



All Theses and Dissertations

2008-07-09

Secondary Intervention for Students At Risk for Emotional and Behavioral Disorders Within a Positive Behavior Support Model

Jennifer Anne James

Brigham Young University - Provo

Follow this and additional works at: <https://scholarsarchive.byu.edu/etd>

 Part of the [Counseling Psychology Commons](#), and the [Special Education and Teaching Commons](#)

BYU ScholarsArchive Citation

James, Jennifer Anne, "Secondary Intervention for Students At Risk for Emotional and Behavioral Disorders Within a Positive Behavior Support Model" (2008). *All Theses and Dissertations*. 1493.

<https://scholarsarchive.byu.edu/etd/1493>

This Thesis is brought to you for free and open access by BYU ScholarsArchive. It has been accepted for inclusion in All Theses and Dissertations by an authorized administrator of BYU ScholarsArchive. For more information, please contact scholarsarchive@byu.edu, ellen_amatangelo@byu.edu.

MENTORING: A SECONDARY INTERVENTION FOR STUDENTS AT RISK FOR
EMOTIONAL AND BEHAVIOR DISORDERS WITHIN A POSITIVE BEHAVIOR
SUPPORT MODEL

by

Jennifer A. James

A thesis submitted to the faculty of

Brigham Young University

in partial fulfillment of the requirements for the degree of

Educational Specialist

Department of Counseling Psychology and Special Education

Brigham Young University

August 2008

Copyright © 2008 Jennifer A. James

All Rights Reserved

BRIGHAM YOUNG UNIVERSITY

GRADUATE COMMITTEE APPROVAL

of a thesis submitted by

Jennifer A. James

This thesis has been read by each member of the following graduate committee and by majority vote has been found to be satisfactory.

Date

Michelle Marchant, Chair

Date

Ellie Young

Date

Paul Caldarella

BRIGHAM YOUNG UNIVERSITY

As chair of the candidate's graduate committee, I have read the thesis of Jennifer A. James in its final form and have found that (1) its format, citations, and bibliographical style are consistent and acceptable and fulfill university and department style requirements; (2) its illustrative materials including figures, tables, and charts are in place; and (3) the final manuscript is satisfactory to the graduate committee and is ready for submission to the university library.

Date

Michelle Marchant, Chair

Accepted for the Department

Date

Ellie Young
Graduate Coordinator

Accepted for the College

Date

Barbara Culatta
Associate Dean, College of Education

ABSTRACT

Mentoring: A Secondary Intervention for Students At Risk for Emotional and Behavior Disorders within a Positive Behavior Support Model

Jennifer A. James

Department of Counseling Psychology and Special Education
Educational Specialist in School Psychology

Mentoring is an intervention growing in popularity with a weak research foundation. This study combines mentoring and social skill training within a positive behavior support framework. Targeting a fourth-grade, Latino student at risk for emotional and behavioral disorders, this single-subject study looks at his ability to master a specific social skill. The mentor served to reinforce social skill learning through practicing, role-playing, and goal setting. The student was chosen using the Systematic Screening for Behavior Disorders and the social skill was created using the School Social Behavior Scales that identified social skill strengths and weaknesses. Student demonstration of the social skill was monitored two to three times each week. The student made progress toward mastery, but did not fully master the social skill. Additionally, pre- and post-School Social Behavior Scales showed increased social skill competency and decreased anti-social

behaviors during the five-month mentoring intervention. Results indicated that short-term mentoring positively influenced the student's general level of social competency but was not sufficient for the mastery of the selected social skill.

ACKNOWLEDGEMENTS

This study would have never come to fruition without the time and efforts of many people. First of all, I would like to acknowledge and express gratitude to my thesis advisor, Michelle Marchant. She saw me through each step from generating ideas to finalizing revisions a process which took over two years. I appreciate her feedback and patience with me during this process. It has been a pleasure to work with her and learn from her experience.

Secondly, I acknowledge and thank the research team from Brigham Young University's Positive Behavior Support Initiative. The team planned, organized, ran, monitored, and helped evaluate the school mentoring study. Shauna Valentine and Janet Young served as the mentoring coordinators and put in numerous hours recruiting, training, monitoring, and even mentoring. The research team relied heavily on Shauna's previous experience with mentoring programs and her commitment to making this mentoring program successful.

Mike Adams and Adam Fischer served as vital players in providing support in the elementary school. The year prior to this study, the research team and elementary school created a pilot mentoring program. Mike and Adam served as advocates between the school staff and administration and the research team. The positive results and experiences from the pilot program, opened the door to continue the mentoring program another year and allowed for this study.

I express appreciation to Paul Caldarella. He worked behind the scenes to help the research team exercise sound research practices in monitoring the mentoring program and

data collection. Paul inspired us to look for opportunities to share our experiences with the mentoring program with others.

This study would have never resulted without the diligent efforts of mentor volunteers, teachers, and observers. I appreciate each one and their willingness to try something new and be flexible. I am also grateful to the school's principal. He was an advocate of the mentoring program and his support was vital to its successful implementation.

Finally, I acknowledge my family for their support and motivation to finish what I started. My husband has been a great source of encouragement to keep going even when the research was stressful and the writing was difficult. He is my biggest advocate in continuing my education and completing my graduate degree. I am also grateful to my mother who provided encouragement and love throughout this process. On several occasions, I took advantage of her listening ear to express the excitement or frustration I felt during this experience.

TABLE OF CONTENTS

ABSTRACT	v
ACKNOWLEDGEMENTS	vii
TABLE OF CONTENTS	ix
LIST OF TABLES	xi
LIST OF FIGURES	xii
INTRODUCTION	1
LITERATURE REVIEW	3
Emotional and Behavioral Disorders	3
Positive Behavior Support	5
Three-tiers of positive behavior support	6
Early identification of students	6
Mentoring	8
History of mentoring	8
Definitions of mentoring	9
School-based mentoring	10
Benefits of mentoring	12
Social Skill Instruction	15
Summary and Conclusion	17
Research Question	18
METHOD	19
Setting	19
Materials	20
Participants	20
Target student	20
Student selection process	20
Target mentor	24
Dependent Variable and Measures	25
Selecting the dependent variable	25
Defining the target social skill	28
Independent Variables and Measures	31
School mentoring training	31
Social skill training	32
Target mentor training	32
Experimental Design	33
Baseline phase	34

Instruction period	36
Structured mentoring phase	36
Closure	37
Data Collection	38
Original data collection procedures	38
Modified data collection procedures	40
Observer and interobserver agreement	41
Treatment Fidelity	43
Social Validity	45
RESULTS	46
Student Performance of the Target Social Skill	46
Student performance of step one	47
Student performance of step two	48
Student performance of step three	52
Student performance of step four	54
Change in Ancillary Measures: SSBS-2 and Grades	54
Social Validity	57
DISCUSSION	59
Implications for Mentoring Students with EBD	59
Implications for Social Skills Research	63
Limitations and Recommendations	64
Conclusion	68
REFERENCES	69
APPENDIX A	75
APPENDIX B	76
APPENDIX C	77
APPENDIX D	78
APPENDIX E	79
APPENDIX F	80
APPENDIX G	84

LIST OF TABLES

Table		Page
1	Description of Participants	21
2	Positive and Negative Examples of the Social Skill Steps.. ..	29
3	Behavior Card (BC) Scoring Key	39
4	Modified Behavior Card (BC) Scoring Key	41
5	Changes (Δ) in Pre- and Post- SSBS-2 Raw Scores	56

LIST OF FIGURES

Figure		Page
1	Overall social skill performance scores across different phases.....	47
2	Look at the teacher during instructions and question behavior card score across different	48
3	Beginning tasks and answering questions within five seconds behavior card score across different phases.....	49
4	Beginning tasks and answering questions within five seconds percentage and trend line across different phases calculated from behavior card observations	50
5	Number of questions asked directly to the target student across different setting calculated from the behavior cards.....	50
6	The target student's response to group-asked questions across different settings calculated from behavior cards	51
7	The target student's percentage of response to group-asked questions across settings calculated from behavior cards.....	51
8	Working on assignments until finished behavior card score across different settings.....	53
9	Working on assignments until finished percentage and trend line across different settings calculated from behavior cards.....	53
10	Turning in assignment scores across different phases	55

INTRODUCTION

Creating safe environments conducive to learning is a primary goal of educators. The government has mandated that students receive a free and appropriate public education in the least restrictive environment meaning students with disabilities should be educated along side students without disabilities as far as it is appropriate (Utah Board of Education, 2004). This idealistic prospect is difficult to implement especially when working with students with emotional and behavioral disorders (EBD; Kamps, Kravits, Rauch, Kamps, & Chung, 2000). The U.S. Department of Education reported in 1994 (Lewis & Sugai, 1999) that 50% of students with EBD drop out and only 42% of those who remain in school graduate with a diploma. To decrease this escalating problem and improve available services, a preventative movement using positive behavior supports (PBS; Kamps et al., 2000) has emerged.

PBS systems incorporate a three-tiered model to theoretically meet the individual needs of each student (Lane & Beebe-Frankenberger, 2004). Primary interventions target all students, while secondary and tertiary programs focus on small group and individual needs. Specific interventions at each level are determined by the unique circumstances of the school and target individuals. Research studies have successfully implemented a variety of intervention programs within the PBS model. However, mentoring is a program that is rising in popularity, but not frequently found in the PBS literature.

Mentoring involves a one-on-one supportive relationship between a child and an adult (Jackson, 2002). It is individual-focused (Cruddas, 2005) and preventative in nature (Dubois, Holloway, Valentine, & Cooper, 2002). Mentoring provides social support and positive role models to youth who may otherwise lack this in their lives. Many

communities are developing mentoring programs (Jekielek, Moore, & Hair, 2002) to meet the vast needs of their youth.

Although mentoring is a popular youth program (Jekielek et al., 2002), mentoring research is considered to be in its infancy and studies show mixed results as to its effectiveness (Keating, Tomishima, Foster, & Alessandri, 2002). Two factors that contribute to this are limited empirical studies (Jackson, 2002) and methodologically weak studies. Further mentoring research is necessary to address these limitations.

Additionally, discrepant findings have been presented regarding the development of social competency within a mentoring relationship. One mentoring study (Jackson, 2002) reported a decrease in problem behaviors but no significant increase in social competency. Without replacing problem behaviors with social competent behaviors, it may be difficult to maintain positive behavior change. Combining social skill training and mentoring interventions may create the social support necessary to develop greater social competency.

The present study seeks to add to mentoring, social skill, and PBS research by implementing social skill oriented mentoring within a PBS system as a secondary level intervention. Using a single-subject design, one student and his mentor were selected from a school mentoring program for this study. The mentor reinforced the social skill “Showing Responsibility for Completing Work.” Data was collected through direct observation and permanent product to measure the demonstration of each social skill step.

LITERATURE REVIEW

Emotional and Behavioral Disorders

“Individuals with emotional and behavioral disorders experience the least favorable outcomes of any group of individuals with disabilities” (Jolivet, Stichter, Nelson, Scott, & Liaupsin, 2000, p.1). Indicators such as low rates of postsecondary education, high levels of unemployment, low levels of community participation, and higher rates of incarceration among individuals with EBD support the above statement. The statistics indicate that individuals with emotional and behavioral challenges may have skill and performance deficits in academic, social, and behavioral contexts (Lane, Carter, Pierson, & Glaeser, 2006). If this is true, there is a great need to develop and improve interventions to help children with EBD.

