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Linking Interventions to Functional Behavior Assessment Results

Andrea Jo Duncan

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LINKING INTERVENTIONS TO FUNCTIONAL

BEHAVIOR ASSESSMENT RESULTS

An Abstract of a Thesis

Submitted

in Partial Fulfillment

of the Requirements for the Degree

Specialist in Education: School Psychology

Andrea Jo Duncan

University of Northern Iowa

May 2006

ABSTRACT

A comprehensive review of the instructional, social, and physical dimensions and consequences of behavior that complete functional behavior assessments. Substantial explanation of each is accompanied with examples of research based interventions linking to each dimension. A new model of functional behavior assessment is described and piloted in a single subject case study design. Also included are the results of the case study.

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CHAPTER 1

INTRODUCTION

Developing the right intervention for a child can be the most difficult aspect of working with children with special needs. Everyday, schools in America are faced with complex challenges related to educating increasingly diverse student populations, especially students with chronic problem behavior. Although these students typically represent a small portion of school enrollment (e.g. 1-5%), they often account for more than 50% of the behavioral incidents handled by office personnel and consume significant amounts of time. It is also likely that many of these same students will require individualized comprehensive behavioral supports that involve family, school, and community participation. School psychologists are often asked by school personnel or by parents for guidance in treating these students and are in a prime position to facilitate the design and delivery of comprehensive behavior intervention plans based on functional behavior assessment (FBA; Knoster & McCurdy, 2002).

Functional Behavior Assessment

Basics of FBA

Children with disabilities and children with problematic behaviors are referred to the school psychologist daily. The school psychologist works with other members of a multidisciplinary team to develop plans to reduce or eliminate the referred child's problematic/target behavior. An effective tool that the school psychologist can employ to design such a plan is FBA. FBA is considered an important and frequently missing link between topographical descriptions of behavior and treatment planning (Knoster &

McCurdy, 2002). The purpose of FBA is to assist school based teams in identifying the function of problem behavior and to use this information in the design and delivery of a behavior support plan (Knoster & McCurdy, 2002). Etscheidt (2001a) defines FBA as a process of identifying functional relationships between environmental events and the occurrence and nonoccurrence of a target behavior. A functional assessment consists of the methods and procedures that are used to identify associations between the behavior and variables in the environment. Functional assessment identifies when, where, and why problem behaviors occur. For example, if aggression was identified as a behavior of concern, the FBA to determine what environmental events seem to trigger the aggression.

FBA relies on a variety of techniques and strategies to identify the purpose of specific behavior and to help individualized education plan (IEP) teams select interventions to directly address the problem behavior (Center for Effective Collaboration and Practice, 2000b). The investigator can use a variety of assessment techniques in the FBA.

Indirect assessments include checklists, rating scales, questionnaires, and interviews. The most frequently employed indirect measure in FBA is the interview. Interviews narrow the possible variables contributing to the occurrence of problem behavior so that an observation can be conducted. Interviews with the child, teacher, parent and/or other individuals are methods for obtaining information about problem behaviors. The interview component in functional behavioral assessments helps to identify variables, settings, events, and activities that can be targeted through direct observation and/or systematic manipulation strategies (O'Neill, et al., 1997). Typical outcomes of the FBA interview include: (a) description of the behavior, (b) identification

of immediate physical and environmental characteristics that predict the behavior and nonoccurrence of problem behaviors, (c) identification of potential functions of behavior (escape or attention) in relation to the outcomes or consequences that are maintaining them, and (d) development of summary statements describing relationships among situations, behaviors, and their functions (O'Neill, et al., 1997). The individuals to be interviewed should have a working knowledge of the child's behavior under problematic circumstances and should have regular and frequent contact with the child. Typically, teachers who are observing problems at a higher rate may have more information about environmental contexts and environmental influences (Kinch, Lewis-Palmer, Hagan-Burke, & Sugai, 2001).

Interviews are frequently conducted with parents to elicit assessment information. Parents and/or primary caregivers have direct knowledge of the child and the problem behavior and have often become very aware of antecedents that serve problem behavior. This behavioral awareness allows the family to engineer various preventative measures within the course of their daily routine (Harrower, Fox, Dunlap, & Kincaid, 1999). While this family behavior serves to prevent disruptions in their daily routine, if this information is not solicited from the parents or caregivers during the interview, proposed school-based interventions may not be effectively addressed or replicated in the home, thus leading to the ultimate defeat of the proposed intervention (Harrower, et al., 1999).

Goals for the parent interview include gathering information about parental concerns and assessing parental perceptions of the child's strengths and weaknesses. Additionally, identification of the child's behavior problem and related antecedent and consequence events need to be established. Information needs to be gathered on how the

parents deal with the problem behavior, as well as the identification of events that reinforce the problem behavior for both the child and for the parents (Sattler, 1993).

The student may also provide information about variables influencing problem behaviors which may not be readily available to teachers, parents, or staff members (Kern, Mantegna, Vorndrean, Bailin, & Hilt, 2001). Research has shown that elementary students included in the FBA process were able to contribute valuable information to the development of hypothesis statements (Kinch, et al., 2001). Reed, Thomas, Sprague, and Horner (1997) claimed that including children in the functional assessment interview process can result in improved quality of information, increased range of information, and improved efficacy of support plans. Information obtained from the interview process from both teachers and students supported data from direct observations (Reed, et al., 1997). Nippe, Lewis-Palmer, and Sprague, (1998) compared teacher interview data and student interview data as well as direct observation data, and found preliminary support for agreement between teacher and student interview information. Lewis-Palmer, Sugai, and Horner (1999) also found that teacher and student provided interview information was consistent with each other, as confirmed through direct observation of the behavior.

The recent trend in including the children in the FBA interview process has generated numerous interview formats, yet formats developed specifically for younger children as well as older children have not been proposed. Formats seeking information regarding the context of the problematic behavior, from students of varying ages have not been developed (O'Neill, et al., 1997).

The interview component of a functional behavioral assessment provides large amounts of information about the student's problem behavior. After the interview

information has been collected the information from respondents must be analyzed and summarized. The analysis attempts to identify variables consistently associated with the problem behavior and to narrow the possible interventions recommended for improving student behavior. Because interview respondents may not agree on factors influencing problem behavior or suggested interventions to improve behavior, the use of direct observational data may help to resolve any discrepancy in the provided interview information. It is important to confirm all information with observational data, no matter how small the amount of discrepancy (O'Neill, et al., 1997).

Naturalistic observation procedures involve the recording of the target behaviors as they occur in their natural setting at the time when they occur. Naturalistic observations are the most frequently used observation systems. Naturalistic observation techniques are used frequently because of their applicability to functional behavior assessments (Nelson, Roberts, Mathur, & Rutherford, 1999). Naturalistic observation procedures can be used in the functional assessment process as a preliminary data collection method that will aid in the development of target behavior definitions and initial hypothesis about the function and maintaining stimuli of the target behavior (Gable, 1996).

Naturalistic observations may be recorded using the antecedent-behavior-consequence (ABC) method, which was first described by Bijou (Bijou, Peterson, & Ault, 1968). Bijou argued that the context of a situation provides a stimulus, or antecedent, that causes a behavior to occur and consequences that maintain the behavior (Olympia, Heathfield, Jenson, & Clark, 2002). Each ABC record identifies the circumstances that were antecedent (precursors) to the problem behavior and the

consequences (results) of that behavior (Ellingson, Miltenberger, & Long, 1999; Foster-Johnson & Dunlap, 1993; Olympia et al.). When ABC observations are recorded repeatedly over time, the observer will be able to see what patterns, if any, emerge in the child's behavior (Olympia et al.).

Time sampling methods record whether the target behavior is present or absent during short, specific intervals within the observation period (McConaughy & Ritter, 2002; Saudargas & Zanolli, 1990). Time sampling procedures can be divided into partial interval, whole interval, and momentary time sampling methods (Repp, Niemenen, Olinger, & Brusca, 1988). These methods provide helpful comparisons of behavior when the target behavior occurs in multiple settings (McConaughy & Ritter). Time sampling is also useful when one is attempting to observe multiple behaviors, sporadic behaviors, and behaviors with a difficult to define duration (Murphy & Harrop, 1994). Time sampling does not record the duration or frequency of the behavior because if a behavior occurs three times or five times within an interval, it is scored as occurring once. This observation method records all behaviors as equal.

A scatterplot may also accompany direct, systematic observations. A scatterplot is a grid in which the student's day is broken into intervals of 30 minutes or shorter. The teacher fills in each block as the school day progresses to represent no problem behavior, low incidence of the problem behavior, or high incidence of the problem behavior occurring during the observation period. When completed for several consecutive days, a scatterplot provides a visual picture of when and to what intensity the problem behavior is occurring. Through this visual picture, patterns across time can often be seen and the relationship between the behavior and environmental variables may become clearer, thus

leading to the development of logical hypotheses about setting events and antecedents (Gable, 1996; Touchette, MacDonald, & Langer, 1985).

Within our model, the observations were designed to confirm/disconfirm information that was gathered through the interview process. In addition, antecedents and consequences are able to be seen more clearly (thereby helping to identify the function of the behavior) and new variables that were not brought out in the interview may be seen. Throughout the whole observation, one is looking for antecedents/consequences that initiate or maintain the problem behavior within the instructional, social, and physical domains (since non-school cannot really be observed).

Observations are one of the primary means of gathering data for an FBA. Observations are used frequently because they provide several benefits that other indirect methods of assessment cannot. When conducted in a natural setting, observations provide a clear picture of the antecedents and consequences that initiate and maintain problem behavior. Sometimes new variables, which were not raised during the interview, may arise through direct observation (Horner & Carr, 1997).

The use of direct and indirect procedures helps to identify the relationship between environmental variables and the accuracy of the functional assessment (Etscheidt, 2001a). The relationships are stated as hypotheses. The hypothesis links the problem behavior to the triggering environmental events. After interviews and observations, a hypothesis may suggest aggression, for example, is triggered by frustration with a difficult academic task. A FBA looks beyond the behavior itself; the focus is on identifying significant pupil-specific instructional, social, or physical environmental factors associated with the occurrence and nonoccurrence of the problem

behavior. This broad perspective offers a better understanding of the function or purpose

behind student behavior (Center for Effective Collaboration and Practice, 2000b) and

leads to the development of the BIP. Knoster and McCurdy (2002) consider the FBA

complete when:

> (a) the problem behavior is operationally defined, including descriptions of
> various forms of the behavior and the consequence of behavior for the individual;
> (b) the antecedent events that predict the occurrence and nonoccurrence of target
> behaviors are identified; (c) the consequent events that maintain problem
> behaviors are specified; (d) the hypothesis specifying the environmental variables,
> immediate antecedents, and function of the problem behavior are developed; and
> (e) the direct observational data are collected to provide correlational support for
> the hypotheses (p. 1014).

Behaviors meet specific needs and bring about specific outcomes. When interventions

simply suppress undesirable behaviors, the needs remain unmet and the inappropriate

behaviors will likely return (Witt, Daly, & Noell, 2000). FBA is a means of determining

the reason for the behavior, or what the child is getting from the behavior. If it is

understood what benefit the child is getting, the child can be taught a new more

appropriate behavior that will achieve the same outcome as the undesirable behavior, and

allow the child to meet his or her needs in a more acceptable way. The goal of FBA is to

understand the function or purpose of a behavior in order to teach replacement behaviors

that are equally effective for the child. Also, FBA will help to identify situations that

prompt undesirable behavior, new skills to teach the child so that undesirable behavior is

unnecessary, and effective ways for teachers and others to respond to undesirable

behavior (Witt, et al., 2000).

After collecting FBA data on a student's behavior, and after developing a hypothesis of the likely function of that behavior, a team develops or revises the student's Behavior Intervention Plan (BIP) or strategies in the IEP. The data collected during the FBA is used to help develop the plan (Center for Effective Collaboration and Practice, 2000c). The intervention may involve the modification of the antecedent events so that the target behavior is prevented or reduced (Etscheidt, 2001a). Antecedents are environmental events that occur before the problem behavior, provoking or causing behavior. In order to reduce any problematic behaviors a child may be exhibiting that is related to an event that provokes the problem behavior, a BIP is developed that modifies the problematic antecedent in order to reduce or eliminate the behavior by preventing it from occurring. For example, for the aggression triggered by difficult tasks, modification might include restructuring the task (e.g. shortening, reducing difficulty).

The BIP might also involve teaching the student an alternative, replacement behavior that will achieve the same function as the challenging behavior (Miltenberger, 2001). To do this, the consequence, or purpose, of the behavior must be known. Questions such as: (a) why does the student exhibit the problem behavior?; and (b) what does the student want or gain when the problem behavior is exhibited?; may reveal what is maintaining the problem behavior (Ysseldyke & Christenson, 2002). Students are taught replacement behaviors which will achieve the same intent as the target behavior but are socially acceptable. The inappropriate behavior is eliminated and a new, acceptable behavior is taught. For example, if the student uses cursing to gain peer attention, s/he could be paired with a peer for assignments to increase positive peer interaction. As the teaching of the new socially acceptable behaviors occurs, the child

realizes that the same outcome can be obtained and the old behavior then becomes incompatible with the new behavior (Miltenberger, 2001). Interventions based on an analysis of the purpose or function of the problem behavior would include teaching the student a new skill or equivalent response that serves the same function as the problem behavior. For example, if a student engages in aggressive behavior during math to gain the attention of the teacher, an effective intervention program would teach the student alternative, appropriate ways to gain teacher attention. Modifying the math assignment might also reduce the problem behavior by preventing it (i.e., the student does not require the teacher's attention sense the assignment is shorter, more interesting, etc.) but would not address the underlying function (i.e., attention) or the skill deficit it represents (i.e., gaining the teacher's attention appropriately; problem solving). The intervention goal is to teach the student an alternative appropriate behavior that results in the same function: "For example, raise hand to get teacher attention versus talking out, or ask assistance to 'escape' a difficult task versus disrupting the class to be sent out to the room" (Etscheidt, 2001a, p. 8-9).

By having a plan that guides actions, teachers can help children through difficult situations. An effective BIP (often called a behavior support plan or positive intervention plan) is used to teach or reinforce positive behaviors. Typically, a child's IEP team develops the plan and will include the following: skills training to increase appropriate behavior, changes that will be made in classrooms or other environments to reduce or eliminate problem behaviors, strategies to replace problem behaviors with appropriate behavior that serve the same function for the child, and supports for the child to use the

appropriate behaviors (Jordan, n.d.). The adoption and sustained use of research validated

practices in BIP's must be emphasized (Sugai, Lewis-Palmer, & Hagan-Burke, 2000).

The following literature will explain the different possible areas the BIP could cover.

　　　To determine if the intervention and the BIP were effective, ongoing progress

monitoring must be done. In general, procedures for individual progress monitoring are

based on direct and frequent observation of performance on the tasks or in the situations

that represent the essential outcome of the intervention. Repeated measurement of

performance occurs before, during, and at the end of interventions producing a series of

data points across time. Time series data enable us to make the usual estimate of current

performance level available through single occasion testing, but also enables us to

estimate trends in performance before and after intervention, and changes in individual

variability (Deno, 2002). Evidence exists that when individual progress monitoring is

used in a formative evaluation design, intervention effectiveness can be increased (Fuchs

& Fuchs, 1986). Direct observation and recording of relatively brief performance samples

embedded within the context of ongoing classroom activities has proved to be the most

practical and logistically feasible form of progress monitoring (Deno, 2002).

Legal Requirements of FBA

　　　The Individuals with Disabilities Education Act (IDEA) Amendments of 1997

require that if a student's behavior impedes his or her learning or the learning of others,

then that student's IEP team must address the problem behavior in a proactive manner.

To do this, the IEP team conducts a FBA, and develops a BIP based on that assessment

[IDEA, 20 U.S.C. § 1414 (d) (3)(B)(i)] (Drasgow & Yell, 2001). Additionally, the IDEA

requires that FBAs must be performed when students with disabilities become the subject

of school discipline proceedings [Section 1415(k)(1)(B)(i)] (Knoster & McCurdy, 2002).

FBA's must be conducted if any of the following few conditions exist:

> (a) when a student's problem behavior presents a danger to himself or herself or others; (b) when a student's suspension or placement in an interim alternative educational setting approaches 10 cumulative days; (c) when suspensions or. placements in an alternative setting exceed 10 consecutive days or amount to a change in placement; (d) when a student is placed in an interim alternative educational setting for 45 days when his or her misconduct involves weapons or drugs; (e) when a due process hearing officer places a student in an interim alternative educational setting for behavior that is dangerous to himself or herself or others (Drasgow & Yell, 2002, p. 249).

Altogether the IDEA requires a FBA be conducted in these situations, the statute does not describe FBA nor the procedures for conducting a FBA.

Several models have been proposed to meet the legal requirements of the IDEA concerning FBA. One popular model of FBA is the model developed by O'Neill et al. (1997). Their model consists of six steps. Relevant information is gathered about the individual before actually starting the FBA. This includes information on the individual's activity patterns, social life, and medical and physical issues. Researchers begin by interviewing direct support personnel and families to obtain information about events that influence problem behavior. Direct observations are then conducted as a way to validate and clarify what was discussed in the interview. From the observations, researchers obtain summary statements about what predicts and maintains problem behavior. If the interview and direct observation fail to reveal consistent patterns of behavior, the next step is to conduct a systematic functional analysis. The functional analysis is designed to test hypotheses variables related to the occurrence of problem behaviors. Information from the assessment assists in the development of the behavior support plan. Behavior support plans are the professional documents that define what interventions will be

implemented in an effort to change the problem behavior and how the interventions will be monitored. The behavior support plan is continually monitored for impacts on the target person or people surrounding the target person.

Another popular model of FBA is the model described by Repp and Horner (1999). The model proposes three methods for identifying the functions that problem behavior serves: functional analysis, direct observation, and interview. In the functional analysis the researcher systematically arranges for certain situations to take place in order determine whether problem behavior occurs consistently. The interview solicits information from asking classroom staff, group home staff, or family members to describe the nature of the problem behavior in detail, the circumstances that triggered the onset of the problem behavior, and the reaction that such behavior evokes from others when it occurs. In direct observation, the assessor closely watches the individual of interest, often for a period of several weeks or more, in the situations that were identified in the interview process as being associated with the problem behavior. A behavior management plan specifies selected interventions to be developed. The behavior management plan discusses how the intervention will be implemented and how it will be evaluated.

These models have been proposed to assist IEP teams in meeting the legal requirements of conducting FBA's prior to disciplinary action. In other situations, an FBA can be an important component of the IEP team's decision making process, but not strictly required. For example, a student's teacher may report that occasionally a student engages in serious misbehavior. In this case, the FBA may be the best proactive

approach to address problem behavior, but it is not required by law (Drasgow & Yell, 2002).

Problem Statement

The objective of FBA is to develop an understanding that will lead to more effective, efficient, and positive interventions. Different processes have been proposed on how to proceed through the assessment phase, but regardless of how the process is described, the challenge is to synthesize and interpret assessment data so that they link logically to specific intervention strategies (Kern & Dunlap, 1999). For an FBA to be functional, it must lead to the development of a plan for intervention and support that has a high likelihood of success. The behavior of the focus student and others in typical routines and setting should serve as the focal point of FBA. Information gathered through the FBA should be summarized in the form of specific and global hypotheses to drive intervention design (Knoster & McCurdy, 2002). The intervention that is developed needs to address the antecedents that cause the behavior and/or the consequences that maintain the problem behavior.

The FBA process should guide the IEP team to the development of the BIP. Interviews and observations should attempt to identify elements from the instructional, physical and/or social dimensions associated with the problem behavior. Once these events have been identified in the hypothesis, the IEP team is ready to select interventions for the BIP.

However, there seems to be a disconnect between assessments that are being conducted and interventions that are being implemented. Individuals who conduct FBA's often fail to incorporate the assessment data into a student's BIP (Jolivette, Scott, &

Nelson, 2000). Without interpretation of assessment data leading to an effective intervention, data collection is a wasted step in the FBA process (Jolivette, Barton-Arwood, and Scott, 2000). There is great need for a model to be developed and validated that relies on information gathered from the assessment to create an effective intervention for the child. The question under investigation is "when looking at the problem behavior in either an instructional, social, or consequential way, will this design of an FBA lead to valid information that will help school psychologists link the intervention to the FBA?" Once assessment is completed, the data must be interpreted to determine the function of the child's behavior and/or the cause of the academic difficulty. Having that information in hand, the assessment can be linked to specific intervention needs.

Theoretical Framework

The purpose of this study is to develop and validate a model that directly links the BIP to assessment data. The unique contribution of this model is the dimensional structure of the assessment and intervention components. The dimensions are based on two theoretical orientations.

The theoretical framework for the proposed model is based on an assessment process designed by Iwata, Dorsey, Slifer, Bauman, and Richman (1982), which explains the effect of different environments on different behaviors (cited in Lalli, Browder, Mace, & Brown, 1993). Human behavior may be under the control of a number of environmental and motivational variables and different treatment interventions may be required to eliminate each source of motivation. For this reason, it is important to identify what the different motivational variables might be (Carr, 1977). Most researchers have evaluated the effects of environmental variables using experimental

methods based on this model. These assessments consist of direct manipulation of a general class of consequences that have been hypothesized to maintain problem behavior during carefully controlled similar conditions to identify functional relationships (Lalli, et al., 1993). A variation of the similar assessment procedure that was presented by Iwata and his colleagues in which assessment data is collected in the natural school settings of students rather than comparable representations, serves as the conceptual model for functional behavior assessment (Kern, Childs, Dunlap, Clarke, Falk, 1994).

The second theoretical framework for the model is the ecological theory. The ecological theory involves certain assumption pertaining to problem behavior. First, behavior must be interpreted in the context of a child's ecosystem, which affects and is affected by the child's behavior (Rhodes, 1967). Environmental and interpersonal factors affect whether, when, and how children exhibit disturbing behaviors. In fact, the child is not even considered to be the source of the disturbance. Rather the disturbance is located in the reciprocal interactions between the child and critical aspects of the environment (Paul & Cooper-Epanchin, 1991). Second, behavior is a result of a complex interaction of influences and thus should be examined within the ecosystem, rather than individually. The environment may present conditions that elicit problem behavior, and successful intervention must alter the ecological system (Rhodes, 1967). The decision that a behavior (or a child) is disturbing is culturally relative. Whether or not a behavior is seen as disturbing depends on the values and expectations of key persons in the setting (Paul & Cooper-Epanchin, 1991).