Students with EBD often display decreased abilities to master academic content (Jolivet et al., 2000). Their academic deficits commonly include low levels of task engagement, limited task completion, limited academic skills, and limited content knowledge (Lane, Wehby, & Barton-Arwood, 2005). Compounding this problem, students with EBD often have externalizing, disruptive behavior patterns (Lane, Gresham, & O’Shaughnessy, 2002) and are frequently removed from class so they receive less academic instruction (Jolivet et al., 2000). In addition, teachers are poorly trained to adjust the core curriculum to the needs of students with EBD (Lane et al., 2002). With this stated, it may not be surprising, but it is still alarming that more than 50% of students with EBD drop out of school (Jolivet et al., 2000).

The high percentage of students who drop out of school is alarming because they are at high risk for social and economic difficulties (Kauffman, Mostert, Trent, & Pullen,

2006). They are less likely to be employed and more likely to be arrested (Jolivet et al., 2000). A 1994 study showed that 73% of students with EBD who dropped out of school were arrested within three to five years, compared to only 3-5% of their peers with EBD who graduated (Sutherland & MacMillan, 2001). This creates an enormous financial burden on the community as taxpayers spend about \$51,000 per year to incarcerate one person whereas it costs about \$11,500 to educate a child with disabilities (Sutherland & MacMillan, 2001).

In addition to academic deficiencies, youth with EBD often have difficulty forming social relationships. With lower levels of social competence (Lane et al., 2006) and limited social skills they often misinterpret social situations, have difficulty problem solving, (Lane, Wehby, et al., 2005) and face peer rejection (Murray & Greenberg, 2006). Because of this, without adaptive social networks these youth are at high risk for other developmental difficulties (Kauffman et al., 2006). Thus, there is a great need to intercede and assist youth with EBD academically, socially, and behaviorally.

One of the difficulties of serving those with EBD is the wide variety of deficits that are included within the categorization (Lane et al., 2002). EBD is characterized by at least one of the following: inability to learn not attributed to intellectual, sensory, or health issues; inability to form relationships, inappropriate behaviors or feelings, persistent unhappiness or depression, and/or propensities to develop physical symptoms or fears related to school problems (Utah State Board of Education, 2000). Each of these characteristics comprises both internalizing and externalizing behaviors. Internalizing behaviors are behavioral deficits focused inwardly such as extreme shyness or depression. Externalizing behaviors are behavior excesses with an outward focus such as

defiance or aggression (Lane, Wehby, et al., 2005; Utah State Board of Education, 2000). Because of the diversity of deficits under the label EBD, it is essential that interventions be individualized and assessment-based.

Another obstacle in serving students with EBD is that they face years of academic failure and peer rejection before evaluations and interventions begin (Lane et al., 2002). To avoid this, the behavioral management focus has shifted from remediation to early identification and prevention. Behavior and learning problems tend to be progressive in nature (Lane et al., 2002; Lane, Wehby, et al., 2005), making early intervention more effective than remediation just as small gaps are easier to bridge than large ones. Research claims that prevention is favorable to remediation (Lane & Carter, 2006; Marchant et al., in press) in that it is generally less intensive, more cost efficient, and more effective (Lane et al., 2002). The government openly supported this paradigm shift with the Individuals with Disabilities Education Act of 1997, legally emphasizing the preventative focus of serious behavioral challenges (Carr et al., 2002). Carr et al. (2002) attributed this prevention paradigm shift to the positive behavior support (PBS) movement.

Positive Behavior Support

The purposes of PBS systems are to enhance the quality of life and minimize problem behaviors (Carr et al., 2002). PBS relies on the premise that “effective environments make problem behaviors irrelevant, inefficient, and ineffective” (Horner, 2000, p.97). Using a form of behavioral analysis, PBS systems focus initially on the school-wide level to prevent the development of behavioral problems (Meier, DiPerna, & Oster, 2006; Sugai & Horner, 2002). School-wide interventions do not effectively serve

every student, so a multi-level, data-driven model is used to meet individual's needs in an organized, efficient, and effective manner (Lane & Beebe-Frankenberger, 2004).

Three-tiers of positive behavior support. The multi-level PBS system encompasses both prevention and remediation using three levels: primary, secondary, and tertiary (Lane & Beebe-Frankenberger, 2004; Sugai & Horner, 2002). The primary level is preventative and educational in nature sufficiently serving about 80% of students with interventions such as school-wide social skill training and school-wide literacy projects (Lane & Beebe-Frankenberger, 2004; Walker, Cheney, Stage, & Blum, 2005). The secondary level is also preventative, focusing on removing or reducing risk factors of the students who fail to respond sufficiently to primary interventions (Lane & Beebe-Frankenberger, 2004; Sugai & Horner, 2002). Secondary interventions such as literacy, anger management, and social skills groups are designed for small group levels that serve between 10-15% of the students. Tertiary level interventions are generally remediation efforts targeting the remaining 5% of students through individualized and intensive programs such as behavioral intervention plans and individualized education programs (Walker et al., 2005). Theoretically, when a school effectively implements all three levels of behavior supports, each student will receive the appropriate level of support to meet their social, behavioral, and academic needs.

Early identification of students. An essential part of the PBS model and prevention of EBD is early identification of students needing secondary and tertiary level supports (Sugai & Horner, 2002). Several identification methods are available. Office disciplinary referrals (ODR) are a naturally available and a frequently used identification source (Sugai & Horner, 2002). However, relying solely on ODR data for identification

purposes introduces several limitations. Office referrals are reactive by identifying students' problem behaviors after they act out. One purpose of early identification and prevention is to identify potential problems before they are apparent (Marchant et al., 2006; Sevenson & Walker, 2002). ODR also targets externalizing behaviors, overlooking many internalizing students (Marchant et al., 2006; Walker et al., 2005). A proactive method for early identification of students with both internalizing and externalizing disorders is systematic school-wide screening (Walker et al., 2005).

Several systematic school-wide screening measures targeting emotional and behavior disorders are available. The *School Social Behavior Scales, 2nd Edition* (SSBS-2) serves multiple purposes as an assessment tool as well as a screening and identification tool for children behaviorally at-risk (Merrell, 2002). The *Systematic Screening for Behavior Disorders* (SSBD, Sevenson & Walker, 1992) and *Student Risk Screening Scale* (SRSS, Drummond, 1993) are examples of screening tools that identify students at risk for EBD (Lane et al., 2002). These screening tools identify students who need secondary and tertiary level supports before problem behaviors become solidified behavioral patterns; thus, creating opportunities for successful preventative interventions.

After identifying students at risk for EBD, different level interventions are designed and implemented. To be most effective and efficient, interventions are tailored to the specific needs of the students (Lane et al., 2002) using assessment data to determine those needs. As stated earlier, this is essential for students identified or at risk for EBD because of the varying behavioral characteristics that EBD encompasses. A flexible, intervention that is growing in popularity among schools and communities, but

yet to be studied within a PBS system is mentoring (Jackson, 2002; Rhodes, Reddy, Roffman, & Grossman, 2005; Royse, 1995).

Mentoring

Mentoring is preventative by nature (Dubois et al., 2002) and designed to connect at-risk students (Jekielek et al., 2002) with adult volunteers from the community to form positive, caring relationships. Though mentoring has not been widely applied in a PBS model, it would fit well as a secondary level component. This one-on-one intervention may look like a tertiary-level support, but when using community volunteers with limited training in behavioral management, it may be more appropriate to focus on students with secondary-level needs than those with tertiary-level needs (Dubois et al., 2002). Matching mentors' skills and experiences with youth's individual needs can facilitate the development of a positive relationship and according to mentoring history positive relationships are a key part of achieving positive outcomes.

History of mentoring. Mentoring's roots can be traced back to Greek mythology. When King Odysseus left for the Trojan War, he entrusted the care of his son Telemachus to his old friend Mentor. Mentor is often painted as a caring, self-sacrificing educator and guide to Telemachus during his father's absence. This image has become the classic model of mentoring (Colley, 2003).

Youth mentoring in the United States is over one hundred years old. Big Brothers Big Sisters (2006) is the oldest and largest youth mentoring program in the United States. It began in 1904 when Ernest Coulter, a court clerk, recognized that many boys in trouble with the court system would benefit from a relationship with a caring adult. Within 12

years, the Big Brothers Big Sisters movement had spread to 96 cities across the United States (Big Brothers Big Sisters, 2006).

Though mentoring was established over one hundred years ago, research regarding the outcomes of mentoring programs has only been available since about 1970 (Dubois et al., 2002). Currently, mentoring research is still considered to be in its infancy with discrepant findings (Keating et al., 2002), limited available empirical studies (Jackson, 2002), and studies that are methodologically weak (Keating et al., 2002). In identifying these weaknesses, researchers (Jackson, 2002; Keating et al., 2002) have begun to redress these issues, but additional research is necessary to strengthen the mentoring research base and make confident assertions about the effectiveness of the programs. This is especially important as the number of mentoring programs serving at-risk youth is rapidly growing (Keating et al., 2002).

Several new mentoring programs began in the mid to late 1980s (Jekielek et al., 2002), as the understanding that children need positive relationships with adults (Search Institute, 2005) became more apparent. These programs provided support systems to supplement parental support and, in some cases, substitute for the lack of parental support (Jekielek et al., 2002). Due to factors such as changing family systems (i.e., more divorce and single-parent households), overcrowded schools, and less cohesive communities the number of positive adult role models in children's lives has been reduced (Jekielek et al., 2002; Rhodes et al., 2005). Youth mentoring brings adults and children together in an effort to provide these role models across many different settings and situations.

Definitions of mentoring. Mentoring has been implemented in a variety of settings spanning the academic, social, and professional arenas (Colley, 2003). In each of these

arenas, mentoring relationships form both naturally and artificially. Natural mentoring relationships are relationships that develop as one person with more experience or competence recognizes and intervenes with another person (McLearn, Colasanto, & Schoen, 1998). Unfortunately, many children in need of positive role models and adult support never develop natural mentoring relationships (Rhodes et al., 2005). School and community-based “artificial” mentoring programs, seek to redress these needs through assigning adult volunteers to serve youth from at-risk backgrounds (DuBois et al., 2002; Rhodes et al., 2005).

School-based mentoring. Youth mentoring is divided into school and community-based programs; and recently, Hancock (2003) issued a call to implement more school-based programs as opposed to community-based programs. Big Brothers Big Sisters of Canada (Hancock, 2003) noticed two problematic trends: increasing numbers of students in need of mentoring and a decreasing pool of volunteers. In response, they launched a nation-wide, in-school mentoring program where students met with adults during the school day one hour each week. The 2002 evaluation of the program showed that 64% of students developed a more positive attitude toward school, 58% improved their grades, 60% improved their relationship with adults, 56% improved their relationships with peers, and 64% developed higher levels of self-confidence. Based on these initial reports the National Programs Coordinator for Big Brothers Big Sisters of Canada advocated creating more in-school mentoring programs.

On the other hand, in a meta-analysis of 55 mentoring programs (Dubois et al., 2002) community and workplace mentoring programs were found to be more effective than school-based programs. Effect sizes were computed as standardized mean

differences in comparing the variety of mentoring studies. School-based mentoring programs had lower effect sizes ($d = .07$) than the community ($d = .14$) and workplace ($d = .24$) programs. However, the meta-analysis only included articles through 1998, so the most current research findings were not included. Additional research of school-based mentoring programs will aid in clarifying these discrepancies.

A Public/Private Ventures report (Herrera, 1999) outlined the advantages of school-based mentoring over its community-based counterpart. School-based mentoring attracts more volunteers due to the decreased time commitment, reaches youth whose parents lack time or energy to transport them the mentoring activities, creates easier supervision as the pair meets on school grounds, and links the mentor to the school creating an educational advocate for the student. In addition, school-based mentoring on average costs \$400 less per student each year than community mentoring. These advantages warrant further development to improve school-based mentoring programs so positive outcomes can be realized in that context.

In a retrospect, qualitative study of two strong Big Brothers Big Sisters programs, Herrera (1999) connected mentoring with academic and behavioral improvements. Parents reported that their students made significant academic improvement. Three of four teachers interviewed noted improved confidence in the mentored students. Mentoring also seemed to have a calming effect on some physically aggressive students. Limitations of this study included using a small sample size, focusing on individuals supportive of the mentoring programs, and only collecting retrospective data. Also, the students were selected by teacher nomination. Upon recognizing these limitations, Herrera submitted that school-based mentoring needs more attention from research. In

addition, Jekielek et al. (2002) reported that while the number of school-based mentoring programs has increased, less research is available to assess their outcomes.

Benefits of mentoring. Research has shown various positive social and emotional outcomes connected to school and community-based mentoring. Rhodes et al. (2005) reported in a literature review that common outcomes for mentoring programs include improved peer and parental relationships, academic achievement, self-concept, and behavior. A qualitative study (Herrera, 1999) found that mentors encouraged more positive relations between the student, the school teachers, and administration which in turn reinforced the student's positive behavior. Additionally, mentoring has been found to heightened social status and increase positive attitudes toward school (Herrera, 1999; Jackson, 2002). Positive attitudes toward school are negatively correlated with delinquent behavior such as drug and alcohol use (Jackson, 2002).

Keating et al. (2002) studied a community mentoring program targeting students with EBD from single-parent households. The students ranged from 10 to 17 and were referred by principals and health professionals. The "Senior Friends" spent a minimum of 3 hours each week with their "Junior Friends" individually, and periodically participated in group activities. Using the Child Behavior Checklist and Teacher Report Form (Achenbach & Edelbrock, 1991), parents and teachers reported significant decreases in internalizing and externalizing behaviors after only six months. These results are encouraging and it would be interesting to see if targeting younger students in a school-based setting would produce similar outcomes.

Mentors promote resiliency by providing safety, dedication, and nurturance to students who may have endured traumatic experiences in the past (Day, 2006). Research

has identified that a primary factor of resiliency is a significant adult who has real interest and a connection with a child (Hancock, 2003). Mentoring studies have shown that youth who are involved in mentoring programs for at least a year have more positive outcomes than those who terminate earlier (Rhodes et al., 2005). Logically, those in longer lasting relationships have more time to develop real interest and connections. However, one researcher questioned whether relationship building alone is sufficient to show significant positive outcomes, particularly in developing social competence versus merely decreasing social deficits.

In his community-based program, Jackson (2002) found that mentored students demonstrated significant decreases in problem behaviors, but they did not increase their social competency. During this study, mentors underwent extensive training and met with their mentees 15-20 hours each week for one year. Using the Behavior Assessment System for Children (BASC; Reynolds & Kamphaus, 1992) as a pre and post-test, parents who reported significantly elevated scores for externalizing and internalizing behaviors at the beginning of the study reported no elevations at the end of the study. Additionally, the number of office referrals significantly decreased among the mentored students. Though these positive outcomes were encouraging, it was unfortunate that the student's level of social competency did not significantly increase. Without developing social competency to replace the antisocial behaviors, it may be more difficult for the students to generalize and maintain positive changes. More research is necessary to determine if building relationships is sufficient to help at-risk students obtain and maintain positive behavior change.

If building a positive relationship with an adult is not sufficient to promote social competence, perhaps combining mentoring with other programs such as social skill training would be more effective. Kamps et al. (2000) created a multifaceted prevention program combining social skill training, tutoring, and positive behavior management that targeted students with EBD and mild cognitive disabilities. Teachers led social skills instruction once a week for about 30 minutes focusing on appropriate peer interaction and appropriate classroom behavior. All the teachers in the study were trained to use same-age peer tutors where students have reciprocal tutor/tutee roles. However, some teachers also used partner reading strategies, cross-age tutoring, or adult tutoring. The positive behavior management plan consisted of a token system for social and tangible reinforcers.

Kamps et al.'s (2000) longitudinal study over a four-year period looked at 38 students ranging in age from 5 to 11 years old at the beginning of the study. Because the teachers used different parts of the intervention the strength of treatment was assessed as well as whether the class had low, moderate, or high structure. Using the Teacher Behavior Report Form created by the researchers, teachers with structured classes who implemented all three parts of the program reported significant outcomes pertaining to reduced physical aggression and other inappropriate behaviors, increased behavioral compliance, and increased academic engagement.

The prevention program detailed above (Kamps et al., 2000) implemented tutoring as opposed to mentoring. Adult tutoring and mentoring are similar in that adult volunteers are paired with students. However, tutoring studies (Berry, 2000; Collins & Onwuegbuzie, 2001; Fuchs, Fuchs, Mathes, & Martinez, 2002) show that it primarily has

an academic and social focus; whereas mentoring combines social, emotional, behavioral, and academic aspects (Jackson, 2002; Keating et al., 2002; Rhodes et al., 2005; Terry, 1999). Combining mentoring with social skill instruction and positive reinforcement could potentially be a strong intervention.

Social Skill Instruction

Development of social competency has been shown to influence a student's educational experience (Lane, Menzies, Barton-Arwood, Doukas, & Munton, 2005; Meier et al., 2006). One way to foster social competence is to evaluate and strengthen social skill acquisition. Lane, Menzies, et al. (2005) defined social skills as specific behaviors that are used to perform social tasks appropriately (i.e., following directions, asking to join a game, and how to apologize). Social skill checklists such as the Social Skill Rating System (SSRS; Gresham and Elliot, 1990) and the School Social Behavior Scales, 2nd Edition (SSBS-2; Merrell, 2002) have been developed to evaluate student social competence.

Once social skill deficits have been identified, it is important to distinguish if it is a skill deficit, performance deficit, or fluency deficit. A skill deficit means that the student does not know how to use the social skill (Lane & Beebe-Frankenberger, 2004); whereas, a performance deficit is where a student knows the skill, but chooses not to use it or the environment does not support the use of it. In the case of a skill deficit, it is necessary to teach the skill; however, with a performance deficit the focus should be on motivation and reinforcement. Fluency deficits refer to when the student attempts to use a social skill but does so in an awkward manner (Lane, Menzies, et al., 2005).

Lane, Menzies, et al. (2005) presented an empirically validated method for implementing and evaluating social skill intervention. This method follows six steps: (a) identify participants, (b) identify skill deficits and design the intervention, (c) organize intervention groups, (d) prepare intervention leaders, (e) implement intervention, and (f) monitor student progress. Proper identification of students with skill deficits is essential so that those who need the intervention will be invited to participate. Different methods of identification include: teacher nomination, using a screening instrument, observation, or monitoring response to primary interventions. Once deficits are identified, empirically-based interventions need to be organized to address students' specific needs.

After the intervention is organized, students are placed in intervention groups. Lane, Menzies, et al. (2005) recommended that large groups be divided by random assignment and smaller groups should be evaluated by single case methodologies. Intervention leaders must be chosen and trained to effectively teach social skills. Finally, the intervention must be implemented and monitored. The recommended method of teaching social skills involves telling, showing, doing, following through and practicing, and generalization. These steps are also incorporated into the direct teaching model: name and describe the skill, give a rationale why the skill is important, model the skill, have student practice saying the steps and role-playing the skill, provide feedback and praise, and plan future opportunities to practice (Miller, Lane, & Wehby, 2005).

Interventionists in the past have consisted of university student volunteers, teachers, school psychologists, and peers (Lane, Menzies, et al., 2005). Mentors have not specifically played the interventionist role in social skill training, though monitoring social competency is commonly found in mentoring studies. Mentoring's connection with

the development of social competency has been through focusing on general relationship building rather than direct social skill instruction or reinforcement. Some studies use both mentoring and social skill training as interventions with students; however, the mentor has been kept separate from the social skill training (Haviland, 1999; Holmes, Brandenburg-Ayres, Cronic, 2003). Looking further into using mentors as social skill interventionists may further both mentoring and social skill research.

Summary and Conclusion

Mentoring, as a school-based intervention, is growing in popularity but has yet to be documented as a secondary level intervention within a PBS system. Mentors are community volunteers with limited training for tertiary level behaviors, so they may be better suited to assist at the secondary level before maladaptive behaviors are fully developed. A group of students who may benefit from mentoring's individualized and flexible structure are those at risk for EBD.

The review of literature indicated that mentoring may be an advantageous intervention for students at risk for EBD. Children at risk for EBD need positive adult role models which mentoring provides. School-based mentoring in particular is able to attract more volunteers and reach students whose parents struggle to provide needed supervision and involvement. However, research outcomes on school-based mentoring are limited and show discrepant findings. Thus more research is necessary to effectively serve these children.

This study looked at school-based, social skill oriented mentoring. Social skill mentoring entailed focusing goals and activities around the acquisition of a specific social skill. It also emphasized the important role of relationship building through sharing

activities and working together. This study targeted a single student at risk for EBD with the goal to increase socially competent behavior, specifically learning the skills necessary to improve assignment completion.

Research Question

The study focused on the following research question: what is the effect of mentoring as a secondary level intervention within a positive behavior support model for an elementary student identified as at risk for externalizing emotional and behavioral problems on a target social skill determined by data-based decisions?

METHOD

Setting

The target elementary school served 532 students ranging from Kindergarten to 6th grade. School mobility rate was 26% and 53% of the students received free or reduced lunch. The two largest ethnic groups were Caucasian (75%) and Hispanic (21%). The intervention was conducted during school and on school grounds. The mentoring pair met in public areas of the school such as the halls, library, gymnasium, cafeteria, or playground.

The target classroom was a fourth grade class with two female teachers: one taught in the morning and one in the afternoon. Observations were scheduled after the lunch break at the beginning of the literacy block during teacher read-a-loud and journal writing. The students sat on the floor in the front of the room during teacher read-a-loud and at their desks for journal writing.

This study focused on one student within a larger in-school mentoring program. Mentors and mentees met during school hours once a week for 45 to 60 minutes. Their visits focused on relationship-building and goal-making activities. Mentoring pairs were encouraged to make and work on goals without specific or structured expectations. After each visit, mentors made short journal entries recording what they did and how their mentee responded to the visit. As this study is embedded within the school mentoring program, organization of the school mentoring program and trainings will be further detailed in later sections.

Materials

Mentors received a binder with training materials and activity ideas. The binder included contact information for the elementary school and mentoring coordinators, a tentative schedule and calendar for the school year, a definition of mentoring, common benefits of mentoring, signs of success, communication skills guidelines, the steps to honest praise, a goal setting form, and information regarding confidentiality issues. Additional handouts which were received during training meetings included: the steps of the target social skill, the steps to honest praise, a suggestion on how to teach problem solving, and postcards to communicate through the summer. A logbook was used to monitor time spent with students, record impressions of the mentoring session, and as a means of communication among the mentor, the mentoring coordinators, and the research team.

Participants

Target student. The target student was a male, fourth-grader identified by his teacher using the SSBD as demonstrating externalizing behaviors at a secondary-level. This student was an English language learner and participated in ESL and 1:1 tutoring programs to improve his English fluency. He also periodically participated in the after school program that focused on homework completion. A summary of student characteristics is provided in Table 1.