Based on Iwata's (1982) environmental variables and the environmental influences conceptualized in the ecological theory the proposed model separates

important domains. The components included in this model are instructional, social, and physical and the antecedents and consequences of behavior. These domains are structured throughout both the assessment and intervention phases of the model.

Research Question

The purpose of this study is to develop and validate a model that directly links the BIP to assessment data. The specific research question that serves this purpose is "when looking at the problem behavior in either an instructional, social, or consequential way, will this design of an FBA lead to valid information that will help school psychologists link the intervention to the FBA?"

Significance of the Study

Individuals often fail to apply the results of the FBA to the student's BIP although it is a necessary step (Jolivette, Scott, et al., 2000). Without incorporating the results of the assessment into the intervention, the time and energy required for data collection were wasted (Jolivette, Barton-Arwood, et al., 2000). Using the instructional, social, physical, and consequential domains that are embedded in the proposed model, will eliminate the disconnect between assessment and intervention. This study is also designed to validate a more efficient and 'user friendly' model of FBA as opposed to previous rigorous traditional procedures.

Definition of Terms

An FBA is a collection of methods for obtaining information about antecedents, behaviors, and consequences. The purpose is to identify the reason for the behavior and to use that information to develop strategies that will support positive student performance while reducing the behaviors that interfere with the child's successful

functioning (Ysseldyke & Christenson, 2002; and Witt, et al., 2000). Problem behavior is anything exhibited by the child that can be seen and counted that is creating difficulty for the child to function academically or socially in the classroom (Witt, et al., 2000; and Miltenberger, 2001). An intervention is a plan for behavior problems that focuses on changing the antecedents and consequences in the environment that maintain the problem behavior, teaching the child an appropriate replacement behavior to use, and changing the environment to make sure that the appropriate behavior is supported and the problem behavior is not (Witt, et al., 2000).

CHAPTER 2

LITERATURE REVIEW

A critical component of the proposed model is a BIP based on ecological

dimensions matched to assessment data. Based on the theoretical concepts of Iwata

(1982) and Rhodes (1967) the dimensions include instructional, social, and physical

domains and interventions based on the hypothesized function of the problem behavior.

The following literature will explain the different domains incorporated throughout the

assessments and interventions.

The Instruction Domain

A functional assessment may reveal that certain elements/antecedents in the

instructional environment may be contributing to the problem behavior. During the FBA

interviews and observations, several elements in the instructional dimension may be

linked to problem behavior. Interventions addressing task difficulty, learning style

match, student interest, student choice, skill deficits and student motivation may be

appropriate. Each suggested intervention in the instructional domain is empirically

validated [See Table 1]. The interventions have been selected to address the element in

the instructional dimension hypothesized to trigger problem behavior. The inclusion of

these interventions in a BIP may reduce or eliminate problem behavior.

Task Difficulty

Many students attempt to avoid or escape activities and tasks that are difficult to

do. When this occurs the activities, tasks, and materials need to be examined and altered

so they are less difficult to do. Students also may refuse to use or stop using material that

is difficult to manipulate. The task itself is not necessarily aversive; rather, the difficulty

of the task evokes challenging behavior. Chandler and Dahlquist (2002) discuss the

importance of understanding instructions concerning the task or activity. Some students

may avoid tasks that involve multi-step, lengthy instructions or the may escape tasks for

which few instructions are provided. They may avoid tasks when they do not understand

the objective or final goal of the activity, or they do not know what materials are required

to participate in the activity and to complete the task. Difficulty of a task may be adapted

or modified by shortening the assignment length or adapting the skill level, the problem

type, or the rules on how the learner may approach the work. Difficulty level may be

addressed by appropriate placement within the curriculum such as with curriculum based

measurement (CBM), choice, or multiple problem types to address curriculum

components (Gunter, Denny, & Venn, 2002).

Miller, Gunter, Venn, Hummel, and Wiley (2003) conducted a study investigating

the effects of shortening mathematic worksheets on academic and on-task performance of

three students with emotional/behavioral disorders. During the shortened assignment

condition, the students were given the same type of mathematical assignments, but they

were cut in half. Students were no longer presented with an entire packet of math sheets.

Instead, they received a half sheet that they could trade in at any time for another half

sheet, whether they had completed all the problems on the previous half sheet or not.

There was also a modeling condition (for two of the students) in which the students also

received worksheets with five examples of correctly completed problems. The

intervention had no impact on Student 1, but he was also frequently absent. Student 2

benefited from the intervention. His average number of correct responses was 5.62 and

increased to 8.84 after the intervention. Student 3 also benefited. His previous average was 2.56 and rose to 5.2. Other studies showing the effects of shortening assignment length on decreasing problem behavior include: Dunlap et al., (1993); Penno, Frank, and Wacker, (2000); and Kern et al. (1994).

Learning Style Match

Some students have their own preference of how they best absorb and learn the information given to them. This preference can be described as a student's learning style. When children are continuously presented information in a way that is not specific to their learning styles, teachers may notice academic underachievement, failure, and social or emotional problems (Polce, 1987). Current norms and practices often ignore unique perceptions, conceptual processes, and style characteristics. When there is conflict between academic success and learning style the unresolved question emerges: "Who must change, the learner or the environment?" An environment consistent with individual learning styles enhances achievement, performance, and self esteem (Polce, 1987).

Polce (1987) recognized the lack of regular education options designed to meet the needs of children with diverse learning styles. Unfortunately, education interventions often focus on deficit labels rather than learning style needs. Matching instruction to each learner may be an unrealistic objective. However, parents and professionals can identify style patterns that influence learning. It is possible to observe and describe qualitative style differences involving perception, conceptualization, and problem-solving abilities (Polce, 1987). Informal and formal procedures can be used by parents and educators to identify a students preferred style. Polce (1987) described how to informally

assess a student for learning style. The first step begins with awareness of style and interactive parameters based on interactions with the child. The next steps involve gathering readily available information. The following sources are valuable: (a) reviewing cumulative scholastic records and achievement performances; (b) examining various samples of classwork; (c) identifying learning patterns through content and error analysis; (d) observing behavior in academic and nonacademic settings and; (e) interviewing the child and significant others. Parents and educators may then develop a checklist of various learning style characteristics and utilize their data to identify patterns that reflect internal perceptions and processes. A variety of resources provide information to develop such checklists and inventories (p. 329).

Jolivette, Wehby, and Hirsch (1999) conducted a study to investigate the effects of an academic strategy identification procedure with three students and mathematics. The authors used a structural assessment that included teacher reports, direct observations, student preference assessments, and error analyses. Once the assessment was complete each student was assigned three strategies that were directly linked to the results of the assessments. Each strategy was taught one on one to the students in less than five minutes. "Bottom first" is an example of one of the strategies, in which the student is taught to identify the bottom number in the ones column; place an upwards arrow next to this number; and solve the problem. "Visual organizer" is another example, in which the student is instructed to regroup when a slash mark appeared above a column (as in canceling out) and solve the problem. Each strategy was taught on a separate day for three days and performance of using the strategy was assessed for each strategy. For the next two days the two strategies that produced the highest percentage of

accurate responses were tested. The most successful strategy was then used until a stable trend was seen in the data. The results of the study demonstrated that all three students benefited from the use of the structural analysis approach. The participants' improvement may be attributed to identification of each student's needs and introduction of learning styles and strategies specific to these needs based on the data obtained from the structural analyses.

Student Interest

Students who are interested in their tasks are less likely to exhibit problematic behaviors while completing the task (Chandler & Dahlquist, 2002; Foster-Johnson, Ferro, & Dunlap, 1994; Clarke et al., 1995; and Dunlap et al., 1993). Many students escape or avoid tasks, activities, or material that they perceive as boring or uninteresting (Chandler & Dahlquist, 2002). Students may find tasks, activities, and materials boring that are not challenging or are too easy, that are tedious or dull, that are not developmentally or chronologically age appropriate, that are not relevant to the student's history, or that do not immediately impact the student's life. Student interests can be identified and used to improve the quality of educational activities and, accordingly, the behavior of students in need of effective instruction and support (Clarke et al., 1995). When identifying student interests it is important to identify for each student why the task or activity is not interesting. The reasons may vary across students. The goal of this strategy is to alter tasks, activities, or material so that they are more interesting or personally relevant for the student, thus reducing escape-motivated behavior. Students are more likely to participate and spend more time on task when they are interested in the activities and materials (Chandler & Dahlquist, 2002). Foster-Johnson et al., (1994) have explained why this is

true. Engagement with the less preferred activities is unpleasant when compared to both the preferred activities and the option of not engaging in the activity. That is, off task or problematic behavior may be more desirable for these students than engaging in the less preferred activities. In contrast, the preferred activates are more pleasant, thereby reducing motivation to escape the activity. Tasks and activities can be made more interesting by using visual aids, graphic organizers, hands on material, cooperative group activities, and variety in instructional delivery and student response mode. For instance, instruction may be more interesting if students respond by shouting answers in unison, writing answers, holding Yes/No answer cards, or raising their hands to be called on. Instructional delivery may be of greater interest to student if it involves short periods of lecture, small group activities, reading, hands on activities, and worksheets (Chandler & Dahlquist, 2002).

Dunlap et al. (1993) conducted a study with five participants. After completing an FBA, it was hypothesized that Ann's desirable behavior would increase when she is engaged in a preferred academic activity. Her preferences were identified through a series of systematic observations prior to the hypothesis testing involving math assignments in which the task was counting. For the preferred activity, she counted Lego blocks by colors as she constructed objects. For the non-preferred activity Ann counted objects on a worksheet and then colored them. Problem behavior was exhibited 93% of the time during the non-preferred activity and 7% during the preferred activity. Problem behavior was exhibited 1% of the time during the non-preferred activity and 91% of the time during the preferred activity. These data support the hypothesis that was developed

for Ann. Other studies that investigate the effects of modifying tasks to incorporate student interest are Foster-Johnson et al. (1994) and Clarke et al. (1995).

Student Choice

Students may refuse to use materials that are consistently and invariable selected by the teacher or by peers. For these students the activity or task that is selected by the teacher is not undesirable, rather it is teacher selection and teacher direction itself that are undesirable. Teacher selection and direction reduces the student's involvement in the educational setting. When students engage in challenging behavior, teacher-directed activities and tasks usually are terminated either by the removal of the task, instructions, or materials or students sent to time out or detention (Chandler & Dahlquist, 2002). It has been shown that children more readily participate in student selected activities than teacher selected activities (Chandler & Dahlquist, 2002; Jolivette, Wehby, Canale & Massey, 2001; Dunlap et al. 1994; Dyer, Dunlap & Winterling, 1990; and Dunlap et al. 1993).

Choice making, provides the individual with the opportunity to choose from an array of multiple instructional options (Jolivette, et al., 2001). One method offers the student fixed choices about the instructional setting. This allows the student to determine, within limits, the material that he or she will use or the task and activity in which he or she will participate. The choices that are provided to students usually should be predetermined by the educator so that they correspond to the goals of the activity or task. Choices may also be limited or open ended. Limited choices are choices in which the student is given a set of predetermined options to choose from. Open ended choices on the other hand, are choices in which the student could choose to do anything s/he wanted;

there is no set of predetermined options. If open ended choices are offered, the student

may choose something that the educator is not prepared or able to fulfill. When students

are offered choices, the educator must be prepared to select an option if the student

doesn't do so independently (Chandler & Dahlquist, 2002). Chandler and Dahlquist

(2002) have developed a list of different choices that may be offered to the student:

> (a) Materials – "Do you want to use a pen or pencil?" or "Do you want to
> download pictures from the internet or cut out pictures from magazines?"
> (b) Amount of work – "Do you want to do one worksheet now and one later or do
> both now?" or "Should we read one story today or two?"
> (c) Order of activities – "What should we do first, discuss the chapter or complete
> the graphic organizer?" or "Do you want to clean your room or do the dishes
> first?"
> (d) Role in activities – "Do you want to be my helper today or sit with your
> friends?" or "Do you want to be the recorder or reporter for your group?" …
> (e) Peer groupings – "Do you want to work with Sharisa or Gwen today?" or
> "You can join the red group or the green group."
> (f) Location of work – "Should we do speech in my office or in the classroom
> today?" or "Do you want to work on your book report in the library or in the
> classroom?"
> (g) Type of task – "Do you want to bounce on the ball or use the swing today in
> our therapy session?" or "Should we play baseball or practice the trampoline
> during gym today?"
> (h) Type of reinforcer – "Do you want a popcorn party or extra recess?" or "Do
> you want to read comic books or play at the computer?" (p. 131)

It has been suggested that choice making opportunities affect student behavior for

a number of reasons. First, opportunities to make choices may take into account the

student's preference for the task, activity, and/or interactions in which the student is

involved. The student is allowed to choose stimuli that may be more reinforcing to him

or her, much the same as student interest (Dunlap et al. 1994). Second, opportunities to

make choices may increase the predictability of the student's environment and thereby

decrease levels of inappropriate behaviors. Being allowed to choose what to do next or

when to stop working on a task or who to work with creates a sense of predictability

(Dyer et al., 1990). Third, opportunities to make choices may provide students with more recognizable, positive, and stable teacher-student interactions (Umbreit, 1995).

Dunlap et al. (1994) studied the effects of choice making of two boys with emotional or behavioral disorder (EBD). The students had problems staying on task and minimizing disruptive behavior. There were two conditions: choice and no choice. In the no choice condition the boys' assignments were selected by the teacher and presented on the blackboard. In the choice condition the boys were given a menu of choices specific to the subject matter, from which they were to select the activity they wanted to do. The choice condition significantly lowered disruptive behavior and increased on task behavior. Other studies that investigate the positive effects of student choice include Chandler and Dahlquist (2002), Jolivette et al. (2001), Dunlap et al. (1994), Dyer et al. (1990), Kern et al. (2001) and Dunlap et al. (1993).

Skill Deficit

An assessment might indicate the student has a skill deficit, and does not know how to perform desired skills. The functional behavioral assessment may show that, although ineffective, the child may engage in the inappropriate behavior to escape or avoid a situation for which he or she lacks the appropriate skills (Center for Effective Collaboration and Practice, 2000a).

In order to reduce the skill deficit, the student needs to be taught the appropriate skill. One way to do this is through direct instruction, teaching the student "how to" accomplish a task correctly. Chandler and Dahlquist (2002) explain that in direct instruction, educators begin instruction with a brief review of previous material and reteach material when necessary. During the review students frequently answer questions

regarding previous material. The review is followed by presentation of new material. This includes teacher presentation, frequent active responding and practice by all students as well and individual students, and frequent feedback and reinforcement. New material is presented in small steps using a variety of stimulating teaching practices such as examples, illustrations, and demonstrations. Students then engage in individual practice, which again involves frequent feedback and reinforcement (Chandler & Dahlquist, 2002).

Sutherland, Alder, and Gunter (2003) conducted a study investigating the effects of an increased rate of opportunities to respond on classroom behavior of students with EBD. The teacher of the EBD classroom was trained to increase the number of times he praised the students and gave them an opportunity to respond to him during lessons. The impact this had on correct responses, disruptive behaviors, and on-task behavior was recorded. The results suggest that students with EBD have fewer disruptions, more correct responses, and increased task engagement during the increased praise and opportunity to respond. Other studies showing the effects of individualized instruction on student's skill deficits include: Gibb and Wilder (2002); and Wehby, Falk, Barton-Arwood, Lane, and Cooley (2003).

Student Motivation

The functional assessment may reveal that the child lacks motivation to stick with and finish academic tasks. Motivation is a necessary trait that gives the student the drive he or she may need to work on a task until it has been completed. Without it, the student lacks ambition, doesn't complete tasks, and gets discouraged. Feather (as cited in Sprick, Borgmeier, & Nolet, 2002) explains a useful way of thinking about student motivation as the Expectancy X Value (expectancy multiplied by value) theory. According to this

theory, student effort on a task will be a product of the degree to which the student

expects to be successful at the task multiplied times the degree to which the student

values the rewards that accompany success. The function described is multiplicative

because if the expectancy or value is equal to zero, student effort will also be nonexistent.

Teachers play a very important role in motivating their students in the classroom. When

teachers effectively develop behavioral expectations and organize the classroom in a way

that is beneficial to the students, the students will know exactly what is expected of them

and what to do in order to be successful (Sprick, et al., 2002). When the teacher

implements effective instructional practices, students will experience success in their

daily learning activities. Every student should feel that it is possible to succeed and will

have the motivation to do what it takes to succeed.

Student motivation in the instructional domain may be increased by using self-

monitoring as an intervention. As an intervention, self-monitoring is designed to function

as a method that will alter behavior while simply collecting data (Shapiro, Durnan, Post,

& Shibitsky Levinson, 2002). Self-monitoring is defined as a means of actively

involving students in the learning process by having them monitor their own behavior

(Sabella Levendoski & Cartledge, 2000). It is a well-established technique that has often

been used to address behavioral and academic problems in children and adolescents. The

two components of the self-monitoring procedure involve: (a) the student observing his

or her own behavior, and (b) the student recording the behavior. A student could be

asked to self assess without self recording. A student could also be asked to self record

without self assessing. However, separating these two actions in application is not

logical because if you want a student to self assess, then you want that student to also self

record (Shapiro, et al., 2002). Self-monitoring interventions are easy to implement, less intrusive than some other behavioral interventions, efficient, inexpensive and attractive to both teachers and students (Sabella Levendoski & Cartledge, 2000). Self-monitoring possesses procedures are easy to implement in the classroom and are important in the process of teaching and learning. The goal of all teaching is to have students become capable of using the learning that they acquire under conditions where they are not being prompted by others to engage in the those behaviors. A student who is able to show behavior that was learned in one setting under related conditions is engaging in a form of self-management, which always includes a self-monitoring process. It is important to note that the self-monitoring process may not be visible to others. Initially, self-monitoring may start out as an overt procedure with specific cueing for assessment and evidence that behavior is being recorded. However, as the student acquires the desired skill or behavior, the cues and recoding of behavior may become covert (Shapiro, et al., 2002).

Sabella Levendoski and Cartledge (2000) taught four elementary school students how to self-monitor their behavior while working independently on newly taught materials. The students received individualized self-monitoring cards that had the question "At this exact second am I doing my work?" printed on them. The card also had two possible responses for the child to mark: "yes" with a happy face under it and "no" with a sad face under it. The children were instructed to assess their own behavior whenever they heard the bell timer (once every 10 minutes) and check the "yes" or "no" box. Math worksheets were used to assess time on task and academic productivity. The

results of the study showed that academic productivity and time on task both increased

for all four children.

The Social Dimension

A functional assessment may reveal that certain elements/antecedents in the social

environment may be contributing to the problem behavior. During the FBA interviews

and observations, several elements in the social dimension may be linked to problem

behavior. Interventions addressing student seating and grouping, peer provocation, adult

interactions in school, student's social skills, and student motivation may be selected by

IEP teams to address problem behavior. For each element, an empirically valid

intervention will be presented [See Table 1]. The empirically validated interventions

have been selected to address the elements in the social dimension hypothesized to

trigger problem behavior. The inclusion of these interventions in a BIP may reduce or

eliminate problem behavior.

Educators require knowledge and skills for acknowledging and intervening with

children experiencing social deficits (Gresham, 2002). The demands placed upon schools

today include meeting the academic and social needs of all students. This focus on the

whole child is a direct result of the increasing number of children who are entering school

with out the academic and social competencies necessary for success, placing them at

high risk for later school problems. As a result, educators and researchers have been

searching for ways to deal more effectively with the numerous difficulties that these

children present, particularly in the area of social behavior (Lane, et al., 2003).

Student Seating and Grouping

Iverson (2003) has thoroughly discussed ideas of how a classroom could be set up so that it is beneficial to the students. Careful student seating arrangements can maintain attention and facilitate overall monitoring of student behavior. Students are not as well coordinated in the classroom as on the playground; they bump into furniture and one another. Clumsiness can provoke laughing and shoving, for these reasons, it is important to plan for heavily traveled lanes to be free of obstacles and wide enough to accommodate the flow. Also, the organization of supplies and materials should be directly related to their educational functions. Materials for activities that occur frequently and involve the entire class must be most readily accessible and must be governed by the simplest procedures (Iverson, 2003). In a study by Lucas and Thomas (1990) the importance of the organization of the classroom was demonstrated. They discussed how changing the organization of the classroom is an unfamiliar way of meeting needs. It doesn't necessarily involve the identification of specific children, nor does it require the construction and execution of complex teaching or intervention strategies. By matching organization with teaching goals teachers may be able to stop certain difficulties from occurring and to help children who are experiencing difficulties.

When the room is arranged so that the teacher can interact easily with students, important aspects of classroom management are facilitated, such as: the teacher is able to respond consistently to minor misbehavior, the teacher is able to respond to misbehavior before it escalates, and the teacher is able to engage more frequently in positive interactions with all students (Sprick, Sprick, & Garrison, 1993). There is no right or wrong way to arrange desks in the classroom, however, different arrangements prompt

different behaviors and create different problems. When students are placed in rows facing forwards, the teacher can get to each student with relative ease and student attention can be easily directed to the teacher. The drawback of this arrangement is that students cannot work together easily. When two students sit next to each other and two students sit facing them, so there are four students sitting with their desks in a square, it encourages interaction and cooperative learning activities. The drawback is that maintaining student attention during teacher directed instruction is difficult. Some students may have difficulty facing the front of the room, and socializing is continually encouraged. When students are placed in pairs all facing forward, this allows the teacher to maintain student attention. Pairs allow student interaction when appropriate, but since students do not face one another the temptation to socialize is not continually in from of them. The drawback to this arrangement is that any work in groups of four must be accomplished by pairs of students turning backwards to work in the groups (Sprick, et al., 1993). Assigning students to a particular desk is also something that needs to be considered when setting up a classroom. Seating assignments should generally be made by the teacher, unless the class has demonstrated that they are supportive of one another, able to stay on task and ready to make responsible choices. Students who like to talk tend to sit with students who will interact with them. Students who have a tendency to misbehave often choose to sit in the back of the room where there is less direct supervision. Students who have conflicts with particular students will often choose to sit in close proximity to those students (Sprick, et al., 1993).