Student selection process. During the past six years, the target elementary school team implemented the SSBD (Walker & Severson, 1992) as a school-wide screening measure to identify students at risk for emotional and behavioral disorders. The SSBD consisted of three gates (Walker, 1994); however, only the first two gates were used

Table 1

Description of Participants

Student/ Mentor	Gender & Age	Ethnicity	Education	SSBD Score
Student	Male; 10	Hispanic	4 th Grade	C.E. = 4 ^a Adapt. = 31 ^b Mal. = 36 ^c
Mentor	Female; 61-80	Caucasian	Bachelor's Degree	N/A

^a Critical Events Scale – Taken from a scale of 33 maladaptive behaviors

^b Adaptive Student Behavior Scales – 12 behaviors ranked according to frequency on a 1-5 Likert Scale

^c Maladaptive Student Behavior Scales – 11 behaviors ranked according to frequency on a 1-5 Likert Scale

because the primary intent of screening was to identify those whose behavior was still in a prevention stage for behavior disorders (Walker et al., 2005).

In the first gate, teachers used definitions and examples of internalizing and externalizing behaviors to identify three students who demonstrated internalizing and three who demonstrated externalizing behaviors. In the second gate teachers completed the stage-two checklist on each identified student. Following the suggestion of Walker and Severson (1992), teachers completed gates one and two during the same meeting. Prior to this screening meeting, teachers were given the definitions of internalizing and externalizing behaviors and were asked to consider students who demonstrated those behaviors. During the screening meeting, teachers identified and completed the stage two checklists on three externalizing and three internalizing students.

The stage-two checklist was comprised of three sections: critical events (e.g., complaints of severe headaches or other somatic complaints; ignores teacher warnings or reprimands; is teased, neglected, and/or avoided by peers), adaptive behaviors (e.g., produces work of acceptable quality given his skill level, cooperates with peers in group activities or situations, complies with teacher requests and commands), and maladaptive behaviors (e.g., tests or challenges teacher-imposed limits, creates a disturbance during class activities, manipulates other children to get his own way). The critical events scale was a 35 item checklist allowing for a score ranging from 0 to 35. The adaptive and maladaptive scales had 12 and 11 items, respectively, which were scored using a five-point Likert scale ranging from never to frequently.

The first student screening process for the study targeted students at risk for EBD with externalizing symptoms. “At risk” was defined as the students who scored between one and four on the critical events scale and had either an adaptive score between 31 and 35 or a maladaptive score between 30 and 34 (H. M. Walker, personal communication, June 18, 2002). Initially, eight students met the inclusion criteria for this study.

The SSBD scores have been found to be a reliable across multiple studies (Walker, 1994; Walker & Severson, 1992). It was standardized using 4463 cases across 18 school districts in eight states: OR, WA, UT, IL, WI, RI, KY, and FL. In a study to replicate the procedures and results of the SSBD, Walker (1994) found it to accurately classify students as externalizers, internalizers, and non-ranked using cost and time efficient methods. This study also reported good social validity evidence in that many of the participating teachers and psychologists favorably rated the instrument and would recommend it to others. These results correlate with the reliability scores found in the

instrument's test manual (Walker & Severson, 1992). Test-retest results for the first stage rank order of externalizing and internalizing behavioral profiles ranged from .72 to .79. The internal consistency of the stage two critical factor index, adaptive behavior scale, and maladaptive behavior scale was measured with Cronbach's *alpha* and was reported to be above .80. Inter-rater reliability of stage one definitions and procedures using Spearman's *rho* ranged between .82 and .94. The scores from both the test manual and other studies suggest that the SSBD has evidence of reliability and validity.

After the SSBD was scored, the researchers and principal discussed which students met the inclusionary criteria for the school mentoring program. The school mentoring program was more inclusive than this mentoring study, so the inclusionary criteria were broader. Both internalizing and externalizing students who scored in the at-risk category, as previously defined, were invited to participate. Also, because additional mentors were available, five students who scored in the EBD category and two students from the previous year's mentoring program were invited to participate. In total, 17 students and 16 mentors participated in the mentoring program. One volunteer mentored two students separately.

The mentoring study originally focused on the eight students who demonstrated externalizing behaviors in the at-risk category; however, consent was only received from six of the students and one teacher chose not to participate. The participating teachers completed the SSBS-2 (Merrell, 2002), which will be described in detail further on, to identify areas of social competency and anti-social behavior among the subset of students. Additionally, to minimize classroom disruption and teacher workload, only one student from each class was selected, thus eliminating two more students from the subset.

Where more than one student was identified in the same classroom, the teacher was consulted to determine which student should be included.

After receiving consent and limiting the students to one per class, the study focused and gathered data on three students' demonstration of the social skill "Showing Responsibility for Completing Work." The target student had the most stable baseline performance of the social skill and thus began the instruction and intervention phases first. Due to time constraints and unstable demonstration of the social skill during baseline, the other two students never entered the instruction or intervention phases.

Target mentor. The target mentor was among those recruited to participate in the school mentoring program. The mentoring coordinators and principal recruited adult volunteers from local businesses, service organizations, and individual referrals. Referrals were obtained from returning mentors who volunteered the previous school year.

The target mentor was new to the program. She was a retired teacher and member of the community who volunteered as a mentor to help children. She considered mothering to be both a strength and hobby and believed children need to know they are loved. The mentor's experience with children included raising her own children and teaching school. She was not formally trained in the area of social and emotional issues. Further mentor characteristics are provided with the student characteristics in Table 1.

The primary factor in selecting the target mentor was identifying those who had an interest for a more structured mentoring relationship with specific goals. This interest was measured during the orientation meeting using a Likert scale. Specifically, the researcher outlined the additional responsibilities of a target mentor and the volunteers reported their level of interest on a scale of 1 (*not interested*) to 4 (*very interested*). Only

those who reported 3 or 4 were selected to be paired with students who were potential study participants.

The target mentor was initially trained with the other mentors in the school mentoring program. The only difference between the training for the target mentor and other mentors took place during the intervention phase. At this time, she received additional training, engaged in structured activities and goals, received data on the student's social skill acquisition, and was more closely supervised.

Dependent Variable and Measures

The dependent variable was the student's performance of the social skill "Showing Responsibility for Completing Work." This skill consisted of four steps and was developed by reviewing various resources: the School Social Behavior Scales 2nd Edition (SSBS-2), teacher interviews, direct classroom observations, and outside resources such as *Skillstreaming the Elementary School Child Revised Edition* (McGinnis & Goldstein, 1997) and *Prevention Plus: A Comprehensive School Program for the Prevention of Antisocial Behavior* (SCYFAR, 1997). The breakdown of the process of developing and defining the dependent variable is described below.

Selecting the dependent variable. Students who met the inclusionary criteria with the SSBD were further assessed using the SSBS-2 completed by the teacher. Responses were summarized by dividing them into their social competency and anti-social behavior (e.g. non-compliance or physical aggressiveness) categories to determine common weakness among the three identified students. Initially, the study focused on three students, as outlined previously. Anti-social behaviors that were scored three or higher and social competency behaviors that were scored three or lower were flagged. The

flagged questions were then divided by subcategories: peer relations, self-management or compliance, academic behavior, antisocial or aggressive, defiant or disruptive, and hostile or irritable.

The social competency scale indicated that the identified students struggled with 50% or more of the behaviors under the peer relations (eight items) and the academic behaviors (14 items) subcategories. The anti-social behavior scale did not show a high percentage of agreement (less than 25%) within any one subcategory. The individual anti-social behaviors that were common across potential participants included: getting in trouble, disregarding feelings of peers, arguing or quarrelling with peers, and bothering or annoying peers.

The SSBS-2 was standardized using a norm sample group of 2280 cases (Merrell, 2002). The norm sample was improved in this instrument's second edition to be more representative of the diverse population across the United States. Specifically, with the Hispanic population, the standardization sample consisted of 9.9% Hispanic cases as compared to the 11.8% Hispanic population recorded by the 2000 Census. Validity tests completed in the Intermountain West, South West United States, Mountain West, and Pacific Northwest supported the use of this instrument in a variety of geographical areas; however, the ethnic diversity of the different areas and groups was not recorded. Merrell (2002) cautions users to interpret results carefully if cultural issues are suspected.

Tests run in conjunction with the development of the SSBS-2 (Merrell, 2002) show it to produce highly reliable scores. The internal consistency of data from the entire SSBS-2 standardization sample using Cronbach's coefficient alpha and Spearman-Brown split-half procedures yielded high coefficients ranging from .92 to .98. Using the Pearson

product-moment correlation coefficients, the test-retest reliability for both the social competency subscales and the antisocial behavior subscales was measured at one week reporting scores ranging from .86 to .94. At a three week interval, the test-retest reliability for the subscales was lower with scores ranging from .76 to .83 for the social competency subscales and .60 to .73 for the antisocial behavior subscales. The coefficients from both the one-week and three-week comparison studies were all statistically significant at a $p < .001$ level. Each of these tests met the accepted criteria for reliable measures and show solid reliability evidence (Merrell, 2002).

The SSBS-2 additionally served as an ancillary dependent variable measure and was completed both pre- and post-intervention. Data collected with this instrument has been normed for children ages 5-18 in a school setting. This tool was selected because it lacked unfamiliar clinical language and it was brief yet comprehensive (Merrell, 2002).

After using the SSBS-2 to identify common areas of weakness, teachers were consulted regarding whether the target social skill ought to focus on peer relations or academic behaviors. The teachers reported that the majority of peer relation difficulties took place during less structured times such as recess, lunch, music, or art. In the classroom, the students' primary difficulty was academic behaviors. Pre-baseline observations confirmed that the students interacted well with peers in the classroom and that behaviors such as talking to neighbors instead of working, being out of seat, and playing with objects were of greatest concern for the identified students.

Based on the aforementioned process of identifying common weaknesses, the researcher used two social skills manuals (McGinnis & Goldstein, 1997; SCYFAR, 1997) to develop two social skill ideas to present to the teachers. Using the same four-step

format found in the manuals, the researcher combined previously defined social skills steps and original ideas to create the social skills, “How to Begin and Respond to Conversations” and “Showing Responsibility for Completing Work.” The social skills were presented to the teachers for feedback and all the teachers agreed that “Showing Responsibility for Completing Work” was the most appropriate skill for the identified students in the classroom setting.

Defining the target social skill. Showing Responsibility for Completing Work was broken down into four, clearly-defined steps: (a) look at the teacher or where she indicates during instructions or questions, (b) begin the task/assignment or answer the question within five seconds, (c) work on the assignment until finished or the time runs out, and (d) turn in the assignment. The student’s frequency of appropriately demonstrating each step was rated using a Likert scale. The steps and scoring procedures are defined below and examples of each social skill step are outlined on Table 2.

The student was to look at the teacher during instructions or questions, unless the teacher gave a specific prompt to look somewhere else. Instructions were defined as speaking to the class or the individual about what they should do or how they should act regarding school work and/or behavior. The target student was not expected to make eye contact when instructions or questions were directed to another student or group of students that did not include him.

The student had five seconds to respond from the time the teacher completed an instruction or a question. When the teacher gave instructions, as defined in the first step, the student was expected to take out or obtain materials indicated by the teacher, read,

Table 2

Positive and Negative Examples of the Social Skill Steps

Social Skill Step	Positive Example	Negative Example
(1) Look at the teacher or where she indicates during instructions or questions	Making eye contact when the teacher gave directions or asked questions.	Looking up, down, around the room while the teacher was giving directions or asking a question.
(2) Begin task/assignment or answer the question within 5 seconds	Within 5 seconds, took out a paper or returned to his seat or otherwise followed the direction. Within 5 seconds, responded verbally or nonverbally (raise hand, head shake or nod) to questions.	Teacher prompted student after a direction was given or the student made no response or recognition of a question.
(3) Work on the assignment until finished or time runs out	Reading, writing, listening, or working in a group as instructed by the teacher during the entire time allotted.	Looking at objects around the room, talking to a neighbor, and playing with objects like shoes or clothing.
(4) Turn in the assignment	Each problem on the assignment was attempted and it was turned in on or before it was due.	The assignment was turned in without attempting each problem, it was turned in past the due date, or the student failed to turn in the assignment.

write, or otherwise do what the teacher indicated. If the student could not find materials, but was proactively searching in his desk or asking the teacher, he was given full points the first time. If it happened a second time, it was considered stalling.

When the teacher asked questions, responses included: raising a hand, calling out an answer, non-verbal gestures like shaking or nodding his head, or repeating the question to himself to show he was thinking about it. If the teacher interrupted the student or class before the full five seconds with another question or instruction, the first interrupted interval was discounted and the student was give another five seconds. It was

not expected that the student respond to every class-directed question, so the student was not penalized for unresponsiveness to three class-directed questions.

Working on the assignment was defined as reading, writing, or interacting with a group according to the instructions given by the teacher. During class-wide activities that required long-term listening, working on the assignment included: continual eye contact, looking up and down from floor to teacher, and/or making eye contact during questions. Off-task behaviors included: looking at objects around the room, talking to a neighbor, playing with objects like shoes or clothing, and not making any eye contact.

Working on the assignments was distinguished from off-task activities using two methods: the observer was present for the teacher's instruction or the observer monitored the student's peers to judge what the student should be doing. To keep the expectation of this behavior within the student's zone of proximal development, the student was allotted three, 10-second breaks during a 25-30 minute observation. This allowed the student time to calm down and transition from lunch recess to the class activity.

Turning in the assignment was defined as giving the assignment to the teacher or bringing his homework folder to school each day. The homework score was computed using two variables: assignment completion and turning in the assignment when it was due. Assignment completion was defined as the student attempting each problem on the assignment. Assignment completion also included student participation when there was no written assignment. Only math, literacy assignments, and homework were tracked. Other subjects (science, art, music, and P.E.) were not included because the student rotated to different classrooms and this study focused solely on homeroom activities.

Independent Variables and Measures

The independent variable was a structured mentoring program with the primary goal being to help the student master the social skill “Showing Responsibility for Completing Work.” Researchers taught the student the social skill and gave the mentor further training and supervision during the intervention phase. Structured activities were used to help reinforce and practice the social skill. The mentoring goal was for the student to demonstrate the target social skill with 90% accuracy in the classroom across at least three observations.

School mentoring training. All mentors in the school mentoring program were trained during an orientation meeting and/or two training meetings held during the study. The principal often participated in these meetings to show administrative and school support. Part of the orientation was to give mentors basic information about the school: where to check in and out, where to meet with their mentee during the visits, and what to do in case of an emergency. Mentoring coordinators also discussed the goals of mentoring, benefits of mentoring, and important skills.

Skills that were briefly discussed during orientation included: communication skills such as listening, asking questions, problem solving, and giving honest praise; a review of school-wide social skills; and goal setting skills. Important information regarding confidentiality, boundaries, giving gifts, physical contact, and stages in the relationship were also discussed. Mentors were then given ideas and suggestions for getting-to-know-you activities and other things to do on their first day.

Training meetings were held to provide a support system for the mentors and check for treatment integrity. Training meetings included time to share success stories

and discuss student or teacher issues that arose. One of the issues discussed was methods to teach their mentee problem-solving skills. Additional ideas and resources for activities were also shared at these training meetings. One of the more popular suggestions was making books available for mentors to borrow during their visits and to read to their mentees.

Social skill training. In two, 20 minute, sessions across consecutive days, a member of the research team taught the social skill to the student using the direct teaching model. The direct teaching model consisted of six steps: (a) name and describe the skill, (b) give a rationale why the skill is important, (c) model the skill, (d) have the student practice saying the steps and doing the skill, (e) provide feedback and praise, and (f) plan future opportunities to practice. The direct teaching model defined above is reported to be the most effective way to teach social skills (Miller et al., 2005). During both teaching sessions, the researcher met with the student to teach, review, and practice the social skill until the student mastered it.

Target mentor training. During the instruction phase, the target mentor received additional training. This included familiarizing the mentor in the steps of the social skill, teaching honest praise, and introducing her to the student behavior graphs. The mentee taught his mentor the social skill, so the mentor only received exposure to the social skill steps during the training. This exposure allowed the mentor to help her mentee teach her the skill, should it have been necessary.

Honest praise was comprised of three steps: (a) acknowledge positive behavior, (b) be specific about what is being praised, and (c) give a reason why the behavior was appropriate (SCYFAR, 1997). For example, “Rachel, I am so proud of you for finishing

your assignment during individual work time, now you can go to recess.” The direct teaching model was used in teaching honest praise and the mentor was able to recite the steps of honest praise with 90% accuracy. The mentor was also given a hand out outlining the steps of both the social skill and honest praise for further reference.

Finally, the behavior graphs were introduced. The researcher explained how to read a sample behavior graph. The graph visually illustrated the student’s use of the social skill. The researcher and mentor discussed how to track the student’s progress and use the data to select short-term goals.

Experimental Design

Originally, this study was designed to be a multiple baseline across subjects. Three students were selected, as previously discussed, and were monitored during the baseline phase. The target student was the first to show stable baseline data. The other two students were monitored for six weeks and ranged from 62.5%-100% and 66.7%-100% demonstration of the social skill. In consulting teachers and considering the data, there did not seem to be an apparent reason for this broad range and unstable performance. Because unstable baselines prevented either student from receiving the intervention, the study was modified to a single-subject reversal design.

However, this study was unable to reach the reversal phase which resulted in the use of an AB design – baseline and intervention (Alberto & Troutman, 2003). The single-subject reversal design required stable data, three consecutive data points, during the intervention phase before returning to baseline. The student reached 85% social skill demonstration for two consecutive observations, but then his performance declined. Confounding factors such as changing schedules and homework routines with testing and

end-of-the-year programs, losing his homework folder, large assignments coming due, and the excitement that comes from anticipating summer vacation may have all impacted the student's homework completion during the last part of the school year.

The AB study design significantly weakened the findings of this study because it was unable to discount the influence of confounding variables on the demonstration of the social skill. Therefore, it was important to consider this weakness in interpreting the results of this study. Baseline data were collected during the already established school mentoring program. The mentor and student met once a week and became acquainted, read together, and worked on homework. Intervention followed a brief instruction period and included a specific goal, feedback regarding performance of the goal, and a checklist of specific activities for the mentoring pair.

Baseline phase. The baseline phase consisted of the target mentor and student participating in the school mentoring program which was previously described. Mentors were trained prior to the study. Mentoring coordinators and the principal conducted an orientation meeting for all mentors new to the school mentoring program, including the target mentor. After orientation, volunteers completed applications which included basic demographics and questions regarding interests and personalities. The principal matched students and mentors according to gender, similar interests, and interest in participating in the study.

Mentoring began with matching day. Before meeting their mentee, the mentors received mentoring binders that served as a resource and included all the information covered during orientation. After the principal personally introduced each student to his or her mentor, the students gave their mentors a tour of the school and introduced them to

their teachers. Matching took place during the last thirty minutes of school so that the mentors could meet with teachers after school to coordinate their weekly visits.

During the first few visits, the primary focus was to develop a positive relationship. The target mentoring pair used games like twenty questions to get to know each other. They also engaged in activities like reading together, working puzzles, practicing math, reviewing spelling words, and working on other homework assignments. After establishing rapport, mentors were encouraged to help their mentees make and reach personal goals.

Mentors were given a goal-setting form (Appendix A) at orientation to help their mentees in the goal-setting process. During this phase, goals were not pre-determined and focused on the mentees' individual needs and desires. Mentors were also encouraged to consult with teachers to get ideas for goals. Examples of potential goals included: making friends, improving relationships with parents and teachers, turning in assignments, coming to school every day, and so forth. Mentors helped the mentee with the goal through practicing, role playing, encouraging, and/or checking up on their progress.

The mentoring coordinators' responsibilities remained consistent across all phases. They checked for treatment fidelity by reviewing the mentor logbook weekly or biweekly and holding training meetings. If mentors were not coming or not logging their visits, they were contacted by the mentoring coordinators. There was never a problem with the target mentor's attendance or logbook records. The mentoring coordinators also held mentoring training meetings for all the mentors twice during the study. The target mentor only attended the second training meeting.

Baseline data collection of the dependent variable “Showing Responsibility for Completing Work” began about two months into the school mentoring phase. This delay was necessary to define the social skill, create the behavior card (Appendix B), and train observers. During the regular school mentoring program and baseline phase, neither the mentor nor student received individualized attention.

Instruction period. One week into baseline, the student and mentor received further instruction and training. This phase began with the introduction of the social skill to the student. The student reached mastery level with the social skill after only two training sessions across consecutive days. Mastery was defined as being able to name steps of the social skill and use the social skill while role playing with 90% accuracy.

The mentoring pair met once during the instruction period and the mentee taught the social skill to his mentor. The pair also practiced the first three steps of the social skill during their time together and the mentor reported that the student “almost always” applied them during the role plays. At this point, the mentor also reported that the student had all four steps memorized, but she wasn’t sure if he realized that the steps applied to him.

Structured mentoring phase. The structured mentoring phase began with the mentoring visit that followed the completion of the student’s social skill instruction. Each week the structured activities were outlined on checklists which were designed based on the student’s performance of the social skill. These checklists generally included reviewing the previous week’s goal, reviewing the behavior graphs, giving praise and feedback, and creating a goal for the upcoming week. The checklists also guided the mentoring pair through activities to practice or reinforce specific social skill steps.

Activities included blind copycat (Appendix C), making short-term goals, making homework reminders, and creating a homework contract.

Behavior data graphs that summarized the student's social skill performance were also provided to the mentor each week. Initially the social skill was graphed as an overall percentage score; however, after the second week, the social skill was broken down and each step was graphed separately (Appendix D). Along with the graphs, the mentor was also given specific suggestions on how the student could maintain or improve his scores.

The behavior graphs were left in the mentor logbook for the mentoring pair to review and use in making goals. For example, the mentoring pair's first short-term goal focused on more eye contact with the teacher. Using the behavior graphs, they were able to see whether the mentee improved his eye contact during the week. When the mentee reached his goals, the mentor would praise him and engage in preferred activities such as putting together puzzles.

Closure. An important part of any relationship is closure. The school mentoring program formally ended with a "forget-me-not" party. The purpose of this party was to celebrate student progress, mentor dedication, and collect social validity data. The party included a program where the students and their mentors wrote something they learned about one another on a forget-me-not flower. The pairs then shared what they wrote with the group and taped the flowers to a poster board to create a "flower garden of friends." Mentors and students were also given postcards as a means of staying in touch during the summer. At the end of the party, mentors were asked to complete a program survey for social validity purposes.