Umbreit (1995) conducted an FBA for Corey (who had ADHD) in which the results indicated that his disruptive behavior occurred most frequently during specific

seating and grouping arrangements. There were four parts to the intervention that was designed for Corey. First, he was instructed to do his independent assignem4nt in each class away from the students that were provoking the problem behavior. Second, in cooperative learning activities, he was assigned to a group that did not include his friends. Third, he was told to request a break whenever he wanted one. Fourth, his teaching staff was instructed to ignore disruptive behavior that occurred during intervention. The seating and grouping arrangements used during the intervention essentially involved avoiding those classroom conditions in which disruptive behavior was likely to occur. Before the intervention was employed, disruptive behavior occurred approximately 55%-95% of the time. As the intervention was implemented in class, disruptive behavior was virtually eliminated and appropriate behavior occurred almost all of the time.

Peer Provocation

The classroom by nature elicits many interactions and feelings. By placing twenty-five to thirty-five individuals in a 30-by-30 foot room, schools create a highly interactive environment. Peer interaction is a natural and desirable aspect of almost all learning environments. Group instruction is used both because it is frequently more expedient and because a good education involves learning how to function as a group member. The group's influence is intensified by the competition found in most classrooms. Students may compete for the highest test scores, strive to earn high grades, or run for class office. Even when instructional methods are used to deemphasize competition, students have numerous opportunities to compare their work to that of their classmates. It is understandable and perhaps unavoidable that classrooms are characterized by a fairly high level of interaction and the accompanying spontaneous

interchange of feelings (Jones & Jones, 2004). Sometimes the interchange of feelings

becomes very negative and hurtful towards others. It may even turn into bullying.

Bullying is a serious and prevalent problem in our schools. Snell, MacKenzie and Frey

(2002) explain the three main components of bullying.

> Bullying (a) involves a power imbalance in which the child doing the bullying has
> more power owing to such factors as age, size support of the peer group, or higher
> status; (b) is carried out with an intent to harm the targeted child; and (c) is
> usually a repeated activity in which a particular child is singled out more than
> once and often in a chronic manner (p. 352).

School wide bullying prevention programs are available and empirically

supported. They can greatly reduce the amount of bullying in a given school. The

Second Step Violence Prevention Program (Jones & Jones, 2004) is organized around

three areas of social-emotional competency: empathy, impulse control, and anger

management. Research involving observations in classroom and on playgrounds

suggests this program reduces students' aggressive behaviors and increases socially

desirable behaviors. The Second Step Violence Prevention Program is available for

grades preschool/kindergarten, grades one through three, grades four and five, and grades

six though eight. Peace Builders (Jones & Jones, 2004) is a program that is designed for

students in kindergarten through fifth grade and includes sections entitled "praise

people", "give up put downs", "seek wise people", "notice and speak up about hurts", and

"right wrongs". This program incorporates a school pledge, a school song, and language

emphasizing positive, peaceful behavior that is taught to students. It is available in both

English and Spanish (Jones & Jones, 2004). The Promoting Alternative Thinking

Strategies (PATHS; Jones & Jones, 2004) program is designed for elementary children.

The objective of the program is to help children develop appropriate problem-solving,

self-control, and emotional regulation skills. Skills are taught through discussions, directed instruction, modeling, and by viewing video-taped segments. In addition, parent letters and home assignments are used to promote the generalization of the skills within the home setting (Leff, Power, Manz, Costigan & Nabors, 2001). Steps to Respect (Snell et al., 2002) is an elementary school program designed to reduce bullying and promote healthy peer relationships. Student lessons emphasize social-emotional skills including skills for coping with bullying, general friendship skills, and emotion management skills. The lessons teach empathy for bullied children and specific helpful ways children can respond why they witness bullying (Snell et al., 2002).

Many of the above programs are newly developed and have not been empirically validated yet, or they are currently in the process of testing. Taub (2002) conducted a year long longitudinal evaluation of the Second Step Violence Prevention Program with student in the third through sixth grades to assess the effectiveness of the program. Second Step was implemented in one school (interventional school) and not implemented in a nearby school (comparison school). Teacher ratings and behavioral observations were used to compare the two schools on social competence and anti-social behaviors. Teacher ratings showed that the children at the experimental school were rated much less socially competent than the comparison school before the start of the intervention. One year later, the children in the two schools were rated similarly by their teachers, as a result of improvement in the intervention group. There was a slight decrease in antisocial behavior at the intervention school and an increase in antisocial behavior at the comparison school. Behavioral observations showed improvements in some pro-social behaviors, such as engaging appropriately with peers. Observations did not find the same

improvement in antisocial behaviors at the intervention school. Bullying in school

continues to be an important topic for research [e.g. Leff, et al., 2001, Espelage and

Swearer, 2003, and Heinrichs, 2003.]

Interactions with Adults in the School Setting

The quality of teacher-student relationships dramatically affects whether student's

personal needs are met in the classroom. Students spend nearly a quarter of their waking

lives between ages six and 17 with teachers. Because teachers are responsible for

evaluating students' work and controlling the quality of life in the classroom, they are

powerful adult figures in students' lives. Effective teachers understand the influence they

have on students and use this influence positively (Jones & Jones, 2004). Students often

believe that teachers do not display qualities of a good teacher, for example, truly caring

about the students and how they are doing in and out of school. When students feel this

way, the results are predictable. Glasser (as cited in Jones & Jones, 2004) noted that by

the end of seventh grade, more than half the students believe that teachers and principals

are their adversaries. Students often respond to this perceived sense of being devalued by

misbehaving. Crusick (as cited in Jones & Jones, 2004) reported that most student

resistance to teacher directions occurs in classes where students report disliking their

teacher. This is supported by research indicating that at least 50% to 60% of school

children suffer from at least on occurrence of maltreatment by an educator, which leads

to some stress symptoms, including aggressive responses (Jones & Jones, 2004).

Teacher training programs have frequently failed to provide teachers with either

prerequisite communication skill or specific methods for involving students in solving

problems. Consequently, teachers all too often find themselves resorting to the authoritarian models they experienced as students, and yell at the children.

If the results of the FBA show that the student is acting up because of conflicts with the teacher, student problem solving maybe an intervention to address this problem. Problem solving is a way for teachers to work with students rather than trying to control them. Problem solving responds to a number of important socio-emotional needs of students and helps remediate a wide range of skill deficits experienced by many students who consistently behave unproductively in school. Teachers who use problem solving are impressed with the positive student attitudes they generate and with their students' abilities to solve problems and take responsibility for their behavior (Jones & Jones, 2004).

Hune and Nelson (2002) conducted a study to determine whether a problem-solving strategy would affect children's alternative solutions to social interaction conflicts and to assess whether this skill would generalize to typical preschool settings. Nine teacher nominated children from a Head Start program with ages ranging from three to four years and were at risk for developing antisocial behavioral patterns participated in the study. Three categories of social interaction problems were ongoing play, acquiring an object, and stopping the unwanted action of others. The children were split into two groups; one group received the intervention and the other did not. The intervention was delivered in the following sequence: One, the researcher provided directions, reviewed behavior management procedures, and introduced the purpose for learning the strategy. Two, the social interaction problem was introduced and defined. Three, the general theme of the story and the protagonist were introduced and the story was told to the point

of conflict and the consequences and resulting feelings identified through questioning.

Four, the instructor reviewed the protagonist's problem-solving strategy, modeled the use

of the strategy, and provided examples and nonexamples of prosocial responses with the

appropriate strategy step. Five, picture prompts were provided to assist with strategy

practice. For each picture presented, the student identified the step, provided the

response, and selected a solution to the problem. Students were taught to use the

following four step strategy to solve problems: (1) decide what the problem is; (2) think

of different ways to solve the problem; (3) say or do something; and (4) see how your

friend feels. The results of the study were not dramatic, but it did demonstrate that

acquisition of a problem solving strategy influenced the types of alternative solutions that

children provide to social interaction conflicts in simulation. Over time, treatment

students produced more prosocial resolutions to social interactions problems than

students in the nontreatment group. Kenney and Watson (1999) have also studied the

effects of student problem solving on crime in the schools.

Students' Social Skills

One of the most important developmental accomplishments of children and youth

is the ability to interact successfully with peers and significant adults. Social skills are

specific behaviors that an individual exhibits to perform competently on a social task

(i.e., starting a conversation or entering an ongoing play group). The behaviors are

exhibited in situations that predict important social outcomes for children and youth.

Social skills are behaviors that must be taught, learned, and performed (Gresham, 2002).

Gresham (2002) has distinguished three different types of social skill deficits:

acquisition, performance, and fluency. Acquisition deficits refer either to the absence of

knowledge for executing a particular social skill even under optimal conditions or a failure to discriminate which social behaviors are appropriate in specific situations. Fluency deficits occur when a student knows how and wants to perform a given social skill, but renders an awkward or unpolished performance of the social skill. Performance deficits occur when the student knows how to perform the skill, but fails to perform the skills at acceptable levels in given situations (Gresham, 2002).

Social skills training can be used to provide individual children with one-on-one assistance in developing skills they will need to more effectively respond to situations in which they have previously experienced problems (Jones and Jones, 2004). Social skills training emphasizes the acquisition, performance, generalization, and maintenance of pro-social behaviors and the reduction or elimination of competing problem behaviors (Gresham, 2002). The most effective social skills instruction consists of direct teaching using modeling, coaching, and effective reinforcement (Lane, et al., 2003).

The majority of students with autism need direct instruction in social skills. Most do not learn interactions skills by simply being placed in social environments (Chileda, n.d.). One highly recognized form of social skills training involves the use of social stories with children with autism and children with Emotional/Behavioral Disorders (E/BD; Lane, et al., 2003; and Thiemann & Goldstein, 2001). Students with autism exhibit a limited range of social skills such as limited speech to initiate comments, request information from others, listen and respond to others. Social stories have been recommended to help these individuals gain an accurate understanding of social situations. Social stories include four to six sentences that describe factual information regarding a social situation, possible reactions of others in that social situation, and

directive statements of appropriate or desired social responses (Lane, et al., 2003). Lane

et al. (2003) conducted a study investigating the effects of written text, picture cueing,

and video feedback. Five children with social impairments related to autism and 10

children without social impairments participated in the study to form five triads. Each

triad had one child with social impairments and two children without social impairments.

The triads participated in two interventions per week for 19 weeks that consisted of 10

minutes of instruction using the visual stimuli, 10 minutes of social interaction, and 10

minutes of video feedback. Results showed increases in targeted social communication

skills when the treatment was implemented. Three of the 5 participants maintained and

generalized some of the previously targeted social skills in the absence of visual cues or

as new treatment phases began. One participant generalized skills to the general

education classroom. This study documents the potential benefits of using visual

supports to teach new social language skills for verbal children who have some reading

ability. The overall improvements are important due to the persistent and significant

difficulties reported for this population in using social-communicative behaviors. The

study contributed to research on using social stories to improve social communication for

children with autism. Gray and Garand (1993) have also studied the use of social stories

on children with autism.

Student Motivation

Students may lack motivation in social areas as well as the academic arena.

Student misconduct may occur because students are not motivated to display certain

academic or social behaviors. Students lacking intrinsic motivation to do well in school

and behave accordingly may benefit from extrinsic motivation in the form of reinforcement.

Adults can increase children's motivation by giving rewards to the child after he or she displays appropriate behavior, also known as reinforcement. Reinforcement strengthens the relationship between the positive behavior and the likeliness that it will occur again. Reinforcement is a basic principle of behavior. Group cohesiveness and positive peer interactions can be greatly increased by using reinforcement. A behavior is reinforced when the occurrence of that behavior is followed by an immediate consequence which results in a strengthening of the behavior or an increase in the probability of the behavior occurring in the future (Miltenberger, 2001). Extra incentives or rewards may help motivate students to improve behavior. The use of reinforcement directs attention toward appropriate behavior and away from inappropriate behavior. There are several different kinds of reinforcement contingencies.

The removal of reinforcement may also be effective in improving student behavior. Response cost and time out from positive reinforcement involve the manipulation of reinforcement to change behavior. Response Cost is an extension of a token economy in which students can lose tokens for inappropriate behavior, students then exchange their tokens for privileges (DuPaul, Stoner, & O'Reilly, 2002). Higgins, Williams, and McLaughlin (2001) conducted a study to determine if a token economy program could decrease three inappropriate behaviors (out of seat, talking out, and poor posture) of an elementary student with learning disabilities. For the token economy, the student earned a check mark if at the end of each time interval, appropriate behavior occurred instead of the specific targeted behaviors. A piece of paper was taped to the

student's desk on which the examiner recorded the check marks and enabled the student to receive feedback on his performance. At the end of the session the check marks were counted up and divided by two. The resulting number was the number of minutes available to use back up rewards such as math worksheets, computer time, reading instruction, leisure reading, and playing academic games. The token economy resulted in a significant decrease in all three target behaviors. The average number of talkouts per session dropped from six to zero after the intervention. The average number of out of seat behavior dropped from 1.9 to zero. And poor posture dropped from 11 to 2.5. This study showed a functional relationship between implementation of a token economy and decreasing problem behaviors.

Response cost interventions are similar to token economy interventions. They differ with the idea that in the response cost, individuals can earn and loose their tokens, and in a token economy individuals can only earn tokens. McGoey and DuPaul (2000) investigated the effects of using a token economy and a response cost intervention on reducing the disruptive behavior of four preschool children with ADHD. It was decided that the children would earn buttons, which would be placed on a chart, for following the classroom rules. The children were reminded of the rules of the class and the possibility of losing buttons for breaking the rules. If a child were to interrupt the teacher, hit another child, is off task, etc. the teacher would remove a button from the chart. The children were to work on collecting three buttons to earn a large button. At the end of the day the children the children could turn in only large buttons for reinforcements such as stickers and hand stamps. Results showed the intervention to have reduced disruptive behaviors of three of the participants to match that of their peers in the classroom.

Time-Out from Positive Reinforcement is another kind of reinforcement contingency that can help reduce problem behavior. This strategy involves removing a child from a reinforcing environment for a brief period of time following inappropriate behavior. The time out period should be short (less than 10 minutes) and should occur directly after the problem behavior. It is also crucial that the child is taken out of a reinforcing environment when he or she is put in time out. If the child is taken from an environment that is not reinforcing, the intervention will have no effect on the behavior (DuPaul et al., 2002).

Nelson and Carr (1999) have development a time out procedure titled "Think Time". It is one strategy that teachers can employ to respond more effectively to disruptive behavior in schools. When the teachers catch inappropriate behavior occurring, the students are cued to leave the classroom for Think Time and go to a different classroom with a cooperating teacher. The child is to sit calmly and think about his or her behavior and gain self-control. Once the child has been sitting calmly for five to ten minutes, the debriefing process is initiated, in which the cooperating teacher asks the student to describe the behavior that initiated Think Time. If the student acceptably describes the behavior, then the behavior debriefing form is given to the student to fill out. The cooperating teacher then checks the behavior debriefing form and if it is correct the student is directed to go back to the classroom and take the form with them. If it is filled out incorrectly, the cooperating teacher gives the student another behavior debriefing form and the process starts again. When the student arrives in the original classroom, the teacher checks the form and if it is correct, the student stays. If it is filled out incorrectly, the student must go back to the cooperative classroom and repeat Think

Time. When Think Time was field tested in a number of elementary schools it had a positive effect on disciplinary responses (reducing the number of suspensions, emergency removals, and expulsions), it also improved the behavioral adjustment, academic performance, and school survival skills. It has also been found to produce a net gain in student time on task, decrease the amount of time students exhibit disruptive behavior, and increase a student's opportunity to interact positively with his or her peers and the teacher. Kee, Hill, and Weist (1999) conducted a study on the effectiveness of time out on disruptive behavior had positive outcomes.

<div align="center">The Physical Dimension</div>

A functional assessment may reveal that certain elements in the physical environment may be contributing to the problem behavior. During the FBA interviews and observations, several elements in the physical dimension may be linked to problem behavior. Interventions addressing auditory influences, visual influences, personal kinesthetic influences, and tactile influences may be selected for BIP's. Each suggested intervention in the physical domain is empirically validated [See Table 1]. The empirically validated interventions have been selected to address the elements in the physical dimension hypothesized to trigger problem behavior. The inclusion of these interventions in a BIP may reduce or eliminate problem behavior.

The combination of physical properties constitute the student's physical environment, such as temperature and lighting. A room that is cool will have a calming effect on some students but may induce misconduct from other students. Bright lights and wide spaces may stimulate some students, while others may be overwhelmed and unable to work. Facing a student toward a window may also be stimulating, while

turning him or her toward a portion of the class may be soothing (Guess, Roberts, & Guy, 1999). The light touch of a T-shirt may feel scratchy or even painful to some students, but be comfortable to others (20 ways to..., 2004). The human brain uses vision, touch, sound, taste, smell, and motion to make sense of the environment and produce a response. When there is a physical distraction that the child is focused on, it inhibits his or her ability to pay attention in the classroom (20 ways to..., 2004).

Auditory Influences

Problem behavior may be influenced by certain auditory elements in a classroom. Is the classroom down the hall being so loud that you can hear them in your room? Is the student listening to the lawn mower outside and not able to complete his or her work? Is there a train going by that is blowing its whistle? Do the fluorescent lights hum so loudly that it distracts the students while reading independently? Children may have difficulty hearing what is being said in the classroom or they may be distracted from noises outside the classroom. Problem behaviors (e.g. not following directions) might be associated with auditory distractions. The student may be distracted by noises from outside the classroom because the room may be poorly insulated to keep outside noises out or the walls and ceilings may be covered with hard materials that reflect sounds and leads to echoes (Scott, 1999). Scientists at Heriot-Watt University (as cited in Scott, 1999) found that in many classrooms with hard surfaces, the percentage of voice consonants lost in the echoes is between 15% and 50%. This means that students cannot hear words clearly, and their concentration wanders. Many are straining to hear rather than directing their energy toward understanding the lesson (Scott, 1999). Students may also pay greater attention to verbal instructions if the instructor's tone of voice varies, rather being

monotone. Instructions may be more stimulating when the tone of voice is slightly higher with more emphasis and when an increase in speed of the speech pattern occurs (Guess et al. 1999).

If noise outside of the room is seeping in, certain modifications may be possible. Schools can avoid unwanted exterior sounds by situating classrooms more appropriately within the building, isolating walls and slabs, or insulating, minimizing, or treating openings. Softer materials, such as fiberglass ceiling tiles or certain types of flooring, absorb sound and reduce classroom noise. Constructing or rehabilitating classrooms with acoustic principles in mind can effectively help lessen the noise level and reduce echoes (Scott, 1999). Playing soft classical music or a nature CD during independent work or free time provides a soothing noise that may help students filter out other distracting noises within the room, such as papers shuffling, a pencil sharpening, or a zipper zipping (20 ways to…, 2004).

O'Reilly, Lacey, and Lancioni (2000) examined the effects of background noise on a five year old female with Williams Syndrome. As many as 95% of individuals with Williams Syndrome are overly sensitive to sounds. She was extremely sensitive to many everyday noises such as a telephone ringing, lawnmower, loud music, and loud crowds. She would react to such noises by crying, whining, cringing, saying "it hurts my ears". Noises would often provoke problem behaviors such as hitting, throwing items, grinding her chin into the arm or hand of her teacher, or destroying items such as books or pencils. The researchers suggested that she be fitted for a pair of earplugs. When she wore the earplugs in the classroom her problem behavior declined, going from occurring roughly 57% of the time to 13% of the time.

Visual Influences

Problem behavior may be associated with the visual elements of a classroom. Are students placed too close to the window and they are constantly looking at what's going on outside? Is the student by the door and pays attention to everybody that walks by? Are the lights in the room creating a glare on the chalkboard or just overly bright? Visual stimulation should be a consideration in addressing problem behavior. Vision can contribute greatly to a student's distinction between self and environment, and has important implications in the use of helpful interventions (Guess et al., 1999). Visual stimuli may be increased or decreased to address problem behavior. For example, students may be distracted from paying attention by visually appetizing objects or they may just like to look around. To increase attention to task the teacher may decrease the visual influences (e.g. move the student's desk or place the student in a work station, or in a three sided cubicle to reduce distractions; Chileda, n.d.). Conversely, a teacher may increase visual influences to improve behavior. For example, giving a student a colored pen, a colored pencil, or marker to write with instead of a regular pencil may increase a student's involvement in an activity. Writing can seem more fun and inviting when multicolored pens or scented markers are offered as choices (20 ways to…, 2004).

Hecker, Burns, Elkind, Elkind, and Katz (2002) conducted a study that investigated the effects of assistive reading software on reading performance that had been diagnosed with attention disorders. The software helps people with reading disabilities compensate for their poor reading skills. It scans printed documents, recognizes the characters on the page, and speaks the text to the user through a

loudspeaker or earphones using a speech synthesizer. As the computer speaks a word, it is highlighted on the computer screen, providing a synchronized auditory and visual presentation of the text. It was found that the assistive software allowed the students to attend better to their reading, to reduce their distractibility, to read with less stress and fatigue, and to read for longer periods of time. It helped them to read faster which enabled them to complete reading assignments in less time. The results indicate that assistive reading software should be considered as a significant intervention to assist student who have attention disorders and as an accommodation to help them compensate for their disabilities.

Personal Kinesthetic Influences

Problem behavior may be influenced by kinesthetic elements. Kinesthetic awareness is the perception or sense of motion, weight, or body position as muscles, tendons, and joints move. Children who learn kinesthetically take in information best when they are moving. Teachers may modify kinesthetic elements in the classroom to address problem behavior. For example, allowing students to write on the chalk board or dry-erase board may increase their involvement in learning activities. Many students get out of their seats at inappropriate times because their sensory system needs stimulation and constant motion. Placing a thick foam wedge in their seat allows them to control the body motion and sensation they need without getting up or disrupting others. Sitting on a large therapy ball also accommodates this need and allows for more intense bouncing and rocking (20 ways to..., n.d.). Morning warm-ups could also be done to wake up student's bodies at the beginning of each day (20 ways to..., n.d.). Such interventions may improve academic performance while decreasing inappropriate movement.

Templeton and Jensen (1996) conducted a study on the effects of "Brain Gym" on classroom climate and academic performance. Brain Gym is an educational program in which students complete a series of simple movements that are designed to help students access and integrate different parts of the brain, so that the right and left hemispheres can work together. One example of the movements the children do is messaging the soft tissue area under the clavicle to the left and right of the sternum to help regulate the firing of the neurotransmitters at the synapses in the brain. Students also do exercises that connect all the energy circuits in the body at one time and get the electrical energy in the body moving; which relieves stress and facilitates learning. The students participated in Brain Gym for nine weeks and it was found to be a tool that would give students ways to gain self control and improve academic performance. Other reports on kinesthetic influences include: Minds in Motion, (1998); and Valdez, (1994).

Tactile Influences

Is the student always touching and feeling objects? Do like to touch soft things like their hair or stuffed animal in the toy box? Is the student drawn to objects with texture like sand or play dough? Does the student enjoy warm or cool temperatures? Is there a heating duct directly over the child so that there is always a breeze on him or her? Tactile characteristics can be summarized as the properties of temperature, pressure, and vibration of stimuli on the skin. Tactile elements in the classroom may influence behavior. Some inappropriate behavior may occur as students seek tactile stimulation. In response, a teacher may increase activities that incorporate tactile stimulation as an intervention to reduce the inappropriate tactile behaviors (e.g. inappropriate touching, self stimulation). For example, while some students may not like to play in finger paint or

pudding, they might explore in shaving cream, which applies less pressure on the skin, removes more easily, and has a slightly different temperature (Guess et al., 1999). Art supplies are a great way to incorporate touch into the classroom. Offering a variety of materials allows students to choose what is tolerated and begin to desensitize their bodies to the stimulus. Common items, such as cotton balls and cotton swabs, toothbrushes, and their own fingers, make great alternatives to paintbrushes. Art media can also be texturized by adding sand or oatmeal to paint, adding color to corn syrup or glue, or using mud (20 ways to..., n.d.). Allowing students to take their shoes off during specific, independent activities, such as silent reading time is another idea. The feet are very sensitive parts of the body, and many students may enjoy or need the extra touch stimulation of bare feet on the carpet or tile floor (20 ways to..., n.d.).

Kurywczak (1997) examined whether retention of sight vocabulary words could be increased by implementing the tactile modality to a visual, auditory, and kinesthetic based lesson. The sample consisted of ten first graders that were assigned to either the experimental group or the control group. Both groups viewed new words written on the board by the teacher, listened to the teacher say the word, wrote the word on paper, and read the word themselves. The experimental group experienced a tactile modality with the new words, by tracing the words in sand with their fingers two different times. The first time the students had to look at the word written on the board, and looking was optional the second time. Students were then tested by using flashcards to measure the number of words that they were able to spell correctly. Thirty words were taught over a period of seven weeks. On average the experimental group, that was able to trace the

new words in the sand with their finger, correctly spelled four more words than the

control group.

Function of Behavior

The consequences of behavior may influence the occurrence of the behavior. To

decrease problem behavior the consequences or function of the behavior must be

examined. The FBA may reveal the purpose, function or consequence of problem

behavior that is hypothesized to maintain that behavior. Gaining attention from peers and

the teacher, being able to escape or avoid a task, gaining sensory stimulation, or feeling

power or control are all possible functions of the problem behavior that will contribute to

its maintenance.

Gaining Attention from Peers and the Teacher

Students may display problem behavior in order to gain attention from the teacher

or peers. Be it positive or negative, the student seeks to gain attention. The attention

serves to reinforce the inappropriate problem behavior. If the student is acting out to gain

attention, the amount of attention that the student receives for problem behavior needs to

be reduced. Sprick et al. (2002), discuss how the teacher can choose to ignore minor

misbehaviors such as not raising a hand to speak but still quickly address (less than three

minutes) more severe behavior such as offensive language or aggression towards others.

This also reduces the amount of peer attention the student receives. While reducing

attention to negative behaviors the teacher must also be giving attention to positive

behaviors. Teachers should interact with the student for positive behaviors three times

more than for problem behaviors. This can be done by simple interaction or by giving

praise (Sprick, et al., 2002).

Attention is most closely related to the social domain that was discussed earlier because attention is a form of social interaction. Students who need social interaction will misbehave in order to obtain it. One thing that can be done is that teachers can teach students replacement behaviors to gain attention at appropriate times. For example, the student blurts out answers to questions and gains attention through being reprimanded for not raising his or her hand. The student can be taught to raise a hand, wait to be called on, answer correctly and still receive attention, positive and not negative. A student may be physically aggressive towards peers in order to gain attention and recognition from them. The student can be taught how to join a group of peers and engage in conversation appropriately, so that he or she gains positive peer attention.

Repp and Karsh (1994) conducted an FBA of problem behaviors for two students, Sara and Alicia. The girls were having tantrums and the results of the FBA showed that they were doing so to gain attention as a form of positive reinforcement from teachers. The intervention used for Alicia's tantrums had four components. First, the teacher was to withdrawal all attention for the tantrum behaviors. The teacher could not engage in physical struggles, verbal pleas, or soothing comments. Second, the teacher was to increase attention to task engagement. Third, the teacher increased the rate of demands and reinforcement for all students in the class. Fourth, opportunities for Alicia to engage in social interaction with the teacher and teaching assistants were increased. Sara's intervention also had four components with three of them being the same as Alicia's first, second and third. The other was the use of pictures in a book to communicate requests for attention. Data were collected for one year after the intervention for both girls. Before the interventions for the girls were implemented, Alicia's tantrums occurred 41%

of the day and Sara had an average of 22 tantrums per day. After the one year of data collection, Alicia's tantrums occurred for 4% of the day and Sara's had been reduced to one to four times per day. Other studies that have found attention to be a major response maintaining the behavior are Lewis and Sugai (1996) and Dunlap et al. (1993).

Escaping or Avoiding a Task

A student may avoid or escape an undesirable task, event, or person by engaging in challenging behavior. Described as negative reinforcement, the challenging behavior increases as it results in a student avoiding or escaping unpleasant or undesirable events. Consequently, the behavior that allows the student to avoid or escape the aversive stimulus is strengthened and will be more likely to occur the next time the undesirable event is present. Students may avoid or escape tasks, activities, materials, people, settings, and so on, that are aversive to them (Chandler & Dahlquist, 2002). Students may engage in very disruptive and/or dangerous behavior such as self-abuse, destroying property, tantrumming, arguing, and aggression, that results in escape and avoidance of unpleasant or undesirable events. Other students may engage in passive forms of noncompliance and non-disruptive behavior such as ignoring instructions, refusing to participate, negotiating, leaving an activity, or engaging in alternative activities. Regardless of the form of behavior, the function of challenging behavior is the same, avoidance of or escape from unpleasant or undesirable events (Chandler & Dahlquist, 2002).

Escape and avoidance may be related to either the instructional or social domains discussed earlier. Students may display problem behavior in order to get out of having to work on or complete a task, or at least avoid it for a little while. For example a student

may refuse to begin a new task so the teacher stops giving instructions or takes the task away from the student. The student has succeeded in escaping from the task. Or a student may start a tantrum when asked to complete a task so the teacher allows the student to tantrum for a period of time. When the student calms down, he or she may return to the desk and finish the task. The student has succeeded in avoiding the task. The task may be too difficult, the student may feel like he or she has no choice in the task, the student may lack interest in the task, the student may not be motivated to work on a task, or the student may lack the skills required to complete the task. If the student is avoiding the task for one of these reasons, the problem behavior used to avoid the task must be replaced within an alternative appropriate behavior. For example, if the student is avoiding math tasks by arguing with the teacher, the arguing may be decreased by teaching the student alternative behavior, such as indicating the need for a break, or a way to ask for a break. The student may want to avoid or escape an "undesirable" person, such as the teacher, an associate or a peer. If the problem behavior results in the person's withdrawing or avoiding contact with the student, the student's problem behavior will be maintained in future settings. Chandler and Dahlquist (2002) have outlined some good examples of problem behaviors and solutions to them. For example, during writing practice a student may throw her pencil in order to get up to get it, go sharpen it, and then return to work. She can be taught to ask for permission to take a break, and then given praise for appropriately making a request.

Burke, Hagan-Burke and Sugai (2003) conducted an FBA on the behaviors that a student was displaying. The student's behaviors included being off task, disrupting others, refusing to do work, not following directions, and fidgeting. The results of the

FBA concluded that his problem behaviors were triggered by reading comprehension tasks and functioned to escape/avoid those tasks. Reading comprehension was difficult for the student because his first language was Spanish. The intervention was designed to pre-teach vocabulary concepts to ensure that he had sufficient background knowledge to complete comprehension tasks during his reading class. The student worked with a graduate student intern for 25 minutes a day on vocabulary instruction. Before the intervention, the student was on task during reading comprehension tasks 43% of the time. After the intervention, he was on task 99% of the time. This study has demonstrated the importance of using FBA to inform the development of instructional interventions for students whose problem behaviors function to escape/avoid academic tasks.

Gaining Sensory Stimulation

When the function of challenging behavior is to obtain sensory stimulation, the student's challenging behavior produces sensory input or the challenging behavior functions to regulate the level and type of sensory stimulation within the environment (Chandler & Dahlquist, 2002). Stimulation may occur within the areas covered previously (auditory, visual, kinesthetic, and tactile) or in the form of taste and smell. The amount of stimulation and sensory input the student desires and is able to tolerate will vary across individuals. The ability to process sensory input will also vary across students (Chandler & Dahlquist. 2002).

Sensory stimulation is most closely related to the physical domain that was discussed above. Students are able to gain all kinds of sensory stimulation through the classroom. They can gain sensation from listening to and looking at things throughout

the room, moving about the room, touching objects in the room, or smelling or tasting objects in the room. Chandler and Dahlquist (2002) have given some good examples of challenging behavior used to gain sensory stimulation and interventions to teach replacement behaviors. For example, a student constantly touches peers and their belongings to gain tactile stimulation. His peers may yell at him, avoid him, or hit him. He can be instructed to squeeze a koosh ball, silly putty, and touch other small manipulatives given to him for this purpose. A student may run from the classroom, stand at her desk, and wander about the classroom in order to gain kinesthetic stimulation. She can be instructed to hold up a break card when a break is needed, walk to the back of the classroom so she doesn't disrupt others, or do stretches during transitions.

Tang, Patterson, and Kennedy (2003) conducted functional analyses on six students with multiple profound disabilities that displayed stereotypic behavior in order to identify the function of the stereotypic behavior. It was found that stereotypy was maintained by visual stimulation, tactile stimulation, or was undifferentiated across conditions. To reduce the stereotypic behavior, competing elements of sensory stimulation were introduced to the individuals. Each element was found to be the individuals preferred item before introducing it into the experiment. The competing elements of sensory stimulation were found to significantly reduce 4 of the six individual's stereotypic behavior.

Student's Need for Power or Control

When students are not satisfied in their attempts to get attention, they may seek power, usually by refusing to do what the teacher requests. At times students feel that the

only way they can get the recognition the desire is through defying the teacher (Charles, 1996). Power seeking students attempt to prove their power by defying the teacher and doing whatever they want. Only when they are the boss of a situation or controlling others will these students feel self worth (Manning & Bucher, 2003). They may show their attempts at seeking power by arguing, contradicting, lying, having temper tantrums, refusing to follow directions, or behaving hostilely. If students can get the teacher to fight with them, they feel they have won whether or not they actually got their way, because they have succeeded in showing they have the power to disrupt the class and put the teacher on the defensive. Even when the teacher wins the contest of wills, the student to believe more firmly that power is what matters in life (Charles, 1996). Regardless of the situation, a teacher needs to avoid entering into a power struggle because that will just reinforce the behavior. In dealing with students who are seeking power, most effective teachers will work to prevent power struggles. They think prevention is more effective, and they know that no one wins a power struggle. The teacher might lose face in front of other students, and the power seeking student's self worth might diminish even more (Manning & Bucher, 2003).

The students need to gain power and control is most closely related to the social domain. Most power struggles are verbal arguments regarding a teacher or peer asking something of the student. For example, Mrs. Brown may reprimand two girls, Mary and Sally, for not paying attention to the lesson and whispering in the back of the room during social studies class. Mary immediately begins to pay attention but Sally becomes upset and the following dialogue may result:

Mrs. Brown   "Sally, you need to pay attention, this is an important point in the lesson."

Sally	"Mary was talking too, yell at her too. You always just yell at me"
Mrs. Brown	"It's just like you to not pay attention. Now stop talking and disrupting the class or else."
Sally	"I didn't do anything and I don't have to do anything you tell me. My mother says I don't have to listen to you if I don't want to."

The conversation continues to escalate and the power struggle is initiated. A few things could have been done to prevent this conversation from reaching the intensity that it has. Mrs. Brown could have been more polite to Sally and not only accusing her. She also could have provided Sally with a choice by using an "or" statement. For example, Mrs. Brown could have told Sally "Pay attention now, or miss your next break and we'll review what you're missing." To prevent power struggles in the classroom, teachers should promote respect and communication between teachers and students.

Maag (1997) suggests that a teacher provide a worse alternative to the student for the problem behavior. For example, it a student continually taps their pencil on the desk and it is disrupting the class, the teacher could have the child tap his/her pencil on their desk for a specified period of time. Maag (1999) described a situation in which a teacher was confronted with a boy who refused to complete his math assignment and instead wrote the name of his school, "Norris," followed by the word "sucks" on the paper. It was found that the student felt that the teacher was trying to force him to engage in a burdensome task. The purpose of his writing "Norris sucks" was to obtain power and control, because he felt no teacher can make a student write answers. The more the teacher tried to get the student to write answers, either through encouragement or reprimand, the more the challenging behavior was reinforced. The reinforcing value of

obtaining power and control by getting a reaction, even a negative one, from the teacher fueled the desire to continue engaging in the inappropriate behavior. A different picture emerged when the teacher changed the context surrounding the inappropriate behavior instead of responding in a traditional and punitive fashion. The teacher nonchalantly said she was sorry that school "sucked" but that he was not being creative in his writing of the words. She enthusiastically and sincerely suggested that he turn over the paper and write "Norris sucks" repeatedly in various print styles and sizes, and forbade him from writing answers to the math problems. The boy, who began in earnest, as this request was congruent with what he wanted to do, quickly lost interest, flipped the paper back over, and began working on the math assignment. Other articles that investigate how a student's need for power and control influence his/her behavior include: Maag and Kemp (2003); and Hagan, Simpson, and Gillis (1987).

Summary

These suggested interventions are not meant to be comprehensive; rather, they should serve as a starting point for intervention planning. The contribution of the BIP component is to allow IEP teams planning interventions to select strategies in the theoretical dimensions hypothesized to influence problem behavior. Additionally, the interventions are empirically validated, suggesting a high probability of success and effectiveness. As part of the FBA model, the dimensional guide attempts to directly link selected interventions to assessment data.

CHAPTER 3

METHODOLOGY

The case study is an empirical inquiry investigating a contemporary process within its real-life context (Yin, 2003). This research approach involves multiple sources of evidence which will converge to address the research question or proposition: "The essence of a case study, the central tendency among all types of research, is that it tries to illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result" Schramm, 1971 (as cited on p.12 in Yin, 2003). The case study as a research strategy "comprises an all encompassing method – covering the logic of design, data collection techniques, and specific approaches to data analysis. In this sense, the case study is not either a data collection tactic or merely a design feature alone but a comprehensive research strategy" p.14 (Yin, 2003). A single-case research design was chosen since the individual case will represent a "critical" and "representative" case requiring functional behavioral assessment and behavior intervention planning. The single case will also be revelatory in investigating the link between functional behavioral assessment and planning for behavioral improvement.

Student

The sample is one student from Wilson High School who has been referred to Support Services. This single student will be the "unit of analysis". Wilson High School serves as an attendance center for approximately 350 students. Seventeen percent of the student body is drawn from diverse cultural and ethnic minority groups. Children from the age of six weeks through grade twelve attend here.

Jeremy is a 15 year old, Caucasian, 9th grader attending Wilson High School. His class schedule includes math, study hall, art, high school reading and writing, manufacturing, P.E., and two hours of resource time. Jeremy has academic and behavior goals that qualify him for special education services. He receives one on one time with Mr. Resource one or two periods a day to help with organization of assignments, extra academic instruction, and he receives study guides to test one day before other students to ensure that Mr. Resource has time to review with Jeremy.

Instrumentation

Five methods of data collection were incorporated. First, archival records were examined. These included cumulative student records and school-based data (e.g. attendance reports and/or disciplinary records). Second, the Schaefer Interview Protocol (SIP) was used to conduct FBA interviews with the referred student, his or her parent(s), and the classroom teacher or support personnel. This instrument is designed to identify variables in the instructional, physical, or social environment hypothesized to influence the behavior(s) of concern. Third, the O'Rourke Dimensional Observation Form (ODOF) was used to collect observational data concerning the problem behavior(s). The observation procedure is designed to confirm the variables identified in the interviews as influencing problem behavior. Fourth, using the Duncan Intervention Domain Guide (DID-G) the support team developed a behavior intervention plan which includes a hypothesis, a goal, baseline data, selected intervention(s), and a progress monitoring plan. Finally, the progress monitoring data will in the form of documentary, descriptive data was gathered throughout the study. Participant-observation was included as the student's support team met to develop a behavioral intervention plan.

Data Collection

Data collection began in the spring, 2005. Once Jeremy was referred to Support

Services, Jeremy, Jeremy's grandmother, Marcella, and Jeremy's resource teacher, Mr.

Resource, signed consent forms. Interviews were then conducted with Mr. Resource, and

Marcella. Upon completion of the interviews the researcher observed Jeremy in multiple

settings, Resource Room, English, and Art. An interview with Jeremy followed the

observations. Jeremy's support team met and developed the behavioral intervention plan,

using the interview and observation data. As a participant of the support team, the

researcher assisted in the development of the behavioral intervention plan. Progress

monitoring data was collected and archival data was collected throughout the duration of

the study.

Data Analysis

The descriptive data from the progress-monitoring document served as the critical

source for evaluating the case study. The following chapter reveals the results and

findings of this study.

CHAPTER 4

RESULTS

Case Study

Referral Procedure

Jeremy is a 9th grade student. His resource room teacher was concerned about his work completion and referred him to the school psychologist. The school psychologist then contacted Jeremy's guardian to seek approval for participation in this research study. Once approval was obtained, the school psychologist gave Jeremy's name, Jeremy's guardian's name and telephone number to the researcher. This information was given to the researcher on 1/29/05. Jeremy's guardian is his grandmother, Marcella; she was reached on 1/31/05. The research project was explained again to her and she was again invited to participate in the research project. Since she agreed to participate she gave the researcher her address for the consent forms to be sent out. The researcher received Mary's signed consent form on 2/10/05. Jeremy's resource teacher, Mr. Resource, signed his consent form on 2/11/05 and the teacher interview was set for 2/17/05. Jeremy signed his consent form on 2/14/05.

Teacher Interview

The interview with Mr. Resource was conducted on 2/17/05 and lasted for 55 minutes (See Appendix A for the completed Teacher Interview Form). Mr. Resource was given a Scatterplot Form to fill out for two weeks concerning Jeremy's occurrence of the target behavior (See Appendix B for the completed Teacher Scatterplot Form).

Instructional domain. Mr. Resource is very concerned about Jeremy's assignment completion. Jeremy was with Mr. Resource 1-3 periods a day depending on what day of the week it was. He had an IEP with the goal areas of Writing and Math. Jeremy was given plenty of time to complete assignments although he chooses not to work on them. He was receiving C's, D's, and F's in all of his classes except for a B- in Art. Jeremy was not working well independently or in a small group setting. Mr. Resource felt that the only way he can get Jeremy to work was work one-on-one with him. Working one on one with Jeremy was fine with Mr. Resource except when he had other students in his classroom that are also demanding his attention. Jeremy is a very artistic and creative student, he likes to draw and build things therefore Art is a strong academic area for him. Jeremy has been a fluent writer in the past, but this year he has failed to show his ability. He also struggled in Math with mostly everything except fractions and decimals. When Jeremy was expected to be working in class, he laid on the couch that is in the classroom and tried sleep. Getting Jeremy to work at the table required a lot of Mr. Resource's energy, so he usually pulled a chair up to the couch and verbally discussed or reviewed material. Mr. Resource discussed a difference in Jeremy's behavior between the morning and afternoon hours. In the morning Jeremy was what he described as "passively noncompliant", Jeremy lies on the couch, trying to sleep, ignoring most of what goes on around him. In the afternoon Jeremy was "actively noncompliant". He was noisy, talkative, disruptive and still sitting on the couch refusing to work. Mr. Resource was most worried about Jeremy out of all of his students because he was the first ever to have failed his class.

Social domain. Jeremy chose to sit apart from the other students in the classroom by sitting on the couch. He got along well with the students in Mr. Resource's room, but Jeremy didn't seem to have a close group of friends like most kids do. He would show off and brag about things. He chose to brag about things that other students wouldn't (i.e. being the only student to have failed Mr. Resource's class). When he became disruptive to the class, the other students ignored him or rolled their eyes at him.

Physical domain. In the room there was a long table where most students choose to sit. There was also a smaller table for students who want to sit alone. There were three computer stations and a couch in the room. Since Jeremy chose to sit on the couch, Mr. Resource put up a large poster about motivation and achieving ones dreams in hopes of encouraging Jeremy to work.