Data Collection

Each observation was approximately 30 minutes during the literacy block. During the observations the teacher read to the students for about 25 minutes and the students wrote in their journals for the remaining time. The observation would conclude when the target student left for his ESL class. This half-hour block of time was selected because the teachers reported that the target student struggled most with the target behavior during literacy. Observers monitored the student 2-3 times each week: Mondays, Wednesdays, and some Thursdays. Observations did not take place on Fridays due to the change in class routine caused by the shortened Friday schedule.

The student's performance of the social skill was measured through direct observation and permanent products using a behavior card and assignment data, respectively. Observers collected data by direct observation on the student's performance of the first three steps of the social skill: look at the teacher during instructions, begin the task/assignment or answer question within five seconds, and work on the assignment until it is complete. The teacher collected data for the fourth step, turning in the assignment, on a spreadsheet and reported it to the observer.

Original data collection procedures. The frequency of appropriate eye contact behavior during each instruction and question was rated according to the approximate percentage of time the student looked at the teacher on a 0-4 point Likert scale (see Table 3). At the end of the observation session, the observer computed an overall eye contact percentage by dividing the total points earned by the total points possible. The percentage was then converted to a score ranging from 0-4 as defined by Table 3. The Likert scale outlined in Table 3 was used across all four steps.

Table 3

Behavior Card (BC) Scoring Key

BC Score	% Observed	BC Score	% Observed
0	0	3	61-90
1	1-30	4	91-100
2	31-60		

The student was rated for each direction given and question asked. He was given a zero for no response or an inappropriate response and a four for an appropriate response. At the end of the observation, the observer calculated the total the number of questions and instruction opportunities and subtracted three. As previously defined, the student was not held accountable for being unresponsive to three group- asked questions. The observer then calculated a percentage by dividing the number of student responses by the modified opportunities to respond. Using the scale outlined in Table 3, the observer gave the student an overall score.

Time on-task was monitoring through measuring the student's time off-task. The observer watched a clock when the student demonstrated off-task behavior and recorded how many seconds or minutes the student was off-task. The student was allowed three 10-second breaks. Breaks were 10-second intervals where the student's off-task behavior was not recorded. The observers began recording off-task behavior after the student had used the allotted breaks.

The time off-task was subtracted from the total observation time to calculate the time the student spent on-task, or doing appropriate activities. The on-task time was then divided by the total observation time for the percentage on-task. Again using Table 3, the percentage was converted into an overall score.

The teachers recorded assignment data on a spreadsheet (Appendix E). The assignment data were scored with a point system: one point for an assignment being on time, one point for being complete, and one point if the teacher marked participation. A percentage was calculated by dividing the points earned by the total points possible. Using the scoring key in Table 3, the percentage was converted to a 0 to 4 score.

Modified data collection procedures. During the intervention, it was determined that the behavior card was not sensitive enough to record the student's behavior change. The following modifications were made to the scoring procedures. Question answering and following directions was modified to make the student responsible for 75% of the class-directed questions. The observer marked class-directed questions differently from the questions asked directly to the student. One out of every four class-directed questions was subtracted from the total opportunities to respond. The percentage was calculated by dividing the number of responses by the modified opportunities to respond.

Being on-task and turning in the assignments were considered the most important steps of this skill; thus they were weighted more than the first two steps. A different scoring key was designed using a 0-6 point Likert scale (see Table 4) to make the measure more sensitive to change.

Table 4

Modified Behavior Card (BD) Scoring Key

BC Score	% Observed	BC Score	% Observed
0	0-9	4	55-69
1	10-24	5	70-84
2	25-39	6	85-100
3	40-54		

Observer and interobserver agreement. Three observers gathered data for this study: a primary observer, a back-up observer, and a reliability observer. The primary observer was a female undergraduate studying Special Education at Brigham Young University. The back-up observer collected data when the primary observer was not available. He was a member of the research team who also worked as a school coordinator in the target elementary. The primary researcher served as the reliability observer, a female graduate student in the Counseling Psychology and Special Education Department at Brigham Young University.

The primary researcher trained the observers how to use the behavior card (Appendix B) and taught them the definitions of the social skill steps. Training was divided into two parts: group training (Appendix F) and practice observations. During the group training, handouts with the definitions of the social skill steps and blank behavior cards were reviewed. How to score each step was discussed as defined earlier with examples and non-examples of the behaviors. The group training meeting lasted about an

hour and the observers were quizzed about the steps and how to score them. This quiz identified areas that needed further training.

During the second portion of training, the reliability observer paired off with the primary observer for practice observations. The back-up observer was brought on after the primary observer was trained, so he paired off with either the primary observer or the reliability observer for practice observations. The observers selected a random boy, not the target student, to monitor for about 30 minutes. After the observation, they compared their behavior card ratings. The practice observations aided to clarify the behavioral definitions and answer questions about scoring. The observers then completed a second quiz and scored at least 90%. Baseline observations began after having greater than 80% reliability during two consecutive observations.

Interobserver reliability was taken on 30% of the observations. During the reliability observations, two observers completed the behavior card. The behavior card consisted of two parts: rating the student's performance of the social skill steps and recording the instructions and questions given by the teacher. The two cards were compared and scored according to their agreement as described below.

Reliability was determined by observer agreement of social skill ratings and the instruction and question list. Social skill scores were compared item by item and scored according to proximity of agreement. Perfect agreement was scored as two points. Items with one point difference were scored as one point and items with more than one point discrepancy were scored as zero. The instructions and questions recorded were also examined item by item. One point was given for each instruction or question that was recorded by both observers. Interobserver agreement was then determined with the

following formula: the number of points earned divided by the total number of points possible multiplied by 100. Interobserver agreement during observations averaged 91.2% ranging between 85.2%-94.2%.

Interobserver agreement was also taken on 30% of the assignment data. Reliability was monitored through two raters separately scoring the data. If any discrepancy existed in the scores, original data were reviewed again. During the study, twice there was discrepancy in the initial scoring; however, after reviewing the original data, the ratings were corrected and interobserver agreement was 100%.

Treatment Fidelity

Treatment fidelity refers to the extent in which the intervention was administered correctly or according to plan. Demonstrating treatment fidelity provides support that the intervention and not confounding variables influenced change in the dependent variable. In this study treatment fidelity was monitored through checklists, phone calls, self-report, and permanent products.

Treatment fidelity checklists (Appendix F) were used during the orientation, social skill trainings, observer trainings, and structured mentoring phase. Checklists were important during the various trainings as there were often multiple sessions and it assisted the trainers in covering all the key points. Treatment fidelity was measured by the percentage in which the coordinators followed the checklist. During the four orientation sessions, the coordinators followed the checklist with 91-97% accuracy. Also, on matching day, the mentors were given a binder with all of the orientation information previously discussed.

The checklists for student and mentor social skill trainings outlined the steps to the direct teaching model. These were followed with 100% accuracy during the instruction sessions. A checklist was also created for the initial observer training and was followed with 100% accuracy during the first two sessions. In training the back-up observer, the checklist was followed with 82% accuracy during the initial meeting, but the skipped steps were covered during subsequent training opportunities.

Finally, checklists or a worksheet were provided to the mentor for each visit during the intervention phase. Due to some confusion with the exchange of checklists there were two weeks of low treatment fidelity. During weeks 1, 4, 5, and 6 the mentor reported following the checklists with 100% accuracy. The mentor did not realize there were checklists available on weeks 2 and 3. Treatment fidelity ranged from 33% to 15%, respectively, due to this misunderstanding. During these two weeks, the mentoring pair did not change their short term goals, they continued working on the mentee's first goal of increasing eye contact with the teacher. They also did not have the feedback from the graphs regarding the student's progress toward the goal. When this problem was identified, phone calls preceded visits to review checklists and student progress.

All mentors in the school mentoring program used weekly log and journal entries as a self-report of the consistency of visits. The mentoring coordinators monitored these logs and called mentors who missed two or more weeks in a row. The target mentor never missed two weeks in a row. There were weeks of illness or student testing where the mentoring pair were unable to meet during the regularly scheduled time. When this occurred, the mentor either rescheduled or just came the following week.

Social Validity

Social validity is a subjective measure of the desirability of the intervention. To increase the social validity among teachers, the researcher involved them in the planning process and also consulted with them during intervention. The teachers played an important role in selecting and developing the target social skill as previously discussed. The researcher also periodically asked the teachers about their experience with the intervention. These conversations helped create better assignment data spreadsheets and also plan around class activities such as the school play and end-of-the-year testing.

At the conclusion of the study, social validity surveys or program evaluations were given to parents, teachers, and the mentor (Appendix G). The surveys were a short series of open-ended questions focusing on the participant's experiences with the mentoring program, the mentor and mentee relationship, and suggestions for improvement. Social validity data for the student was collected through a semi-structured interview (Appendix G).

RESULTS

In this study, the mentor reinforced the learning of the social skill “Showing Responsibility for Completing Work” with her mentee via review, practice, and positive reinforcement. The student’s performance of the social skill was analyzed as both an overall performance score and individual step scores. In an effort to create a more sensitive measurement system, the scoring procedure was modified during the third week of intervention as previously described. Because the student’s overall performance did not stabilize, the intervention was unable to be reversed. Still, interesting and positive trends were found in the individual steps. These data will be presented in detail in the following paragraphs.

Student Performance of the Target Social Skill

The overall work completion score represented the student’s aggregate performance of each social skill step. During baseline, the student averaged 54.2% performance of the social skill with scores ranging from 50.0%-56.3% with no increasing or decreasing trend. During the instruction period, the student’s performance began to increase. The student averaged 63.2% performance of the social skill with scores ranging from 58.3%-68.8%. In the intervention phase, the performance scores were less stable. With scores ranging from 62.5%-81.3%, the student performed the social skill an average of 68.8%. The student’s overall performance decreased during the modified scoring phase. The student averaged 68.7% with scores ranging from 55.0%-85.0%. The overall social skill performance as described is illustrated by Figure 1.

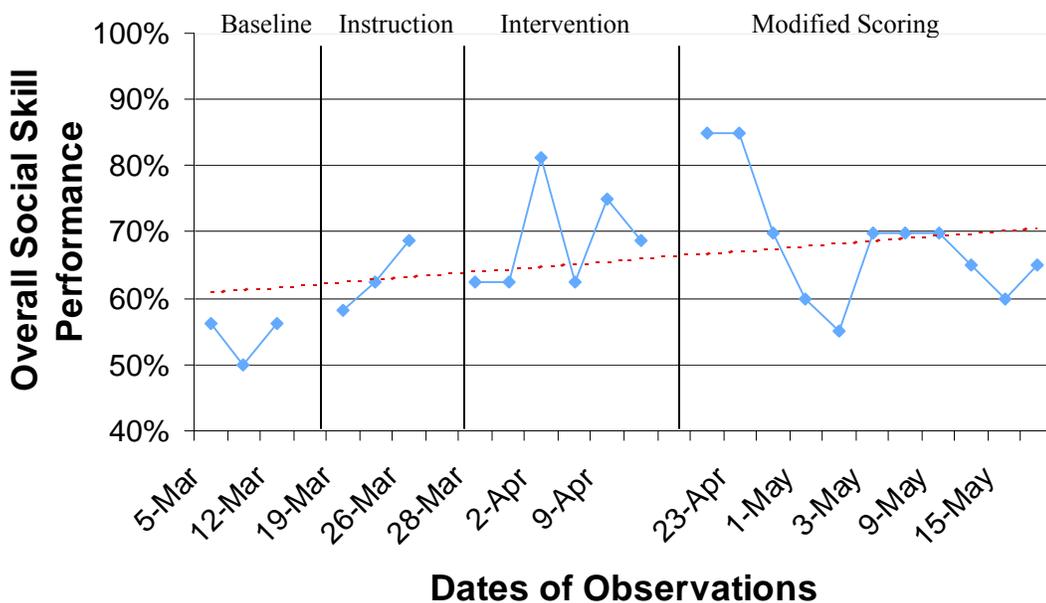


Figure 1. Overall social skill performance scores across different phases.

Student performance of step one. Step one, look at the teacher during instructions and questions, measured the amount of the student's appropriate eye contact during teaching activities. During the baseline phase, the target student's eye contact score ranged from 1-2 with an average score of 1.33 on a 0-4 scale. Improvement was immediately observed during the instruction phase as the target student's eye contact behavior increased and he averaged 2.66 during the instruction phase. Eye contact was the first short-term goal set during the intervention phase. The student's eye contact behavior stabilized at a 3 for the duration of the study, except on two occasions when he scored 4. Figure 2 illustrates this described positive trend. The graph indicates where modified scoring began; however, modified scoring procedures did not affect eye contact scoring, so the intervention and modified scoring phases were reported together.

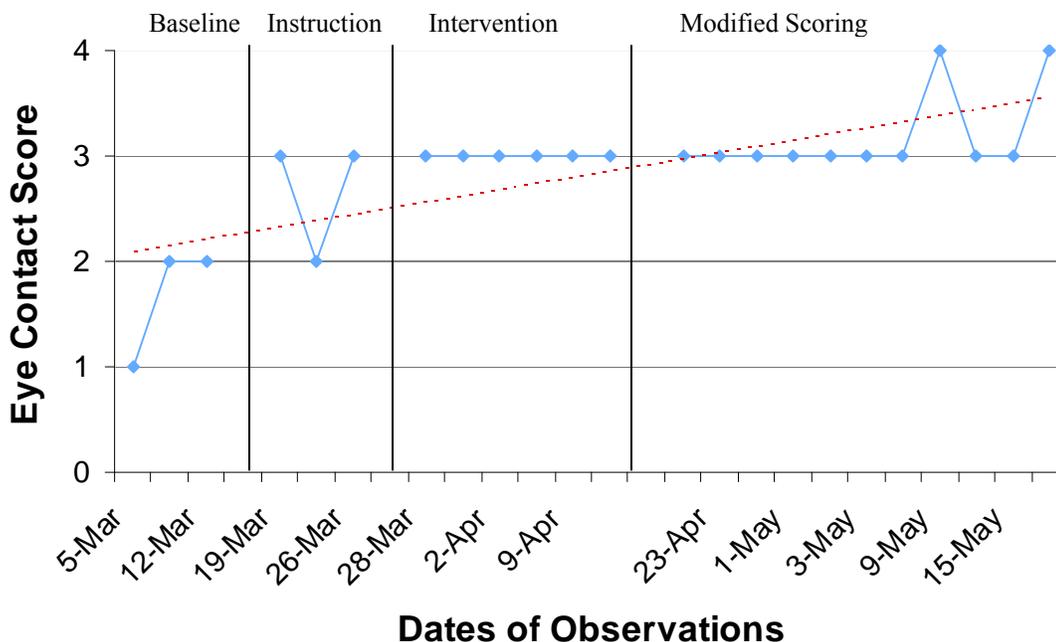


Figure 2. Look at the teacher during instructions and question behavior card score across different phases.

Student performance of step two. Step two measured the student's class participation through monitoring compliance to teacher directions and responses to questions. During baseline the student's participation score ranged from 1-2 with a mean of 1.33. During instruction and intervention phases the student's participation averaged 1 and 1.71, respectively (Figure 3). Modified scoring procedures only minimally affected this step, so again the intervention and modified scoring phases were reported together.

Unlike the other steps, this step combined multiple variables focusing on both answering questions and complying with directions. The number of questions asked and directions given varied across observation sessions. The number of questions and instructions in an observation session during baseline varied from 13-22 with an average

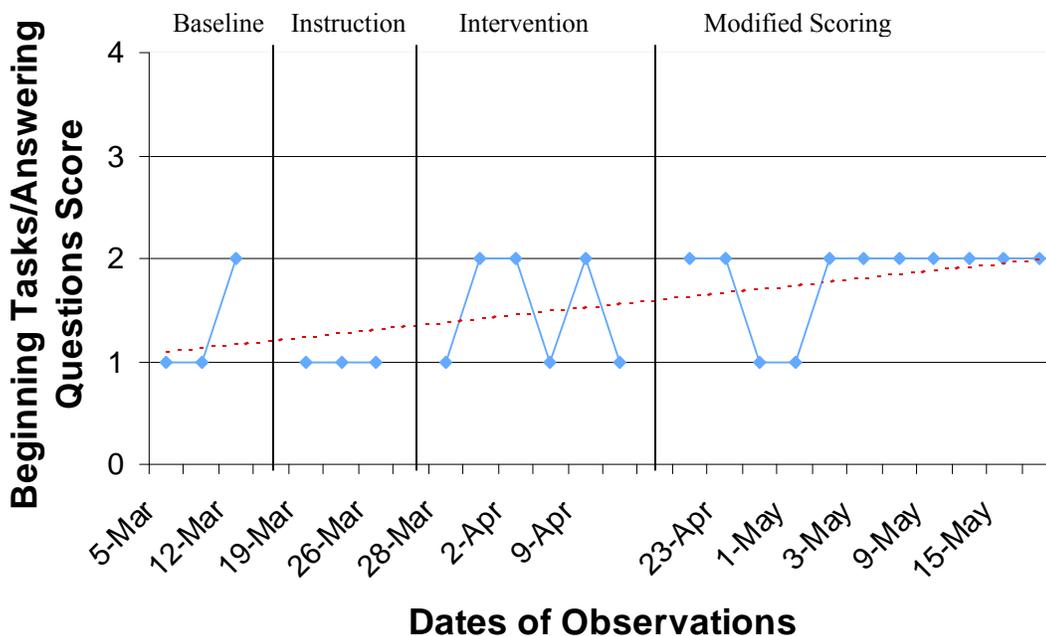


Figure 3. Beginning tasks and answering questions within five seconds behavior card score across different phases.

of 18.7, during instruction it varied from 16-20 with an average of 18.3, and during intervention and modified scoring it varied from 11-24 with an average of 16.5. Because of the disproportionate number of questions and instructions, and because the student's progress with this step was small, the student's improvement is better illustrated through the percentage of compliance to instructions and questions (Figure 4).

The step is further broken down into number of questions asked directly to the target student (Figure 5), number of responses to group questions (Figure 6), and the percentage of responses to group questions (Figure 7). Questions directed specifically to the target student ranged from 0-2 with an average of 0.67 during baseline. During instruction the number of questions ranged from 0-2 with an average of 1 and during

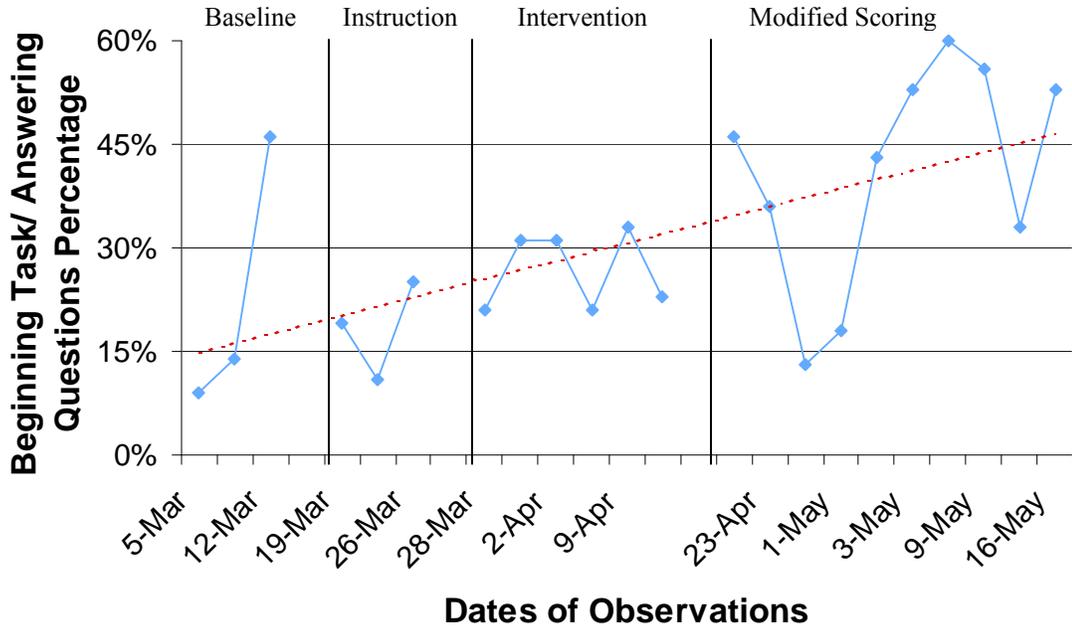


Figure 4. Beginning tasks and answering questions within five seconds percentage and trend line across different phases calculated from behavior card observations.

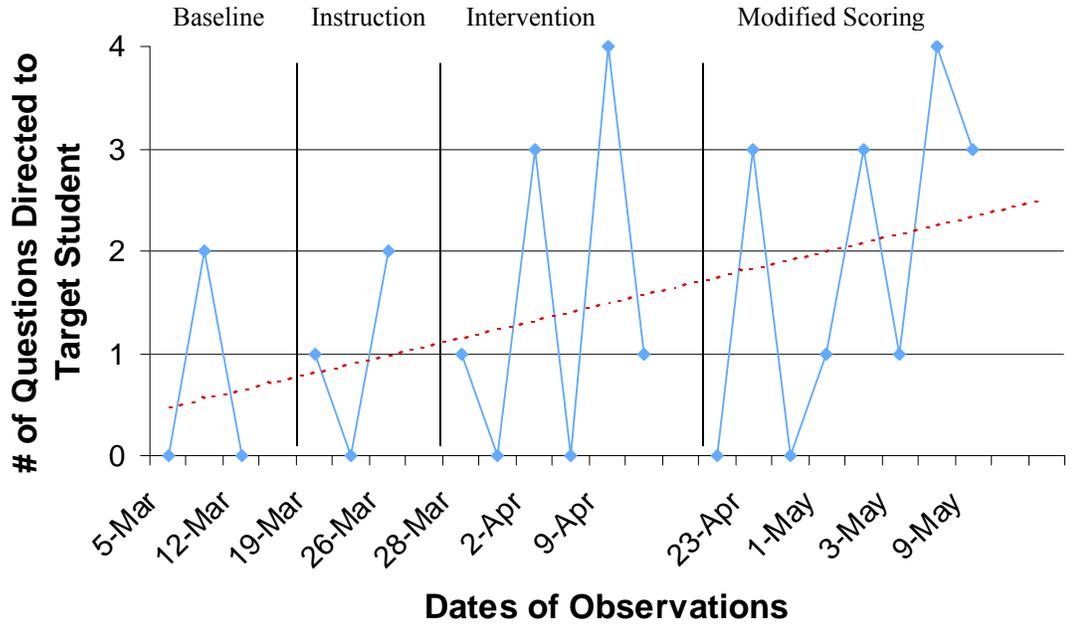


Figure 5. Number of questions asked directly to the target student across different setting calculated from the behavior cards.