Non-School domain. Mr. Resource kept Jeremy's grandmother up to date on his progress and felt that she is frustrated because she is constantly getting a negative report. He thought that Jeremy and his grandmother have a good relationship, but his grandmother has lost control of him. Jeremy has always lived with his grandparents, but his grandfather passed away five years ago and things have increasingly gotten worse since then. His grandmother, Marcella, was dating a new man and they planned on getting married the summer of 2005, which Jeremy was upset about. Jeremy's father is a truck driver and is only home a few times a month. Jeremy enjoys building things like bikes and ramps at home and roller blading. Mr. Resource was not aware of any medications that Jeremy is taking.

Antecedents and consequences. When Jeremy chooses to sit at the table or computer, he will usually work, but Mr. Resource reported that getting him to the table was the hard part. He also works quite well one on one. Last year Mr. Resource was able to work with him entirely one on one and Jeremy did well, but this year it was more difficult for him to work one on one with Jeremy. Mr. Resource tried to talk with Jeremy about his goals and future plans in order of connecting that with graduating, but it hadn't helped. He had also kept Jeremy for an after school program to give him more time to complete homework, but that also had no successful impact. Marcella tried to withhold things from Jeremy until he does what he is asked (i.e. going on trips or getting a new pair of roller blades) but this also had little success.

Purpose of behavior. Mr. Resource felt there could be numerous purposes of Jeremy's behavior. Jeremy may want to do poorly so that he can brag, receive attention, and feel some sort of pride for being the "best bad student." He may also want to gain social connections but lacks the knowledge of how to do so in an appropriate manner. He may be displaying this behavior as a way to escape academic demand or lacks the motivation to do so. Jeremy may avoid doing his work because he feels he can't do it. In this way it's not that he'd done his work incorrectly, but that he hadn't done it at all. He may enjoy being seen as a rebel instead of a student with a learning disability.

Operational definition of target behavior. Upon completion of the teacher interview, the target behavior had shifted from work completion alone to work completions and class participation. Mr. Resource felt that if Jeremy would sit at the table participate in class discussions, not try to sleep, and take a few notes this would increase the number of assignments being turned in.

Grandparent Interview

Marcella's interview was scheduled for 2/25/05, but was rescheduled for 3/11/05 because of conflicting schedules and spring break. The interview lasted approximately 30 minutes. Marcella's interview was much shorter than Mr. Resource's because she either kept her answers very brief or was unable to answer the question (See Appendix C for the completed Parent Interview Form).

Instructional domain. Marcella was aware of Jeremy's behavior in school because Mr. Resource had been in constant contact with her. She was struggling at home to enforce rules and instill the importance of education in Jeremy. She used to ask him everyday if he had homework to complete and he would always respond with "I'll do it later" but it would never get done, so she didn't ask as often. He used to bring a book bag home but she was never sure if it even had homework in it. Marcella knew that Jeremy dislikes Mr. Resource because he always tries to get him to work, and Jeremy viewed that as constant nagging. She talked to Jeremy about his grades and how low they are, but he was not concerned with them; he feels that D's and F's are okay. She would love to see him earning C's. Jeremy dislikes all of his classes and has no desire to be at school, and lacks interest and motivation while there.

Social domain. Marcella was aware that Jeremy lacks a group of friends while at school but he had friends outside of school. He liked to roller blade, snow board, and play hockey with his friends. His friends attend another high school and Jeremy has looked into transferring there, but he lacks the credits he would need in order to do so. Although Jeremy does not get along well with his peers, she felt that he gets along much better with adults.

Non-School domain. Jeremy lives with his grandmother and his father who is only home a couple times a month because he's a truck driver. Jeremy was very close to his grandfather and when he passed away Jeremy took it very hard. He has been in counseling for it, but he still hasn't dealt with it appropriately, he was still keeping all his emotions locked up. Marcella was dating again and planning on remarrying this summer. She explained that she is not home a lot because she is very busy and she spends a lot of time at her fiancé's house. Jeremy told his grandmother that he doesn't mind her fiancé and he'll just have to get used to her being married to another man. Her fiancé used to be a counselor and she is hoping that he'll be able to help Jeremy. Jeremy was prescribed Ritalin in 1st grade but now refuses to take it. Jeremy's morning routine consisted of getting out of bed, getting dressed, brushing his teeth, and walking out the door. He showered at night and ate breakfast at school.

Purpose of behavior. Marcella does not know the purpose of Jeremy's behavior; she feels that if she did he wouldn't be behaving the way he currently was. She thought it may be that Jeremy was stubborn or he wanted to have the power in everything that he does. To try to control Jeremy she bargained with him and used activities that she knows he wants to do, and then he will only halfway do what she wants him to do.

Scatterplot Results

By reviewing the results of the scatterplot that Mr. Resource completed, it was easy to see a difference in Jeremy's behavior in the morning versus the afternoon. In the morning he was a bit more cooperative and quite calm. In the afternoon he was not as cooperative and very disruptive. Because of this behavior difference it was decided that Jeremy would be observed first thing in the morning in Mr. Resource's room, 3rd hour art,

and the last class period of the day, which was also spent with Mr. Resource. Jeremy was also observed in 4th hour English because of his failing grade in the core class.

Classroom Observation #1

The first classroom observation was conducted on 3/30/05 in Mr. Resource's room lasting from 8:00 – 9:30. A naturalistic observation was conducted (See Appendix D for the completed observation form) as well as time sampling (See Appendix E for the completed form).

There were two students in the classroom. When class started Jeremy was stretched out on the couch in Mr. Resource's room. Mr. Resource was talking to Jeremy about assignments that he could be working on, giving him suggestions of where to start. He told him that in order to work he needed to come work at the table. Jeremy didn't want to work. Everything that Mr. Resource suggested Jeremy replied with "no" or "I don't want to."

For twelve minutes Jeremy was the only student in the room the other student was in the bathroom. Mr. Resource used this time as an opportunity to talk with Jeremy who was still lying on the couch. Mr. Resource sat on a stool in front of the couch and started orally reviewing the Math assignment that Jeremy could work on. At one point in time he had to tell Jeremy to open his eyes and look at him. He engaged him in answering questions about the math review although he was still lying on the couch. Mr. Resource asked Jeremy to get out his book. He did so and gave it to him. He proceeded to open the book and hold it in front of him while explaining the page. By orally asking Jeremy questions over the assignment, Jeremy was able to explain what he knew.

When the other student came back in the classroom she asked to use the computer in Mr. Resource's office. While she was at the computer Jeremy could not see her. Mr. Resource continued to focus on Jeremy who was still lying on the couch by asking him questions and letting him respond. If he answered correctly, Mr. Resource gave him another question. If he answered incorrectly, Mr. Resource explained the question in greater detail and Jeremy usually responded correctly.

When the review was over, Mr. Resource asked Jeremy to get out a piece of paper and move to the table to work on drawing the graph for math. He gave him the book and left the room for a few minutes to get some coffee. While he was gone Jeremy looked at the book for about a minute and then sat it down, continuing to lie down. When Mr. Resource reentered the room he asked Jeremy if he had answered the problem. He responded incorrectly. Mr. Resource asked Jeremy to work on the graph, he responded "I already know how to do it," and Mr. Resource told him to prove it. He then sat up on the couch, got out the appropriate assignment, got off the couch to get the colored pencils, and began working on the graph while sitting sideways on the couch. While Jeremy was working Mr. Resource went into his office to check on the student that was using his computer for an English assignment. He continued to go back and forth between the two students, working with them one on one but for short periods of time.

The other student left the room at 8:48 leaving Jeremy to be the only student in the room for the next 14 minutes. During this time he and Mr. Resource continued to work with the graph for Math. Mr. Resource positioned himself around the couch to work with Jeremy. He gave him small bits of the assignment to work on independently as he left his side. Jeremy worked independently until Mr. Resource came back to him and

checked in. Jeremy had worked on the problem but has answered incorrectly or missed a few steps in the process. Mr. Resource then walked him through it step by step giving positive feedback the entire time.

At 9:02 another student entered the room. From 9:02–9:26 Mr. Resource worked at the table sitting beside the other student. He shifted his attention from one student to the other as appropriately needed. When he saw Jeremy not working, he would reengage him in the assignment by verbally walking him through what he needed to do for the next step. While Jeremy was working independently, Mr. Resource worked with the other student. At 9:26 Jeremy began packing up his bag and laid back down on the couch with his eyes closed. Mr. Resource continued working with the other student. At 9:34 Jeremy left the room to go to his next class.

After the observation Mr. Resource was asked if the behavior witnessed was typical. He explained that this was a good day compared to most. Jeremy worked much more than he would have on what he calls a typical day. Although he worked quite well for him this morning, he still didn't accomplish a whole lot. This amount of work completed was typical. From the time sampling it was determined that Jeremy worked on class work for 40% of the time and his peers worked on class work for 90% of the time.

Classroom Observation #2

The second classroom observation was also conducted in Mr. Resource's room but in the afternoon due to the behavior differences between morning hours and afternoon hours. On the afternoon of 3/30/05 Jeremy was observed from 2:25 – 3:03. The same observation forms that were used for the first classroom observation were used for this one as well (See the completed observation form in Appendix F).

There were seven students in the classroom. When Jeremy walked into the room and saw the researcher sitting in the corner he immediately said that he was going to go to the Library and read. Mr. Resource turned down his request and he then went to the couch and laid down. He told Mr. Resource that he volunteered to read *Romeo and Juliet*. Mr. Resource told him that she would help him with it, if he would get out his book, which he did. Mr. Resource was concerned that if he didn't help Jeremy with the book, then he would just lie on the couch with a book in front of his face and not read a word. Jeremy's solution to this worry was that Mr. Resource could tell that he was reading when he didn't talk to anybody. Mr. Resource wanted Jeremy to read the part of Romeo out loud, he outright refused to, stating, "I don't want to read out loud!" in a loud voice. Jeremy and Mr. Resource then discussed and summarized what had happened in the story up to a certain point, with Mr. Resource doing most of that talking and Jeremy chiming in once and a while.

When Mr. Resource left Jeremy's side to work with other students, Jeremy began talking and laughing with the only other boy in the classroom. Three times he laughed loudly and obnoxiously at the word "drill bit" and "rape." Two times he laughed loudly like Woody Woodpecker. A girl in the class made a comment to him asking him if that was Woody Woodpecker.

Jeremy asked Mr. Resource if he could go talk to another teacher about something. He allowed him to go but only if the researcher escorted him, due to his recent tendency of leaving the building. During the walk, Jeremy was asked how things were going. He responded that they were going horribly. As a door was passed that led outside, Jeremy with a smile on his face said that he would be okay by himself now and

wanted to be left alone. He was told that if he were to be left alone the chances of him leaving the building were pretty high given his past behavior and it wasn't worth risking. Jeremy grumbled, but kept walking. At this time Jeremy and the researcher discussed a good time to conduct the student interview. Jeremy wanted to have it done in the afternoon so he could get out of Mr. Resource's class, and it was agreed upon. When Jeremy returned to Mr. Resource's room he went back to the couch, sat down and leaned over the back and began talking to the researcher again. Throughout the conversation he stated that he felt guilty for things that he had done.

Jeremy got up to draw on the dry erase board. The other students were slyly putting sticky notes on each other's back with messages such a "kick me" "kill me" "blow me" etc. written on them. They were interacting appropriately with each other and Jeremy was minding his own business at the board. The boy put a note on Jeremy's back that said "blow me" and the girl put some tape on his back. Jeremy threw a pencil at the boy. Mr. Resource took Jeremy into his office and talked to him. He then took the boy and girl out into the hall (separately) to talk with them. They both apologized to Jeremy. Jeremy stayed in Mr. Resource's office for about five minutes. When he came out of the office, he went to the couch and sat down. He sat for a few minutes and then began packing up his bag. School officially gets out at 3:08 (but the school does not use a bell system) and Jeremy left at 3:03.

After the observation Mr. Resource reported that Jeremy's behavior was typical. He said that the amount of work he completed was typical and minimal. However, the playing with the sticky notes and picking on Jeremy was a new behavior. Also the interaction with the girl in the classroom was new, because both boys usually don't pay

any attention to her but today they did. Mr. Resource attributed the differences in Jeremy's behavior to the researcher's presence in the room. From the time sampling it was determined that Jeremy worked on class work for 10% of the time and his peers worked on class work for 65% of the time.

Classroom Observation #3

Jeremy was observed in art class because this is the class that he is receiving the highest grade in. The observation was conducted on 3/31/05 lasting from 10:26 – 11:10. Again, the same observation forms were used for this observation as for the first two (See Appendix G for the completed observation form).

Jeremy entered the room and sat down at a large table in front of Mr. Art's desk where all the students sit. Jeremy's hair was spiked up all over as compared to his usual style. He also had changed the hoops that he wears in his ears. Jeremy was the first one in the room, as the other students entered they joined him at the table. There were four boys and seven girls. The girls made four comments on his spiky hair. They said it looked good, kind of rock star'ish, and he should keep wearing it that way. As they gave him this attention, he sat at the table and nodded to them. During the conversation about his hair he was setting up his I Pod to be connected to a speaker that he sat on the table so everyone could hear his music. The first song he played was heavy rock as were all the other songs he played throughout the period. It was in German and he asked Mr. Art to translate it for him, but he did not. Jeremy then wanted Mr. Art to feel how hard and spiky his hair was, which he did.

Jeremy turned the I Pod off as Mr. Art began class without being told. As Mr. Art started the class he introduced the researcher. Jeremy had told another student in the class

that he was being observed and this student announced it to the entire class. Jeremy didn't seem to be bothered by the comment. Jeremy got out his project and the needed supplies to work. Mr. Art finished up the introduction for today's class and Jeremy turned the I Pod back on. The music was at a comfortable volume for everyone, he was only asked once by another student to turn it down.

Jeremy looked like every other student in this class. He would work for a bit then stop and talk and then work again. He mainly talked to the boy that was sitting across the table from him. Neither he nor the other students seemed to accomplish much during this period.

Towards the end of class Jeremy received a lot of attention regarding his I Pod. Everyone had questions about it, even Mr. Art. (e.g. "How much did it cost?" "Where did you get it?" "How much is it to get one of the speakers like you have?" "How many songs do you have on it?" "How many will it hold?" "What kind of songs do you have on it?"). While receiving this attention, Jeremy kept his responses fairly short.

Jeremy started putting away his supplies about five minutes before everyone else. Once done, he sat at the table and played different songs on his I Pod. Depending on the reaction from other students, he would then pick a new song or continue with the current song. At the end of class Mr. Art told Jeremy that he would not be able to bring the I Pod back to class again on Monday because he didn't get enough work done. Class was then over and everyone left.

After the observation Mr. Art reported that this day was typical for Jeremy. Mr. Art felt that there is a special dynamic that happens in his class. He has seen some of the girls acting like older sisters toward Jeremy and another boy in the class and this helped

to keep him in line. The girls in this class were pretty girls and when they talk to Jeremy it was positive attention for him. This is the class Jeremy is receiving the best grade in, but Mr. Art reported that Jeremy does minimum work of what he's capable of doing. From the time sampling it was determined that Jeremy worked on class work for 55% of the time and his peers worked on class work for 60% of the time.

Student Interview

Jeremy's interview was conducted in the afternoon of 4/8/05. Since Jeremy had requested to have it take place during Mr. Resource's class, he was with the researcher from 2:26 – 3:00 (See Appendix H for the completed Student Interview Form for Jeremy's interview).

The interview started by asking Jeremy what he usually did that got him into trouble. He said that he used profanity directed towards teachers and peers. He used the profanity when he gets frustrated with what teachers and peers do. When asked about what he meant by this, he could not think of an example). He said that "Dropping an F bomb just helps me feel better." Jeremy felt like he doesn't fit in at Wilson High School. He didn't have any real friends. He has friends that are his friends one day but not the next. He said he "catches a lot of crap" from the upper classmen just because he is a freshman. He didn't understand this because he has been attending this school longer than any of the other kids in his class. He wanted to transfer to another high school because his friends go there. He and his friends liked to roller blade.

When asked about his behavior of not wanting to work in the classroom and if he ever gets into trouble about it, Jeremy explained that he did, but only in Mr. Resource's room. He felt that Mr. Resource "bugs him all the time" and he doesn't like it. The more

he bothered him the more he didn't want to work. He said that if he would only ask him to work one time in a period, he would be more likely to work. He wouldn't come into class and immediately sit down and start working but he would be more likely to work if he wouldn't "bug him all the time." He also didn't want to work because he didn't want to be at school because school was stupid. "I don't understand why kids are supposed to be in school for eight hours a day and then go home and work on the same crap for another 2-3 hours." He thought that kids should be taught at home – but not in a "home school" way. He explained that kids should just learn from their parents whatever their parents want to teach them. Jeremy said that his grandmother could teach him because she used to be a teacher.

When Jeremy was in Mr. Resource's room and got into trouble (using profanity or not working) he was sent to the principal's office. The principal told him that using profanity was wrong and it shouldn't be done in the school. Jeremy said that he always got the same old speech and then spent the rest of the class period in the office. When asked if he has used profanity as a way to get out of the classroom he said he hadn't done it but he had thought about it. Jeremy feels that Mr. Resource (and other teachers) should have a way of dealing with him when he has gotten into trouble in the classroom because the principal had to deal with kids getting into trouble all day and it was not fair to him. He felt that if a teacher has a problem with a kid they should take care of it themselves. Jeremy said that the principal made a deal with him that if he gets a D+ in all of his classes this semester he would take Jeremy from school on a Friday afternoon and go golfing. Jeremy liked to golf and was interested in this reward. When Jeremy was in someone else's classroom and gets into trouble, he would leave the classroom and go to

Mr. Resource's room. Mr. Resource wants him to start working on stuff as soon as he got to the room. He explained that if he was not ready to work and needed time to calm down, the teacher bugging him made him more upset and more likely to use profanity and not work. Jeremy liked to go to Mr. Resource's room because he had a couch that was comfortable.

Times that Jeremy listed as being times that he gets into trouble were the 1st, 2nd, and 8th period on Mondays, Wednesdays, and Fridays. These were the times that he is in Mr. Resource's room.

Jeremy reported that the instructional material was not too hard or too easy for him, he just doesn't want to do it. There were no classes that are better than others and no classes that were worse than others. There were teachers that he dislikes less than others but really didn't like any of them.

Jeremy had mentioned that he felt guilty all the time. When asked to further explain what he meant by that he stated that he didn't really feel guilty, but he felt nervous. He has felt nervous ever since his grandpa died 5 years ago. His grandpa was like a dad to him. Things just haven't been the same since he died. His grandpa was a very important person and since he's been gone Jeremy doesn't have someone he considers to be as important. Jeremy lived with his grandma and his dad. His dad was a trucker and wasn't home much. His grandma was very busy and Jeremy reported that he spent many nights home alone. When left home alone Jeremy said that he played on the computer and talked to friends. Jeremy was very upset that his grandma was dating another man and planned to get married in the summer. Jeremy had nothing against this

man; he just felt that his grandma didn't need to be dating period. He thought it was "gross."

Jeremy reported that he will usually get into trouble at home with his grandma for his failing grades and not cleaning his room. When he got into trouble he was yelled at. He said that there are no other consequences. After all the yelling had taken place, everything was fine in a few hours. A few times he got into a fight with his dad and it has turned physical (e.g. punches were thrown), but Jeremy didn't seem to be bothered by this: "it's not a big deal." When asked, "if you got home from school and had the worst fight ever with your grandma or dad one night, would you be able to go to school the next day and not be thinking about it?" He said "yes". The school psychologist was informed of this information and followed up with him two days later. She determined that it was nothing significant to be concerned about and documented it in his school file. Jeremy was also asked if he thought there was anything going on in his life that could help explain why he continued to get upset at school. He stated that there was but he didn't want to talk about it, because he only had certain people that he talks to about that.

Jeremy's favorite place at school was out on the front steps where he could sit with friends. His least favorite place at school was in Mr. Resource's room.

Jeremy used profanity and refused to work when he was frustrated. Profanity lets others know that he was mad and they needed to stay away from him. Using profanity results in others giving him some space. He reported other things he could do that would be appropriate included punching a wall, a bag or people. He didn't have a punching bag that he could use, but he does have a wall that he has hit. He had some people that he would like to punch, but he understood that he couldn't do that because he would get sent

back to a juvenile detention facility. He has been placed at one for about a month when he was ten; he didn't want to talk about why he was placed there.

Instructional domain. Jeremy felt that he is capable of doing his work, it was not too easy or too hard, and he just didn't want to do it because he didn't see the point in doing it.

Social domain. Jeremy felt that Mr. Resource was constantly on him to do work and never left him alone. He reported that he doesn't want to work because he was frustrated and wanted to be left alone. He felt like he didn't fit in at school because he was picked on by the upperclassmen and lacked a core group of friends while at school.

Physical domain. Jeremy enjoyed sitting on the couch in Mr. Resources room because it was comfortable and no one else would sit next to him when he was on it. He felt that when he got into trouble with a teacher in their classroom, that teacher should be the one that has to deal with him and he should not be sent to the principal's office.

Non-School domain. Jeremy felt nervous all the time since his grandfather died; at school and at home. He didn't approve of his grandmother's plan to remarry. Jeremy faced no consequences for getting into trouble at home, and was never held accountable.

Classroom Observation #4

After the student interview a fourth observation was conducted in a core academic area. The English teacher is Jeremy's academic advisor and was interested in this project and agreed to participate. Jeremy was observed on 4/18/05 in Mr. English's classroom from 12:00 –12:45. The same observation forms were used as were in previous observations (See Appendix I for the completed observation form).

Jeremy and two other boys entered the room five minutes after class had started. The class began by reviewing previous material and taking notes, taking 15 minutes. Jeremy took a few notes. When Mr. English asked Jeremy a question he responded correctly. For the entire period while sitting at his table he was either hunched over the table holding his head up with his hand, or bent over lying on the table. As the class read aloud from their books Jeremy did not participate. For ten minutes his eyes were closed but his head was turned away from the instructor so he could not see that he appeared to be sleeping. Mr. English asked Jeremy three times to sit up and follow along, but he chose not to. Classmates did not pay attention to him or make any comments about him. From the time sampling it was determined that Jeremy worked on class work for 0% of the time and his peers worked on class work for 70% of the time.

Teacher and Parent Meeting

A meeting was held in the afternoon of 4/18/05 at which Mr. Resource, Grandmother Marcella, and the researcher were present. Jeremy chose not to attend despite several invitations stressing the importance of this meeting. The purpose of this meeting was to present Mr. Resource and Marcella a summary of all data that had been collected and to discuss the function of Jeremy's behavior and to develop an intervention. The following is a summary of information discussed at this meeting (See Appendix J for the completed Functional Assessment – Summary and Hypothesis Form that was used to organize the data that was presented for this meeting).

Jeremy's current status with overdue assignments and in class behavior was briefly discussed as this meeting. The focus of this meeting was developing an intervention that would be appropriate for Jeremy. The researcher shared that the target

behavior is most likely to happen when Jeremy is supposed to be and has been asked to work on an assignment or participate in a class activity, lecture, or discussion. The target behavior is least likely to happen when the class is given one task to complete for the entire period and the students are allowed to talk with each other and listen to music while working. The team hypothesized that when Jeremy is asked by a teacher to complete assignments, work independently, participate in class, or join the group at the table to work he will not comply. In doing this he escapes/avoids instructional demands. He will become inactive, sleep, or draw. As a consequence Jeremy is asked again to be an active member of the class and he will still not comply.

Intervention

At the end of this meeting the group could not decide upon an intervention that could be used to improve Jeremy's behavior. The Duncan Intervention Domains-Guide (DID-G) was referred to for developing an intervention appropriate for Jeremy's behavior of escaping task demands (See Appendix K for the DID-G). The intervention presented in the DID-G Social Dimension for student motivation was appropriate for Jeremy. Jeremy was not motivated to complete work or participate in class discussions as determined by the interviews and observations. A reinforcement strategy would be appropriate for Jeremy's current behaviors. It was decided that in order to fully develop the intervention, the researcher needed to talk with Jeremy to decide what would be a meaningful reinforcer to him.

Student Meeting

The researcher met with Jeremy on 4/19/05 to discuss a reinforcer that would be meaningful to him. Jeremy explained a few things that he thought would be worth

working for: fishing, time out of school, or a reduced assignment list. Although Jeremy

enjoyed fishing, it would be difficult to incorporate it into the school day and it was

decided against. A reduced assignment list consisted of removing an assignment from

Jeremy's owed work for every two assignments that he would complete. Mr. Resource

felt that this would be making things too brief for Jeremy and he wouldn't be exposed to

everything that is required academically, and was decided against. Because time out of

school was the biggest motivator for Jeremy, this was heavily focused on and agreed

upon.

Intervention

It was decided that for every assignment that Jeremy completed he earned 10

minutes out of school. Any assignment completed by Jeremy for any class would count

so long as Mr. Resource saw the completed assignment before it was turned in to the

appropriate teacher. He was only able to use his time out of school during Mr. Resource's

class time. Jeremy was interested in saving up his time and using a large amount at one

time rather than a small amount every day. He was allowed to use his time however he

wanted, he could save it or use it daily depending on what he wanted to do each day.

However, if he decided to save it, again he could only use the time to miss Mr.

Resource's class. Being allowed to only use the time during Mr. Resource's class worked

well because Jeremy is with Mr. Resource first thing in the morning and last thing in the

afternoon. It was convenient for Jeremy to be able to come in late in the morning or leave

early in the afternoon. A behavior contract was drawn up that explained the intervention

and Jeremy, Mr. Resource, and the researcher signed it (See Appendix L for the behavior

contract that was used with Jeremy).

Behavior Intervention Plan

The Behavior Intervention Plan (BIP) was completed by the researcher and given to Mr. Resource on 4/22/05 (See Appendix M for the completed BIP form).

Progress Monitoring Plan

The Progress Monitoring Plan was also completed by the researcher and given to Mr. Resource and Grandma on 4/22/05 (See Appendix N for the completed Progress Monitoring Plan).

Results

The intervention was started on 4/25/05 and data was collected continuously in Mr. Resource's classroom and Mr. English's classroom along with the number of assignments Jeremy completed. See Appendix O for the percentage of time Jeremy used class time to work on assignments in Mr. Resource's classroom. See Appendix P for the percentage of time Jeremy used class time to work on assignments in Mr. English's classroom. See Appendix Q for the number of assignments Jeremy completed for all of his classes.

The researcher met with Mr. Resource on 5/19/05 to discuss the effectiveness of the intervention that was in place for Jeremy. It was clear that the intervention was not working and was inappropriate for Jeremy. He felt that the time out of school worked well in the beginning but Jeremy's excitement about it had worn off. It was then decided to create a "menu" of items that Jeremy could choose from. The same principle as before, for every one assignment Jeremy completed he would earn the item he selected (See Appendix R for the menu that was used with Jeremy). The menu of reinforcers was set in place on 5/19/05. However, it also resulted to be ineffective.

CHAPTER 5

DISCUSSION

The question under investigation was "when looking at the problem behavior in either an instructional, social, or consequential way, will this design of an FBA lead to valid information that will help school psychologists link the intervention to the FBA?" The results of the case study would suggest that looking at the behavior specifically in the above domains is helpful for the school psychologist to link the intervention to the results of the FBA. Developing an intervention that was appropriate for Jeremy was not difficult. Having the information from the interviews and observations separated into the domains was beneficial. Observation and interview forms were successful in keeping the FBA process structured. Scott, McIntyre, Liaupsin, Nelson, and Conroy (2004) have experienced the need for a structured model of functional behavior assessment and stated "In attempts to bridge the gap between the development of structured processes (i.e., forms, questions, procedural steps) that might lead teams to conduct a more thorough and valid assessment process, thereby creating more reliable and valid hypothesis from which to consider interventions in the absence of formal hypothesis testing" (pg 393). This model of FBA easily kept data in organized sections allowing patterns of Jeremy's behavior to became apparent and then easily examined. However, implementation of the interventions to improve Jeremy's behavior and academic engagement produced little improvement. The researcher has attributed this to the great need for early intervention.

Jeremy was in 9th grade and had been in special education and resource for almost six years but with all of that support he was still failing his classes and presenting

inappropriate behavior in the classroom. The FBA process did not start with Jeremy at the appropriate time. Participating in this research study would have been much more beneficial to him if it had begun almost six years ago. Jeremy was exhibiting a range of problem behaviors and had multiple interacting variables for possible functions/causes/effects of his behavior. Due to the presence of the multiple interacting variables it made identifying the specific functions quite ambiguous (Repp & Horner, 1999). There continues to be an insufficient empirical database on FBA for students in nonclinical settings who exhibit a range of problem behaviors to establish a basis for making methodologically sound recommendations. Unquestionably, FBA must become an integral part of an overall systemic approach to academic and behavioral management that is proactive in nature and implemented in young children, so that minor problem behaviors are addressed before they develop into severe challenges (Scott, Bucalos, et al., 2004). There is mounting evidence that the majority of severe and chronic problem behaviors demonstrated by school-aged children and adolescents stem from behavior patterns that are established during early childhood. Without early identification and proactive prevention/intervention among young children at risk, problem behavior is likely to continue to develop and lead to long-term, chronic, and disabling conditions. Today, early detection and intervention seems to be the most powerful course of action for ameliorating life-long problems associated with children at risk for emotional/behavioral disorders (Hester et al., (2004).

The researcher experienced some resistance from a teacher when exploring possible interventions for Jeremy. The teacher had reason to believe the intervention would not be effective due to past experiences. However this represents the need for an

intervention that is acceptable to the teachers who will implement it. Elliot, Witt, and

Kratochwill (1991) suggest that treatment acceptability is an important variable in

predicting intervention adherences and integrity. A number of studies have reported that

intervention adherence and integrity are enhanced when the interventions selected are

easy to implement. It was found that teachers prefer treatments they can implement

independently to those requiring consultation with others (Telzrow & Beebe, 2002). Mr.

Resource was pleased with the intervention that was implemented because it didn't

require training and he could implement it independently. He also felt that it would be

effective due to Jeremy's excitement about being allowed out of school early. Although

the actual effectiveness of a specific treatment cannot be determined without a

satisfactory trial of implementation, perceived effectiveness has been shown to relate to

intervention acceptability. Perceived effectiveness refers to the degree to which the

interventionist believes that the treatment is likely to address the identified concern

(Telzow & Beebe, 2002).

The results of this case examination also stress the importance of appropriate

training. This was the researchers first experience in conducting a functional behavior

assessment. Being a skilled psychologist that conducts functional behavior assessments

requires a level and depth of training that relatively few practitioners have (Repp &

Horner, 1999). Determining the function of a student's behavior is an ever-evolving

process as there are many possibilities extending from antecedents, consequences, and

true functionality of behavior. Being able to sort through all of the information and place

it into the appropriate section whether it is a behavior domain (instructional, social,

physical) or property of behavior (antecedents, consequences, function) is a skilled

process that requires practice. Also of importance, is that the psychologist understands that the DID-G is not a comprehensive list of interventions, it is a guide. Research may need to be conducted beyond the guide to develop the appropriate intervention for the individual.

Further research needs to be conducted to further validate this model. Future research may further investigate different ages of students and a wide range of target behaviors to confirm the usefulness of examining behavior in the instructional, social, physical, non-school domains and the consequences of behavior. It would be beneficial to begin this process earlier in the student's school year as to support the idea of early intervention.

In future studies it may certainly be possible to have multiple hypotheses in multiple domains in need of more than one type of intervention. Jeremy had many variables that needed to be addressed. Because the model focuses on one aspect at a time, not all of these needs were addressed. As a result, his conflicting behavior limited the effectiveness of the interventions.

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Appendix A

Teacher Interview Form

Teacher Interview Form – Middle & Secondary

Student: Jeremy   Date: 02/17/05

Teacher: Mr. Resource   Interviewer: Andrea Duncan

The information I gather from you today will help us develop interventions that are more effective for this student. The interview should take about 30 minutes. Thank you for making time to meet.

Description of Problem Behavior: Jeremy does not work on assignments. He will not comply with instructions given regarding assignments. His behavior will shift between active noncompliance and passive noncompliance.

Topography: Jeremy sits alone, on the couch, and refuses to work, and sometimes sleeps

Frequency: daily

Duration: entire period

Intensity:	1 (low)	2	**3**	4	5 (high)

Indicate with a check (√) the days and times the student typically demonstrates the target behavior.

	Monday	Tuesday	Wednesday	Thursday	Friday
Before School					
Period 1:	X	X	X	X	X
Period 2:	X		X		
Period 3:					
Period 4:					
Period 5:					
Period 6:					
Period 7:	X	X	X	X	X
Lunch					
Passing Times					
After School					
To and From School					
Other (specify):					

Behavior Influences

Instructional Domain

1. Describe the student's achievement in reading, math, writing, etc.
2. What are the student's academic strengths? Weaknesses?
3. How does the student's performance compare with others in class?
4. Describe what is happening instructionally when the behavior occurs.
5. Describe what the student is expected to be doing at this time.
6. If different from the student, describe what other classmates expected to be doing at this time.
7. Describe how the student works independently.
8. Describe how the student works with classmates.
9. Looking at the scatter plot we completed earlier, is there anything different about instruction at times that the behavior occurs?

Social Domain

1. Describe who and what is near the student's seat.
2. Do either who or what is near the student seem to predict the target behavior?
3. Describe the student's interactions with classmates before the behavior happens.
4. Are classmates involved before the student demonstrates the target behavior?
5. Are classmates involved when the student demonstrates the target behavior?
6. Describe the student's relationships with other students in class.
7. Does the student have friends in class?
8. How does the target behavior affect the student's relationships with classmates?
9. Looking at the scatter plot we completed earlier, is there anything different about the student's social interactions at times that the behavior occurs?

Physical Domain

1. Describe the arrangement of your classroom.
1. Describe where the student sits in the classroom.
2. Describe the area around the student (i.e., overhead projector, windows, bulletin boards).
3. Is the student easily distractible in class? Describe.
4. Looking at the scatter plot we completed earlier, is there anything different about the classroom environment at times that the behavior occurs?

Non-School Domain

1. Describe your contacts with the student's parents/guardians.
2. Describe what you know about the relationship between the student and parent/guardian.
3. Is there anything you believe to be significant happening in the student's life outside of school?
4. Has the student experienced any significant life changes (i.e., death in family, divorce, move)?
5. Is the student currently taking any medications? Name of medication? Reason for taking it?
6. Has the student taken medication in the past? Name of medication? Reason for taking it?

Antecedents & Consequences

1. What would seem to predict a "good" instructional period?
2. What would seem to predict a "poor" instructional period?
3. What would seem to predict "good" social interactions?
4. What would seem to predict "poor" social interactions?
5. What classroom arrangement best supports this student's behavior?
6. What classroom arrangement is most difficult for this student to handle?
7. Are classmates involved after the student demonstrates the target behavior?
8. Describe your response when the behavior occurs.
9. Describe the response of other students who are present when the behavior occurs.
10. Describe the response of adults who are present when the behavior occurs (i.e., aides, parents, etc.).
11. Describe what happens if the student is removed from the classroom because of the behavior.
12. What happens if the student misses instructional time because of the behavior?
13. What happens if other students miss instructional time because of the behavior?
14. Describe the student's interactions with classmates before the behavior happens.

Purpose of Behavior

1. Describe the purpose(s) that this behavior may serve for this student.
2. What could the student "get" from this behavior?
3. What could the student "get out of" with this behavior?

Behavior Usefulness

1. How often does this behavior help the student "get something" or "get out of something"?
2. How long between the times the student demonstrates the behavior and the time that he/she "gets" or "gets out of" something? Immediately? Several minutes? Longer?

Behavior Strengths

1. Does the student have an appropriate behavior that serves the same purpose as the target behavior?
2. How often does the student demonstrate this behavior unprompted?
3. When and where does the student demonstrate this behavior?

Teacher Interview Summary

Instructional Domain (influences, antecedents & consequences, purpose, usefulness, strengths)

- Jeremy's grades are very poor but it is not determined if he lacks the skills or motivation to complete assignments.
- Jeremy faces no consequences for his poor grades

Social Domain (influences, antecedents & consequences, purpose, usefulness, strengths)

- Jeremy may lack a social connection to this school.
- He may be displaying these behaviors to gain social attention from peers and others. He is being viewed as a misbehaving student.
- He feels a sense of pride for being a poor student.

Physical Domain (influences, antecedents & consequences, purpose, usefulness, strengths)

- A key aspect in the physical domain in Mr. Resource's room is the couch. Jeremy sits on the couch on a daily basis and when he does this Mr. Resource feels that Jeremy is not ready to work, and little is expected from him the entire period.

Non-School Domain (influences, antecedents & consequences, purpose, usefulness, strengths)

- Jeremy's grandmother is getting remarried after his grandfather passed away. He may be preoccupied with this new change and resistive of it.

Operational Definition of Target Behavior:

Jeremy does not use class time to work on assignments. He is uninvolved with other students and activities that take place during class. He prefers to sit alone and sleep through class.

Appendix B

Teacher Scatterplot Form

Teacher Scatterplot Form

Student: Jeremy   Teacher: Mr. Resource

Week(s) of: Feb 21-25 & Feb 28- Mar 4   Interval: 5 minutes and 10 minutes

Use the symbols below – L for low intensity, M for medium intensity, H for high intensity – to describe student's demonstration of the target behavior during the selected interval time, either 5 or 10 minutes. Next to the boxes below, describe what the target behavior looks like at each intensity level.

| L | Low Intensity Behavior Description: Working

| M | Medium Intensity Behavior Description: Passive Noncompliance

| H | High Intensity Behavior Description: Active Noncompliance

	M	T	W	TH	F	M	T	W	TH	F
8:00	~	~	M	M	M	M	~	M	*	M
8:10	~	~	M	M	M	M	~	M	*	L
8:20	~	~	L	L	M	L	~	L	*	L
8:30	~	~	L	L	L	M	~	L	*	L
8:40	~	~	L	M	M	M	~	M	*	M
8:50	~	~	M	~	M	M	~	M	*	L
9:00	~	~	M	~	L	M	~	M	*	L
9:10	~	~	L	~	M	M	~	M	*	M
9:20	~	~	L	~	M	L	~	M	*	L
9:30	~	~	M	~	M	M	~	M	*	L
2:10	~	M	M	*	*	M	~	M	M	M
2:15	~	M	M	*	*	H	~	M	M	M
2:20	~	L	M	*	*	M	~	M	L	M
2:25	~	H	M	*	*	M	~	L	H	L
2:30	~	H	H	*	*	L	~	M	M	L
2:35	~	H	M	*	*	M	~	M	M	L
2:40	~	M	M	*	*	M	~	M	M	L
2:45	~	M	M	*	*	M	~	M	M	M
2:50	~	H	H	*	*	M	~	L	M	~
2:55	~	M	M	*	*	M	~	M	H	~
3:00	~	M	M	*	*	M	~	M	H	~

Time of Day

~ Jeremy was absent   * Mr. Resource forgot the scatterplot

Appendix C

Parent Interview Form

Parent Interview Form

Student: Jeremy

Date: 3/11/05

Parent: Marcella

Interviewer: Andrea Duncan

I'd like to talk to you about your child's experiences at school and home. The more honest you are with me, the more I will be able to help. Nothing you tell me will get your child in trouble.

Operational Definition of Target Behavior (from teacher interview):

Completing assignments, or participating in class (not sleeping, participating in discussions, taking notes). Jeremy should be active in the classroom instead of sleeping.

Indicate with a check (√) when the child typically demonstrates the target behavior at home. Then for each day and time, describe the behavior in more detail.

	Monday	Tuesday	Wednesday	Thursday	Friday
Before School					
Between School & Dinner					
Dinner					
Between Dinner & Bedtime Routine					
During Bedtime Routine					
Other Time (specify):					
Other Time (specify):					

* This was difficult for Marcella to answer because Jeremy never brings homework home. She used to ask him about it on a regular basis but it didn't help so she rarely asks about homework anymore, and Jeremy never mentions it.

Day	Time	Description: Where does behavior happen? Who is present? What is happening before, during, and after the behavior?
		When Marcella would ask Jeremy if he had homework that needed to be completed, Jeremy would respond, "I'll do it later". She never thought that the homework was actually completed. He used to bring his book bag home on a regular basis, but not anymore. Again, Jeremy would never mention homework. He would only briefly talk about it if his grandmother brought it up.
		As far as Marcella is aware only she and Jeremy have talked about homework issues. She is not aware of any that have taken place between Jeremy and his father.
		Jeremy would go to his room when he got home from school, watch television in the living room, or would be with his friends.

Behavior Influences

Instructional Domain

10. Describe your child's attitude towards school.
11. How does your student talk about school at home?
12. Describe your child's relationship with his/her teacher.
13. Describe your child's relationship with his/her peers.
14. Do you think your child understands what is expected of him/her academically?
15. Do you think your child understands what is expected of him/her behaviorally?
16. What types of activities do you think your child enjoys in school?
17. Describe your contacts with your child's teacher and school.
18. What are your expectations for your child at school?

Social Domain

10. How does your child get along with other children?
11. How does your child get along with adults?
12. Does your child have friends at school?
13. Does your child have friends other than school friends?
14. What does your child like to do after school and on weekends?

Non-School Domain

7. Who is in your family?
8. Who lives in your home?
9. Does the target behavior happen at home? Describe this behavior at home.
10. Have you noticed any changes in your child's behavior at home?
11. Have there been any life changes for your child (i.e., divorce, death, move, etc.)?
12. Is your child currently taking any medications? What is the medication and reason for taking it?
13. Has your child taken medication in the past? What was the medication and reason for taking it?
14. Describe your child's morning getting ready for school.
15. Describe your child's after school & evening time.
16. Describe homework time in your home.

Antecedents & Consequences

1. If you know that the target behavior has happened at school, what is your response at home?
2. What seems to predict a "good" behavior day at your home?
3. What seems to predict a "poor" behavior day at your home?
4. If the target behavior happens at home, how do you respond to it?
5. If the target behavior happens at home, how do other adults respond to it?
6. If the target behavior happens at home, how do siblings respond to it?

Purpose of Behavior

4. Describe the function(s) that this behavior may serve for your child.
5. What could your child "get" from this behavior?
6. What could your child "get out of" with this behavior?

Behavior Usefulness

3. How often does this behavior help your child "get something" or "get out of something"?
4. How long between the times your child demonstrates the behavior and the time that he/she "gets" or "gets out of" something? Immediately? Several minutes? Longer?

Behavior Strengths

4. Does your child do something else that is okay, that gets him/her to the same end as this behavior?
5. How often does your child demonstrate this behavior unprompted?
6. When and where does your child demonstrate this behavior?

Parent Interview Summary

Instructional Domain (influences, antecedents & consequences, purpose, usefulness, strengths)

- Jeremy simply dislikes all of his classes and school. He has no desire to be at school and lacks interest and motivation when there.

Social Domain (influences, antecedents & consequences, purpose, usefulness, strengths)

- Jeremy doesn't have a solid group of friends at his school. He wanted to transfer to another high school where all of his friends attend, but he lacks the required credits to transfer.
- Jeremy views Mr. Resource's instruction as "nagging" and feels that Mr. Resource "nags" at him constantly.

Non-School Domain (influences, antecedents & consequences, purpose, usefulness, strengths)

- Jeremy is upset that his grandmother is dating and getting remarried.

Appendix D

Observation Form: Resource Room (#1)

Classroom Observation Form

Student: Jeremy

Date: 3/30/05

Teacher: Mr. Resource

Location of observation: Mr. Resource's classroom

Observer: Andrea Duncan

Start Time: 8:00   End Time: 9:30

Operational Definition of Target Behavior (from teacher interview):

Completing assignments, or participating in class (not sleeping, participating in discussions, taking notes). Jeremy should be active in the classroom instead of sleeping.

Use the space below for the narrative observation. Include all possible information pertaining to the antecedents and consequences of the target behavior, along with possible environmental influences.

There were two students in the classroom. When class started Jeremy was found stretched out on the couch in Mr. Resource's room. Mr. Resource was talking to Jeremy about assignments that he could be working on, giving him suggestions of where to start. He told him that in order to work he needed to come work at the table. Jeremy didn't want to work. Everything that Mr. Resource suggested Jeremy replied with "no" or "I don't want to".

For twelve minutes Jeremy was the only student in the room (the other student went to the bathroom). Mr. Resource used this time as an opportunity to talk with Jeremy. He was still lying on the couch. Mr. Resource sat on a stool in front of the couch and started orally reviewing the Math assignment that Jeremy could work on. At one point in time he had to tell Jeremy to open his eyes and look at him. He engaged him in answering questions about the Math review although he was still lying on the couch. Mr. Resource asked Jeremy to get out his book. He did so and gave it to Mr. Resource. He proceeded to open the book and hold it in front of him while explaining the page. By orally asking Jeremy questions over the assignment, Jeremy was able to explain what he knew.

When the other student came back in the classroom she asked to use the computer in Mr. Resource's office. While she was in the office Jeremy could not see her. Mr. Resource continued to focus on Jeremy who was still lying on the couch. Asking him questions and letting him respond. If he answered correctly Mr. Resource gave him another question. If he answered incorrectly Mr. Resource explained the question in greater detail and had Jeremy respond, it was usually correct this time.

When the review was over, Mr. Resource asked Jeremy to get out a piece of paper and move to the table to work on drawing the graph for Math. He gave him the book and left the room for a few minutes to get some coffee. While he was gone Jeremy looked at the book for about a minute and then sat it down, continuing to lie down. When Mr.

Resource reentered the room he asked Jeremy if he had answered the problem. He said that he had, but the answer he gave was incorrect. Mr. Resource asked Jeremy to work on the graph, he responded, "I already know how to do it", and Mr. Resource told him to prove it. He then sat up on the couch, got out the appropriate assignment, got off the couch to get the colored pencils, and began working on the graph while sitting sideways on the couch. While Jeremy was working Mr. Resource went into his office to check on the student that was using the computer for an English assignment. He continued to go back and forth between the two students, working with them one on one but for short periods of time.

The other student left the room at 8:48 leaving Jeremy to be the only student in the room for the next 14 minutes. During this time he and Mr. Resource continue to work with the graph for Math. Mr. Resource positions himself around the couch to work with Jeremy. He gives him small bits of the assignment to work on independently as he leaves his side. Jeremy works independently until Mr. Resource comes back to him and checks in. Jeremy has usually worked on the problem but has answered incorrectly or missed a few steps in the process. Mr. Resource then walks him through it step by step giving positive feedback the entire time.

At 9:02 another student entered the room. From 9:02–9:26 Mr. Resource worked at the table sitting beside the other student. He shifted his attention from one student to the other as appropriately needed. When he saw that Jeremy had stopped working he would reengage him in the assignment by verbally walking him through what he needed to do for the next step. While Jeremy was working independently Mr. Resource worked with the other student. At 9:26 Jeremy began packing up his bag and laid back down on the couch with his eyes closed. Mr. Resource continued working with the other student. At 9:34 Jeremy left the room to go to his next class.

After the observation Mr. Resource was asked if the behavior that was witnessed was typical. He explained that this was a good day compared to most. He worked much more than he would have on what he calls a typical day. Although he worked quite well for him this morning he still didn't accomplish a whole lot, this amount of work completed is typical.

In addition to a Continuous Observation Log, the following observation methods should be considered as appropriate: event recording, duration recording, momentary time sampling. Data gathered from any additional observations should be included below.

Time sampling indicated that Jeremy was on task 40% of the time and his peers were on task 90% of the time.

Identify the antecedents and consequences for the observed target behavior, including observational data to support conclusions.

Observation Summary – Antecedents of Behavior:

Instructional Domain

Identify Antecedent	Describe observational evidence supporting the antecedent
When Jeremy works independently…	His response is usually incorrect.
When Jeremy works one-on-one with Mr. Resource…	His response is usually correct.

Social Domain

Identify Antecedent	Describe observational evidence supporting the antecedent
When there is another student in the room…	Jeremy would not interact with them.
When Mr. Resource talks with Jeremy about class or something else…	Jeremy would respond with statements that are very brief and would not extend the conversation. It was as if he lacked the energy to interact with others.

Physical Domain

Identify Antecedent	Describe observational evidence supporting the antecedent
When Jeremy lies on the couch…	Mr. Resource comes to work with him and works around his body on the couch. He is asked to sit at the table, but he refuses.

Observation Summary – Consequences of Behavior

Identify Consequence	Describe observational evidence supporting the antecedent
Jeremy refuses to work...	When Jeremy is asked to work he simply refuses. So Mr. Resource tries harder to get Jeremy involved. He sits beside him, talks to him, and asks him questions about the assignment.

Appendix E

Time Sampling Form

Time Sampling Observation:
Percent of class time used to work on schoolwork.

Date: 3/30/05   Time: 8:00-9:30   Date:_____   Time:_____

Location: Mr. Resource's Classroom Location: _____

Student		Peer	Student		Peer
15	-	+	15		
30	-	+	30		
15	-	-	15		
30	-	+	30		
15	-	+	15		
30	+	-	30		
15	+	+	15		
30	+	+	30		
15	-	+	15		
30	-	+	30		
15	-	+	15		
30	+	+	30		
15	-	+	15		
30	+	+	30		
15	+	+	15		
30	-	+	30		
15	-	+	15		
30	+	+	30		
15	+	+	15		
30	-	+	30		

8/20 = 40%   18/20 = 90%
of time on task   of time on task

15 second intervals switching from Student to a Peer.

Appendix F

Observation Form: Resource Room (#2)

Classroom Observation Form

Student: Jeremy   Date: 3/30/05

Teacher: Mr. Resource   Location of observation: Mr. Resource's classroom

Observer: Andrea Duncan   Start Time: 2:25   End Time: 3:03

Operational Definition of Target Behavior (from teacher interview):

Completing assignments, or participating in class (not sleeping, participating in discussions, taking notes). Jeremy should be active in the classroom instead of sleeping.

Use the space below for the narrative observation. Include all possible information pertaining to the antecedents and consequences of the target behavior, along with possible environmental influences.

There were seven students in the classroom. When Jeremy walked into the room and saw the researcher sitting in the corner he immediately said that he was going to go to the Library and read. Mr. Resource turned down his request and he then went to the couch and laid down. He told Mr. Resource that he volunteered to read *Romeo and Juliet*. Mr. Resource told him that she would help him with it, if he would get out his book, which he did. Mr. Resource was concerned that if he didn't help Jeremy with the book, then he would just lie on the couch with a book in front of his face and not read a word. Jeremy's solution to this worry was that Mr. Resource could tell that he was reading when he didn't talk to anybody. Mr. Resource wanted Jeremy to read the part of Romeo out loud, he outright refused to, stating, "I don't want to read out loud!" in a loud voice. Jeremy and Mr. Resource then discussed and summarized what had happened in the story up to a certain point, with Mr. Resource doing most of that talking and Jeremy chiming in once and a while.

When Mr. Resource left Jeremy's side to work with other students, Jeremy began talking and laughing with the only other boy in the classroom. Three times he laughed loudly and obnoxiously at the word "drill bit" and "rape". Two times he laughed loudly like Woody Woodpecker. A girl in the class made a comment to him asking him if that was Woody Woodpecker.

Jeremy asked Mr. Resource if he could go talk to another teacher about something. He allowed him to go but only if the researcher escorted him, due to his recent tendency of leaving the building. During the walk, Jeremy was asked how things were going. He responded that they were going horribly. As a door was passed that led outside, Jeremy with a smile on his face said that he would be okay by himself now and wanted to be left alone. He was told that if he were to be left alone the chances of him leaving the building were pretty high given his past behavior and it wasn't worth risking. Jeremy grumbled, but kept walking. At this time Jeremy and the researcher discussed a good time to

conduct the student interview. Jeremy wanted to have it done in the afternoon so he could get out of Mr. Resource's class, and it was agreed upon. When Jeremy returned to Mr. Resource's room he went back to the couch, sat down and leaned over the back and began talking to the researcher again. Throughout the conversation he stated that he felt guilty for things that he had done.

Jeremy got up to draw on the dry erase board. The other students were slyly putting sticky notes on each other's back with messages such a "kick me" "kill me" "blow me" etc. written on them. They were playing nicely with each other and Jeremy was minding his own business at the board. The boy put a note on Jeremy's back that said "blow me" and the girl put some tape on his back. Jeremy threw a pencil at the boy. Mr. Resource took Jeremy into his office and talked to him. He then took the boy and girl out into the hall (separately) to talk with them. They both apologized to Jeremy. Jeremy stayed in Mr. Resource's office for about five minutes. When he came out of the office, he went to the couch and sat down. He sat for a few minutes and then began packing up his bag. School officially gets out at 3:08 (but the school does not use a bell system) and Jeremy left at 3:03.

After the observation Mr. Resource reported that Jeremy's behavior was typical. He said that the amount of work he completed was typical and minimal. However, the playing with the sticky notes and picking on Jeremy was a new behavior. Also the interaction with the girl in the classroom was new, because both boys usually don't pay any attention to her but today they did. Mr. Resource attributed the differences in Jeremy's behavior to the researcher's presence in the room.

> In addition to a Continuous Observation Log, the following observation methods should be considered as appropriate: event recording, duration recording, momentary time sampling. Data gathered from any additional observations should be included below.

Time sampling indicated that Jeremy was on task for 10 % of the time and his peers were on task 65% of the time.

Identify the antecedents and consequences for the observed target behavior, including observational data to support conclusions.

Observation Summary – Antecedents of Behavior:

Instructional Domain

Identify Antecedent	Describe observational evidence supporting the antecedent
When Jeremy is asked to read out loud...	He loudly states "I don't want to read outloud" Supporting a dislike for reading.

Social Domain

Identify Antecedent	Describe observational evidence supporting the antecedent
When Mr. Resource asks Jeremy to work on an assignment...	He refuses to do so. Jeremy is then asked over and over again to get out something to work on. Mr. Resource always has options of work for Jeremy to complete.
When Jeremy is picked on by his peers...	He becomes upset and acts out (as seen by throwing the pencil)

Physical Domain

Identify Antecedent	Describe observational evidence supporting the antecedent
When Jeremy lies on the couch...	He does not work.

Observation Summary – Consequences of Behavior

Identify Consequence	Describe observational evidence supporting the antecedent
When Jeremy becomes upset...	He becomes aggressive and gets into trouble. He then receives attention from the teacher.
When Jeremy refuses to work...	Mr. Resource pleads with him to work, Jeremy still refuses but gains more attention for escaping his work. He then only relaxes in Mr. Resource's room, and no work is completed.

Appendix G

Observation Form: Art

Classroom Observation Form

Student: Jeremy

Date: 3/31/05

Teacher: Mr. Art

Location of observation: Mr. Art's classroom

Observer: Andrea Duncan

Start Time: 10:26 End Time: 11:10

Operational Definition of Target Behavior (from teacher interview):

Completing assignments, or participating in class (not sleeping, participating in discussions, taking notes). Jeremy should be active in the classroom instead of sleeping.

Use the space below for the narrative observation. Include all possible information pertaining to the antecedents and consequences of the target behavior, along with possible environmental influences.

Jeremy entered the room and sat down at a large table in front of Mr. Art's desk where all the students sit. Jeremy's hair was spiked up all over as compared to his usual style. He also had changed the hoops that he wears in his ears. Jeremy was the first one in the room, as the other students entered they joined him at the table. There were four boys and seven girls. The girls made four comments on his spiky hair. They said it looked good, kind of rock star'ish, and he should keep wearing it that way. As they gave him this attention, he sat at the table and nodded to them. During the conversation about his hair he was setting up his I Pod to be connected to a speaker that he sat on the table so everyone could hear his music. The first song he played was heavy rock as were all the other songs he played throughout the period. It was in German and he asked Mr. Art to translate it for him, but he did not. Jeremy then wanted Mr. Art to feel how hard and spiky his hair was, which he did.

Jeremy turned the I Pod off as Mr. Art began class without being told. As Mr. Art started the class he introduced the researcher. Jeremy had told another student in the class that he was being observed and this student announced it to the entire class. Jeremy didn't seem to be bothered by the comment. Jeremy got out his project and the needed supplies to work. Mr. Art finished up the introduction for today's class and Jeremy turned the I Pod back on. The music was at a comfortable volume for everyone, he was only asked once by another student to turn it down.

Jeremy looked like every other student in this class. He would work for a bit then stop and talk and then work again. He mainly talked to the boy that was sitting across the table from him. Neither he nor the other students seemed to accomplish much during this period.

Towards the end of class Jeremy received a lot of attention regarding his I Pod. Everyone had questions about it, even Mr. Art. (e.g. "How much did it cost?" "Where did you get it?" "How much is it to get one of the speakers like you have?" "How many songs do you have on it?" "How many will it hold?" "What kind of songs do you have on it?") While receiving this attention, Jeremy kept his responses fairly short.

Jeremy started putting away his supplies about five minutes before everyone else. Once done, he sat at the table and played different songs on his I Pod. Depending on the reaction from other students, he would then pick a new song or continue with the current song. At the end of class Mr. Art told Jeremy that he would not be able to bring the I Pod back to class again on Monday because he didn't get enough work done. Class was then over and everyone left.

After the observation Mr. Art reported that this day was typical for Jeremy. Mr. Art felt that there is a special dynamic that happens in his class. He has seen some of the girls acting like older sisters toward Jeremy and another boy in the class and this helped to keep him in line. The girls in this class were pretty girls and when they talk to Jeremy it was positive attention for him. This is the class Jeremy is receiving the best grade in, but Mr. Art reported that Jeremy does minimum work of what he's capable of doing.

> In addition to a Continuous Observation Log, the following observation methods should be considered as appropriate: event recording, duration recording, momentary time sampling. Data gathered from any additional observations should be included below.

Time sampling indicated that Jeremy was on task for 55% of the time while peers were on task 60% of the time.

Identify the antecedents and consequences for the observed target behavior, including observational data to support conclusions.

Observation Summary – Antecedents of Behavior:

Instructional Domain

Identify Antecedent	Describe observational evidence supporting the antecedent
Jeremy stayed busy...	This could be because this class is interesting to him and he is allowed to do what he's interested in (drawing).

Social Domain

Identify Antecedent	Describe observational evidence supporting the antecedent
Students are allowed to chat while they work…	Even though they talk to each other while working, they still work on their projects and stay on task.
Jeremy received attention from his peers…	Justin seemed to enjoy the attention for his hair and I-Pod throughout the class period. He also received attention from the pretty girls in the class.

Physical Domain

Identify Antecedent	Describe observational evidence supporting the antecedent
Sitting at the table with peers…	Jeremy sat at the table with everyone else and worked like everyone else. The only time he got up from the table was to get more supplies and then put them away later.

Observation Summary – Consequences of Behavior

Identify Consequence	Describe observational evidence supporting the antecedent
Jeremy worked in this class…	There wasn't a significant difference between the amount of time Jeremy and his peers worked on projects.

Appendix H

Student Interview Form

Student Interview Form – Middle & Secondary

Student: Jeremy   Date: 4/8/05

Teacher: Mr. Resource   Interviewer: Andrea Duncan

I want to talk to you about how school is going for you. I want to help find ways to make school better for you. The more honest you are with me, the more I can help. Nothing you tell me will get you in trouble.

What do you do that usually gets you in trouble at school? (i.e., talking, fighting, unfinished work)

Profanity towards teachers and students

What about <u>not working in class</u> (describe target behavior from teacher interview if not identified above)? Do you ever get in trouble for this?

Yes, but only because I don't want to work.

Why do you think you get in trouble for <u>not doing your assignments</u> (target behavior)?

I don't know. I shouldn't have to work if I don't want to.

What happens just before you get in trouble for <u>not working</u> (target behavior)?

I'm minding my own business not bothering anybody but teachers keep bugging me. They're always nagging at me.

What happens after you get in trouble for <u>not completing your assignments</u> (target behavior)?

They (the teachers) will keep bugging me, start yelling at me, send me to the principal's office, or I'll leave and go to Mr. Resource's room.

Indicate with a check (√) when the student reports getting in trouble for _____ (target behavior).

	Monday	Tuesday	Wednesday	Thursday	Friday
Before School					
Period 1:	X	X	X	X	X
Period 2:	X		X		
Period 3:					
Period 4:					
Period 5:					
Period 6:					
Period 7:	X	X	X	X	X
Lunch					
Passing Times					
After School					
To and From School					
Other (specify):					
Other (specify):					

Behavior Influences

Instructional

1. Is any of your schoolwork too easy for you? If so, what is too easy?
2. Is any of your schoolwork too hard for you? If so, what is too hard?
3. Do you get help in classes if you ask for it appropriately?
4. Do your teachers notice when you do good work in class?
5. Do you ever feel that you don't have enough time to finish your work at school? When?
6. Do you ever feel that there is too much time to finish work at school? When?
7. Does it help you when a teacher helps you with your work?
8. Does it help you when a classmate helps you with your work?
9. What is your most favorite class? Why?
10. What is your least favorite class? Why?
11. In what class(es) do you get in the most trouble?
12. In what class(es) do you get in the least trouble?
13. What do you think would help you most with your work in school?

Physical

1. Tell me about the place(s) you like to hang out at school. Why do you like this place?
2. Tell me about the place(s) at school you most want to avoid. Why do you want to avoid this?
3. Tell me where you can do your best work at school.
4. Tell me where it is the hardest to do your work at school.
5. Is there a place in school (i.e., hallways) where you're most likely to get in trouble?
6. Is there a place in school where you're least likely to get in trouble?
7. Is there anything in classrooms that gets in your way when you're trying to learn or study?
8. Is there anything in your classrooms that gets in your way when you're trying to behavior appropriately?

Social

1. Do you have friends in school?
2. In which classes do you have friends?
3. Are there kids at school who you don't like?
4. Are any of these kids in your classes?
5. When you get in trouble, do other kids get in trouble too? Tell me what happens.
6. Are other kids bothered when you _____ (target behavior) in class?
7. Whom in your class do you think your behavior bugs?
8. Whom in your class do you want to bug with your behavior?
9. Do other kids bug you in class?

Non-School

1. What happens when you get in trouble at home?
2. Do you get in trouble for _____ at home?
3. What happens when you get in trouble for _____ at home?
4. Do you ever think about things that happen at home or in your neighborhood when you're at school?
5. Is it ever hard to focus on school because of stuff that's happening at home or in your neighborhood?
6. Do you think there is anything going on in your life that could help other people understand why you _____?

Antecedents & Consequences

1. What do your friends do when you _____?
2. What do your teachers do when you _____?
3. What do your parents/guardians do when you _____?
4. What happens at school just before you _____?
5. What happens at school just after you _____?
6. What happens at home just before you _____?
7. What happens at home just after you _____?
8. How do you feel after you get in trouble for _____?

Purpose of Behavior

1. What do you want to <u>get</u> when you _____?
2. What do you want to <u>get out of</u> when you _____?

Behavior Usefulness

1. How well is _____ working for you?
2. Are you getting/getting out of what you want?

Behavior Strengths

1. Are there other things you can do besides _____ to get what you want without getting in trouble?
2. Tell me about these other things you can do.
3. What happens when you do these things?
4. Are there other things you can do besides _____ to get out of something without getting in trouble?
5. Tell me about these other things you can do.
6. What happens when you do these things?

Student Interview Summary

Instructional Domain (influences, antecedents & consequences, purpose, usefulness, strengths)

- Jeremy feels that he is capable of doing his work, it is not too easy or too hard.
- He doesn't want to do it because he doesn't see the point/benefit of completing his work.

Social Domain (influences, antecedents & consequences, purpose, usefulness, strengths)

- Jeremy feels that Mr. Resource "bugs" him to work all the time and never leaves him alone.
- When Jeremy says that he doesn't want to work it is because hi is frustrated and wants to be left alone for a while.
- He also feels like he doesn't fit in at Wilson High School. He is teased by his upper classmen and lacks a core group of friends while at school.

Physical Domain (influences, antecedents & consequences, purpose, usefulness, strengths)

- Jeremy enjoys sitting on the couch because it is comfortable and no one else sits on it with him so he can always be alone on the couch.
- Jeremy thinks that the teacher he gets into trouble with should be the one to give him his consequence.

Non-School Domain (influences, antecedents & consequences, purpose, usefulness, strengths)

- Jeremy feels nervous all the time since his grandpa died. He doesn't like the fact that his grandma is dating and getting remarried.
- Jeremy faces no consequences at home (although his grandma says he does)

Appendix I

Observation Form: English

Classroom Observation Form

Student: Jeremy   Date: 4/18/05

  Teacher: Mr. English   Location of observation: Mr. English's classroom

  Observer: Andrea Duncan   Start Time: 12:00   End Time: 12:45

Operational Definition of Target Behavior (from teacher interview):

Completing assignments, or participating in class (not sleeping, participating in discussions, taking notes). Jeremy should be active in the classroom instead of sleeping.

Use the space below for the narrative observation. Include all possible information pertaining to the antecedents and consequences of the target behavior, along with possible environmental influences.

Jeremy and two other boys entered the room five minutes after class had started. The class began by reviewing previous material and taking notes, taking 15 minutes. Jeremy took a few notes. When Mr. English asked Jeremy a question he responded correctly. For the entire period while sitting at his table he was either hunched over the table holding his head up with his hand, or bent over lying on the table. As the class read aloud from their books Jeremy did not participate. For ten minutes his eyes were closed but his head was turned away from the instructor so he could not see that he appeared to be sleeping. Mr. English asked Jeremy three times to sit up and follow along, but he chose not to. Classmates did not pay attention to him or make any comments about him.

Mr. English reported that this was exactly the type of behavior he has been seeing out of Jeremy all year long.

In addition to a Continuous Observation Log, the following observation methods should be considered as appropriate: event recording, duration recording, momentary time sampling. Data gathered from any additional observations should be included below.

From the time sampling it was determined that Jeremy worked on class work for 0% of the time and his peers worked on class work for 70% of the time

Identify the antecedents and consequences for the observed target behavior, including observational data to support conclusions.

Observation Summary – Antecedents of Behavior:

Instructional Domain

Identify Antecedent	Describe observational evidence supporting the antecedent
Jeremy appeared to not pay attention for the entire period...	Jeremy was asked to pay attention and sit up a few times but when he didn't listen nothing else was done.

Social Domain

Identify Antecedent	Describe observational evidence supporting the antecedent
Jeremy did not interact with peers or the teacher...	He sat at a table by himself and did not participate in the discussion or the review.

Physical Domain

Identify Antecedent	Describe observational evidence supporting the antecedent
Sitting at the table by himself...	Jeremy sat at a table by himself and stayed there the entire period. He laid his head down on the table many times and nothing was done to correct him.

Observation Summary – Consequences of Behavior

Identify Consequence	Describe observational evidence supporting the antecedent
Jeremy did not work in this class...	Jeremy seemed to be completely "checked out" from this class. He was not involved at all.

Appendix J

Functional Assessment – Summary and Hypothesis Form

Functional Assessment – Summary & Hypothesis Form

Information has been collected from 2 observations in the resource teacher's room, 1 in Art, and 1 in English. Interviews have been conducted with the resource teacher, the student's grandmother, and the student. The scatterplot has been completed by the resource teacher and 6 behavior checks have been completed

Definition of Target Behavior:
Not using class time to work on assignments or participate in class discussions or lectures.

Instructional:
When the student is asked to work on an assignment or be involved with a class activity/discussion/lecture he does not comply. He will then sit and do nothing or try to sleep. The instructor will then redirect the student's attention to the task at hand, and again the student will not comply. The student does not work well independently. He will work for short amounts of time and his work is either incorrect or incomplete. Student works well one on one. The student uses class time to work on assignments 32% of the time while peers work on assignments 76% of the time.

Social:
The student doesn't have a social group. He feels like he doesn't fit in at Wilson High School. When he responds to questions his responses are very short. He is able to interact with students when it is allowed in class. He gains attention for not working in class from another boy in the resource teacher's room in the afternoon.

Physical:
The student's least favorite place to be in school is the resource teacher's room. His most favorite place to be at school is out on the front steps. The student spends a lot of time in the resource teacher's room on the couch, and very little time at the large table in her room where students work. In Art, he sits at the large table with the group. In English, he sits at a two person table by himself.

Non-School
The student is upset that his grandmother is dating and planning on remarrying. He gets about 6 ½ hours of sleep a night. The student feels nervous all the time, at school and away from school. He is interested in transferring to Cedar Falls High School where his friends go. He enjoys roller-blading with his friends and building/rebuilding things.

Target Behavior is _Most_ Likely to Happen When:
The student is supposed to be and has been asked to work on an assignment or participate in a class activity, lecture, or discussion.

Target Behavior is _Least_ Likely to Happen When:
The class is given one task to complete for the entire period and the students are allowed to talk with each other and listen to music while working.

Hypothesis:
When the student is asked by the teacher to complete assignments, work independently, participate in class, or join the group at the table to work he will not comply. In doing this he escapes/avoids instructional demands. The student will become inactive, sleep, or draw. As a consequence the student is asked again to be an active member of the class and he will still not comply.

Appendix K

Duncan Intervention Domain – Guide (DID-G)

Duncan Intervention Domains – Guide (DID-G)

The Instructional Domain

Task Difficulty	Learning Style	Student Interest	Student Choice	Skill Deficits	Student Motivation
Shortening worksheets (Miller, Gunter, Venn, Hummel, & Wiley, 2003)	**Academic strategy identification** (Jolivette, Wehby, & Hirsch, 1999)	**Preferred activities** (Dunlap et. Al., 1993)	**Student menus** (Dunlap et al., 1994)	**Individualized instruction** (Gibb & Wilder, 2002)	**Self-monitoring** (Sabella, Levendoski & Cartledge, 2000)

The Social Dimension

Student Seating & Grouping	Peer Provocation	Adult Interactions	Student's Social Skills	Student Motivation
Cooperative learning (Umbreit, 1995)	**Second Step Violation Prevention Program** (Taub, 2002)	**Student Problem-Solving** Hune & Nelson (2002)	**Social skill training** (Lane, Wehby, Menzies, Dougas, Munton & Gregg, 2003)	**Reinforcement strategies** (Higgins, Williams, & McLaughlin, 2001)

The Physical Dimension

Auditory Influences	Visual Influences	Personal Kinesthetic Influences	Tactile Influences
Removal of background noise (O'Reilly, Lacey, & Lancioni, 2000).	**Assistive reading software** (Hecker, Burns, Elkind, Elkind, & Katz, 2002)	**Brain Gym movement program** (Templeton & Jensen, 1996)	**Lesson Plans Including Tactile Modality** (Kurywczak, 1997)

Consequences of Behavior

Gaining Attention From Teacher or Peers	Escaping or Avoiding a Task	Gaining Sensory Stimulation	Gaining Power or Control
Teacher attention to task engagement & ignoring tantrums (Repp & Karsh, 1994)	**Pre-teaching strategies** (Burke, Hagan-burke & Sugai, 2003)	**Hand-mouthing maintained by sensory reinforcers** (Shirley, Iwata, & Kahng, 1999)	**Non-punitive response to student** (Maag, 1997)

Appendix L
Behavior Contract

Behavior Contract

It has been agreed upon that Jeremy earns time out of school for completing his assignments. For every one assignment that is completed, he earns 10 minutes out of Mr. Resource's class. He is able to save his time or spend it daily, he is the sole decider of what to do with his time everyday. This contract will be in effect as long as needed, as determined by Jeremy, Mr. Resource, and Miss Duncan.

_____	_____
(Jeremy)	(Date)
_____	_____
(Mr. Resource)	(Date)
_____	_____
(Miss Duncan)	(Date)

Appendix M

Behavior Intervention Plan (BIP)

Behavioral Intervention Plan (BIP)

Student Name: Jeremy   **D.O.B.**

School: Wilson High School   **Grade: 9th**

Target Behavior: Using time inappropriately. (i.e.- not working on assignments or participating in class discussions or lectures)

Summary of Assessment Data

Interview:

<u>Resource Teacher</u> – He cannot determine if the student lacks the skills required to do the work or lacks motivation to do the work. May avoid doing the work because he'd rather be seen as a rebel than as someone who lacks required skills to do the work. He works better for him in a small group setting (morning) than in a larger group setting (afternoon). He has a difficult time getting the student off of the couch to come work at the table in her room. Thinks the student may have a sense of pride about being a bad student and may receive attention from peers for it.

<u>Grandmother</u> – She knows that the student doesn't like school and that he has no desire to be at school and lacks interest and motivation while here. The student's friends do not attend the same school so he has no strong social connections here. The student becomes easily frustrated when teachers ask him to work.

<u>Student</u> – He feels like he is capable of doing his work but doesn't want to because he doesn't see the point in it. The student becomes frustrated and upset when teachers ask him to work because he feels that they are "bugging" him. The student doesn't feel like he fits in at his school because his friends don't go to school here. He feels nervous all the time, ever since his grandfather passed away. He gets about 6½ hours of sleep a night. The student's least favorite place to be in school is the resource teacher's room.

Observation:

<u>Resource Teacher's Room</u>: (morning, small group) This morning the student was on the couch all morning. The resource teacher asked him multiple times to go sit at the table without success. He sat next to him and worked 1:1 with him for the majority of the class period. During the time that the resource teacher worked with another student he would give the student a task to work on. He demonstrated that he would work independently, but for very short periods of time. His work was usually incorrect or incomplete when he came back over to him. He was very passive and tired this morning. Responses he gave were short and quiet. The student worked on class material 43% of the time and peers worked for 87% of the time. This percentage would have been lower if the resource teacher had not worked 1:1 with him.

<u>The resource teacher's Room</u>: (afternoon, large group) The student was more awake this afternoon. He spent most of his time on the couch with some spent on a trip to another teacher's room and drawing on the board. He was also more talkative and his voice was much louder. He states things out loud for all to hear and then laughs loudly afterward. The only other boy in the class laughed along with him. He had a book he was supposed to read, but he wasn't reading it. The resource teacher sat 1:1 with him for a short amount of time and reviewed the book. Two students in the class played a joke on the student by placing a sticky note on his back. The student became upset and threw a pencil at the boy and then sat in the resource teacher's office. The student worked on class material 9% of the time and peers worked for 64% of the time.

<u>Art Teacher's Room</u>: (Art, large group) The class was given their task for the period at the beginning of class. They were to work on their sketches of possible metal sculptures they will do in an upcoming class. The student worked like a typical student during this time. He worked on class material 55% of the time and peers worked 60% of the time. He sat at the large table with the group and carried conversations with students around him. He had his I-Pod with him a played music for everyone to hear. He received a lot of attention as a result of his I-Pod and his spiky hair.

<u>English Teacher's Room</u>: (English, large group) The class began by reviewing previous material and taking notes, this took 15 minutes. The student took a few notes. When the instructor asked the student a question he responded correctly. For the entire period while sitting at his table the student was either hunched over the table holding his head up with his hand, or bent over lying on the table. As the class read aloud from their books the student did not participate. For 10 minutes the student's eyes were closed but his head was turned away from the instructor. He was asked 3 times to sit up and follow along, but he chose not to. Classmates did not pay attention to him or make any comments about him. He worked on class material 0% of the time and peers worked 70% of the time.

Working Hypothesis: When the student is asked by the teacher to complete assignments, work independently, participate in class, or join the group at the table to work he will not comply. In doing this he escapes/avoids instructional demands. The student will become inactive, sleep, or draw. As a consequence he is asked again to be an active member of the class and he will still not comply.

Intervention(s) Reinforcement Strategy: For every assignment that the student completes he earns 10 minutes out of school. Minutes can be banked and saved for a later date. However, a maximum of 90 minutes can be used at one time. If the student chooses to use 90 minutes at once this will excuse him from the first two periods of the day, which is resource time. The student may also choose to use banked time to leave school early. If this occurs he will be excused from 8th hour only, also resource time. ANY assignment that the student completes counts towards time out of school, but the resource teacher must see the assignment.

Appendix N

Progress Monitoring Form

Progress Monitoring Plan

Target Behavior: Using time inappropriately. (i.e.- not working on assignments or participating in class discussions or lectures)

Observation Method: (e.g., event, time sampling, anecdotal) Time sampling, permanent product records, and event recording.

Description of Procedures: (e.g., when observations will be conducted, who will collect the data, where the data will be collected)

To monitor academic engagement, time sampling will be done by the researcher six times per week. On Monday, Thursday, and Friday, for the remainder of the PLS school year, the researcher will observe the student in the Resource teacher's and English teacher's rooms.

To monitor the number of assignments being completed, permanent products will be counted and event recording will be used. The resource teacher and the student will be recording a description of assignments that the student completes and also recording the number of assignments that are being completed. Both the resource teacher and the student have been given the tools to record this data.

Progress Review Meeting Scheduled: 5/19/05

Appendix O

Resource: Academic Engagement
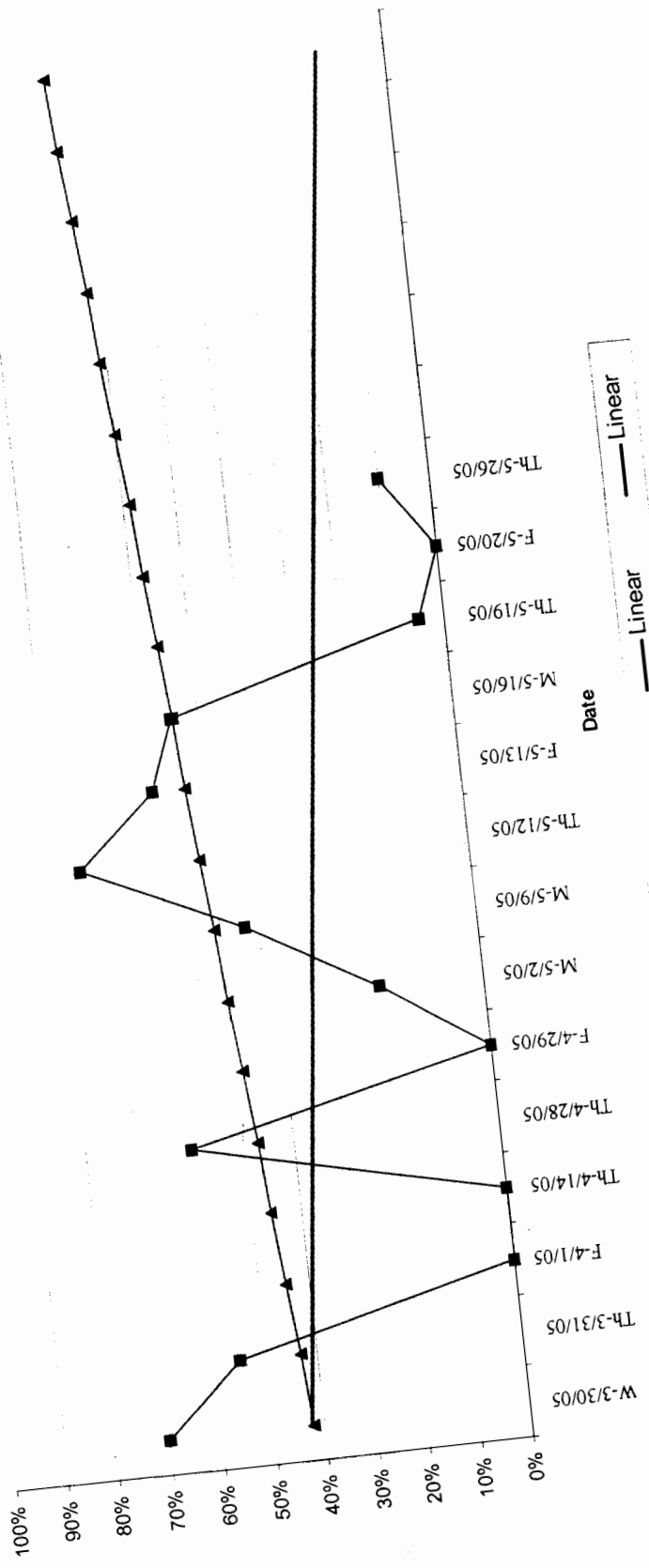
Resource: Increasing Academic Engagement
Spring 2005
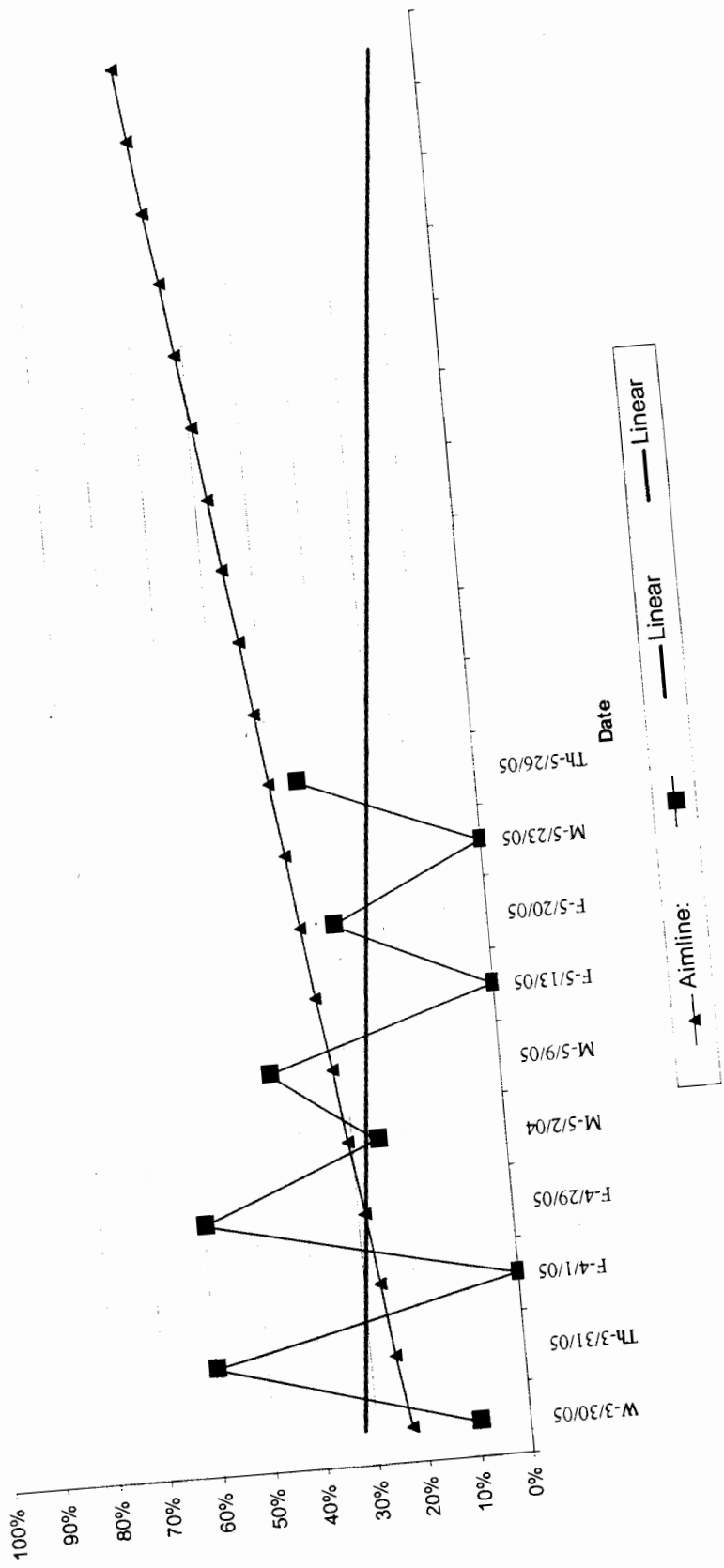
Appendix P

English: Academic Engagement

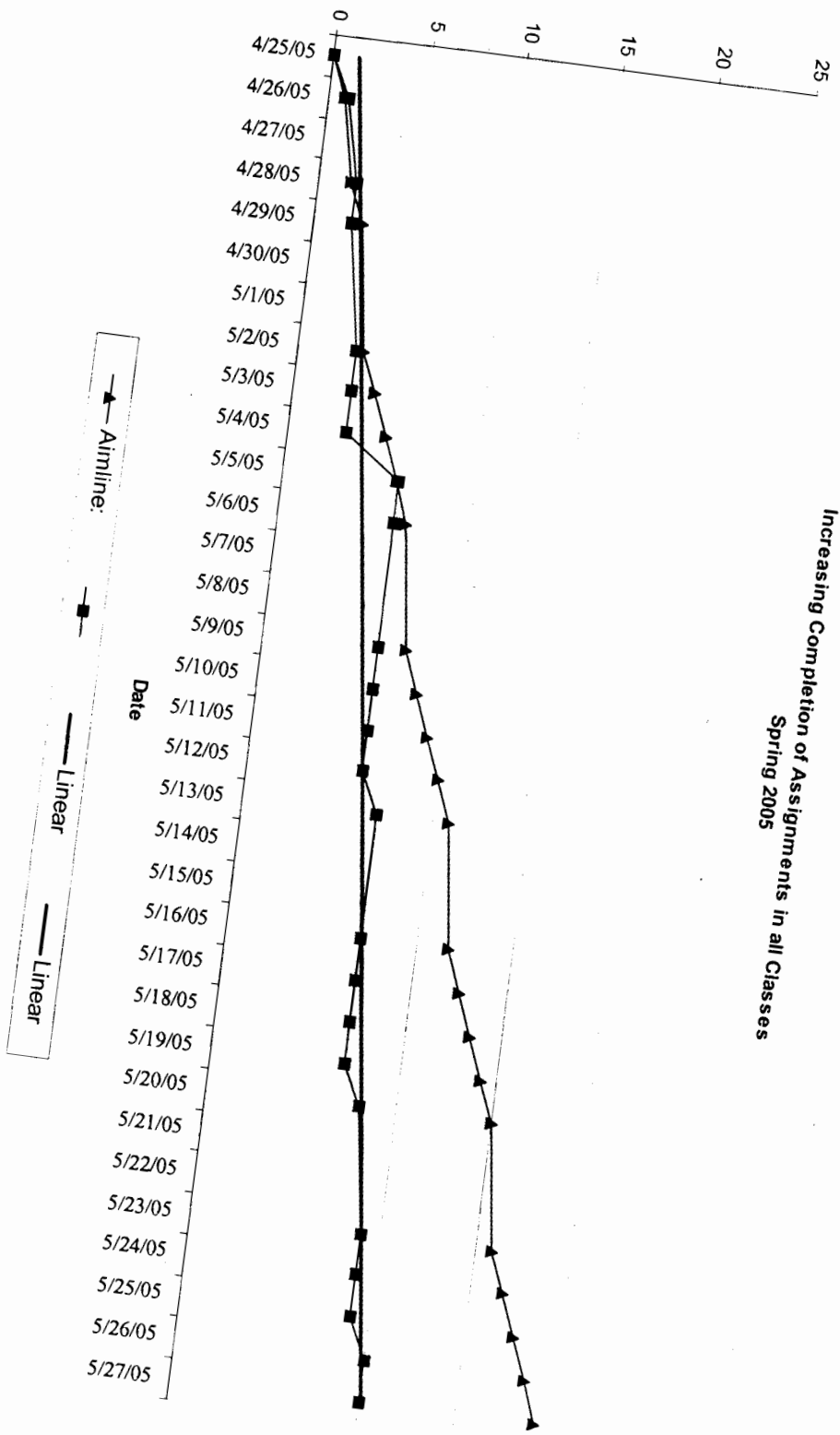English: Increasing Academic Engagement
Spring 2005

Appendix Q

Number of Completed Assignments

Increasing Completion of Assignments in all Classes
Spring 2005

Appendix R

Menu of Reinforcers

Jeremy's Menu

For Every Assignment Completed I can Earn.....

10 minutes out of school

Time on the Internet

Time to check email

Time with the Principal

Food

Candy

Pop

Skate around the block on roller blades

Time on couch (uninterrupted)