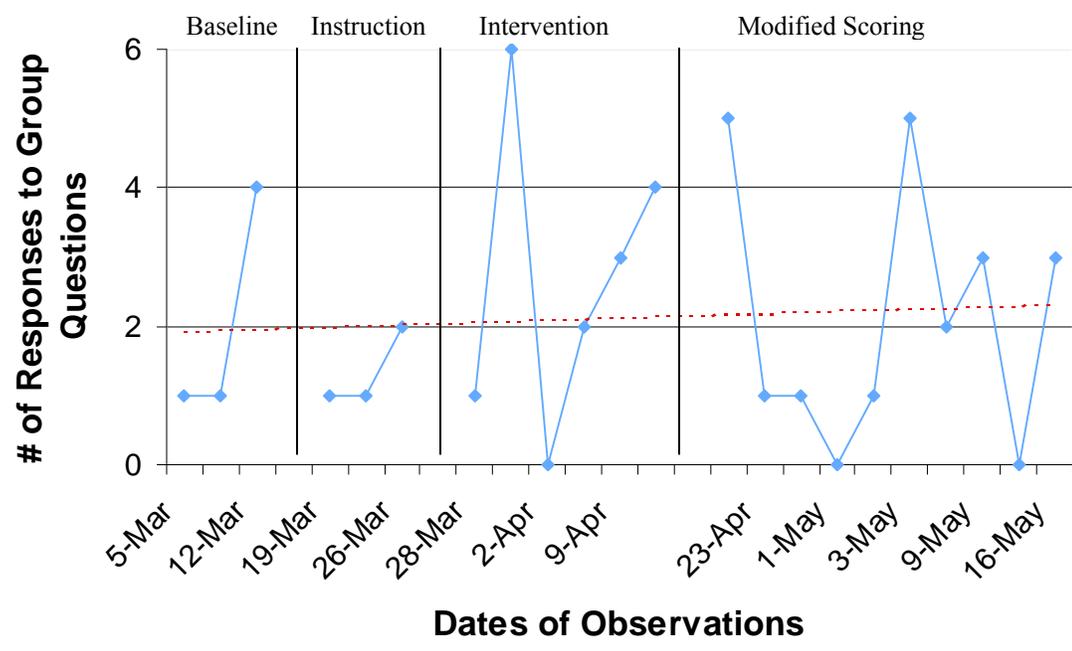


Figure 6. The target student’s response to group-asked questions across different settings calculated from behavior cards.

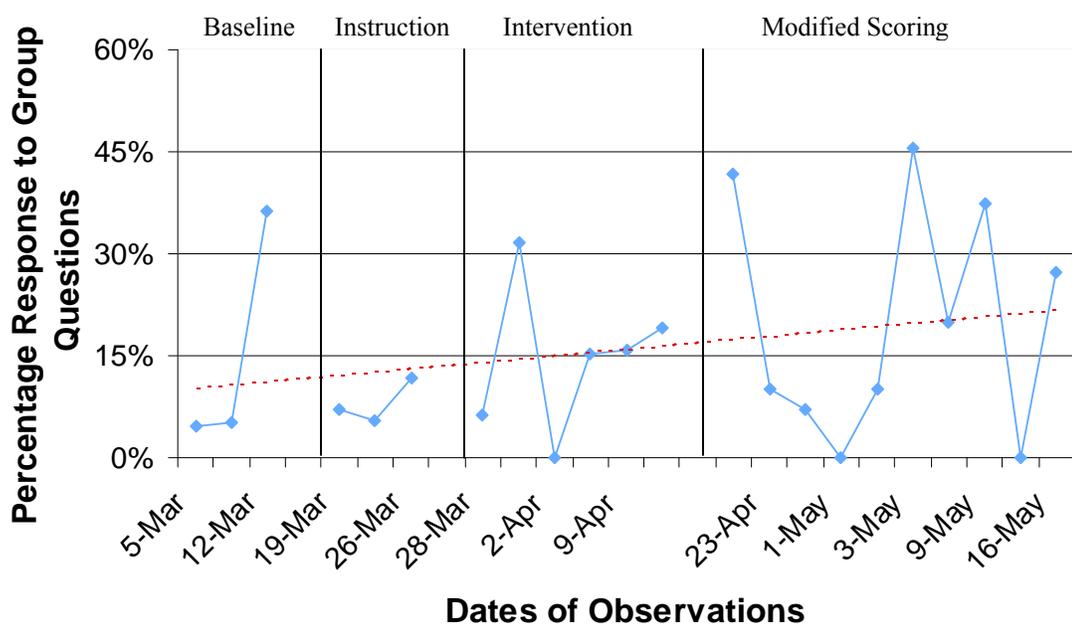


Figure 7. The target student’s percentage of response to group-asked questions across settings calculated from behavior cards.

intervention and modified scoring, it ranged from 0-4 with an average of 1.7. The last two observations are not included on the graph because the regular afternoon teacher was absent.

Figures 6 and 7 show the student's number of responses and correlating percentage of responses to group-asked questions. Both the number of responses and the percentage of responses show varying increasing and decreasing trends. During baseline he ranged 1-4 responses with an average of 2 which equated to an average of 15.5% of the questions. During the instruction phase he ranged 1-2 with an average of 1.33 which was the equivalent of 8.2%. During intervention and modified scoring phases he ranged 0-6 with an average of 2.31 which averaged to 17.9%.

Student performance of step three. Step three measured the student's amount of time on-task. During baseline and instruction the student averaged 3 on the 0-4 scale. At the beginning of intervention, the student ranged from 3-4 with an average of 3.66. By the middle of the third week, the researchers decided that steps three and four were key to mastering the social skill and modified the scoring to weight these steps heavier than the first two steps.

Upon modification of scoring, the student achieved a perfect score of 6 through the end of the intervention. Figure 8 divides the original scoring and the modified scoring and shows that improvement was maintained. However, as a result of the high baseline score, the student's potential progress on this scale was limited. Thus the student's progress is also presented as the percentage of time on-task (Figure 9).

During baseline, the student ranged from 76%-90% on-task with an average of 83%. The average dropped slightly during instruction to 80% with a range of 70%-88%.

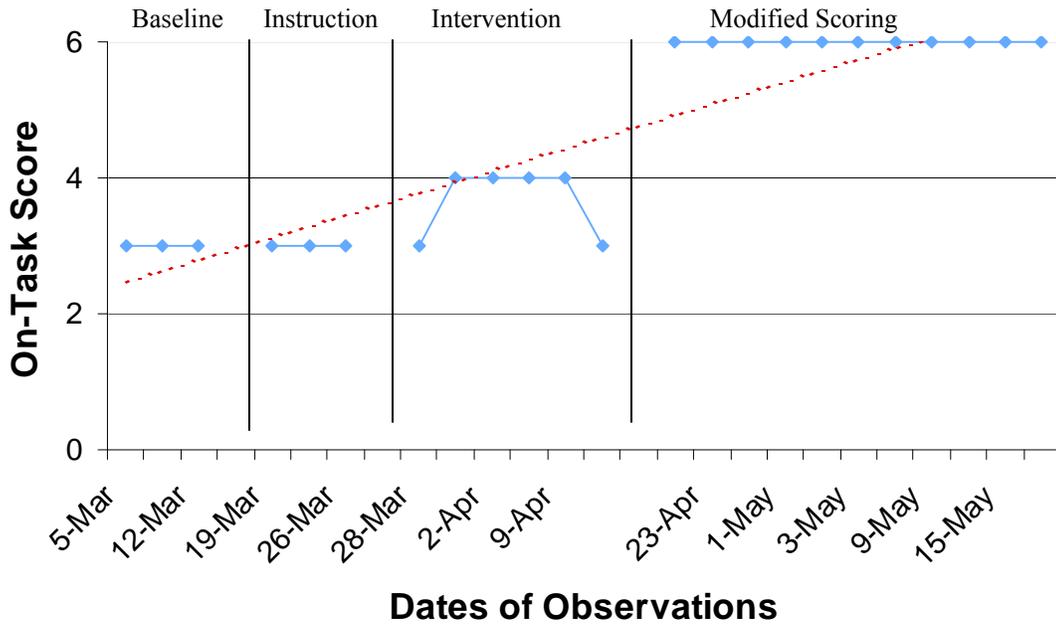


Figure 8. Working on assignments until finished behavior card score across different settings.

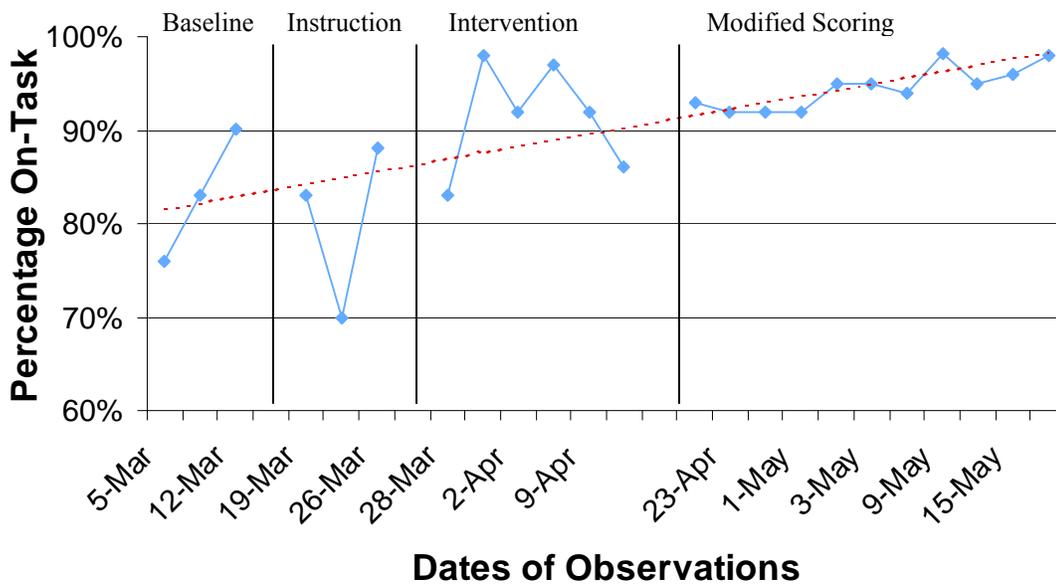


Figure 9. Working on assignments until finished percentage and trend line across different settings calculated from behavior cards.

During intervention the on-task behavior not only increased but also maintained through the intervention and modified scoring phases. The range of on-task behavior during intervention and modified scoring was 83%-98% with an average of 93%.

Student performance of step four. The final step of the social skill tracked completed and on-time language arts and math assignments. During the study, the student completed 9 of 11 (82%) math assignments and 11 of 22 (50%) language arts assignments. During baseline, the student averaged 2.67 points with scores ranging from 2-4. The student averaged 3.5 during the instruction period; however, this average is calculated using two points instead of three because one day the teachers did not report any assignments given. During intervention the student averaged 2.83 points with scores ranging from 1-4. After modifying the scoring system to a 0-6 scale, the student averaged 2.73 points with scores ranging from 0-6 (See Figure 10).

Change in Ancillary Measures: SSBS-2 and Grades

The SSBS-2 was the instrument used to identify social skill deficiencies at the beginning of the study. It was also administered as a post-test survey of the student's general social competency and antisocial behavior. The student's social competency raw score increased from 84 to 110 and his antisocial behavior raw score decreased from 70 to 32. The SSBS-2 defines the correlating t-scores where a t-score of 50 is average with a standard deviation of 10. The student's social competency t-score increased from a 41 to

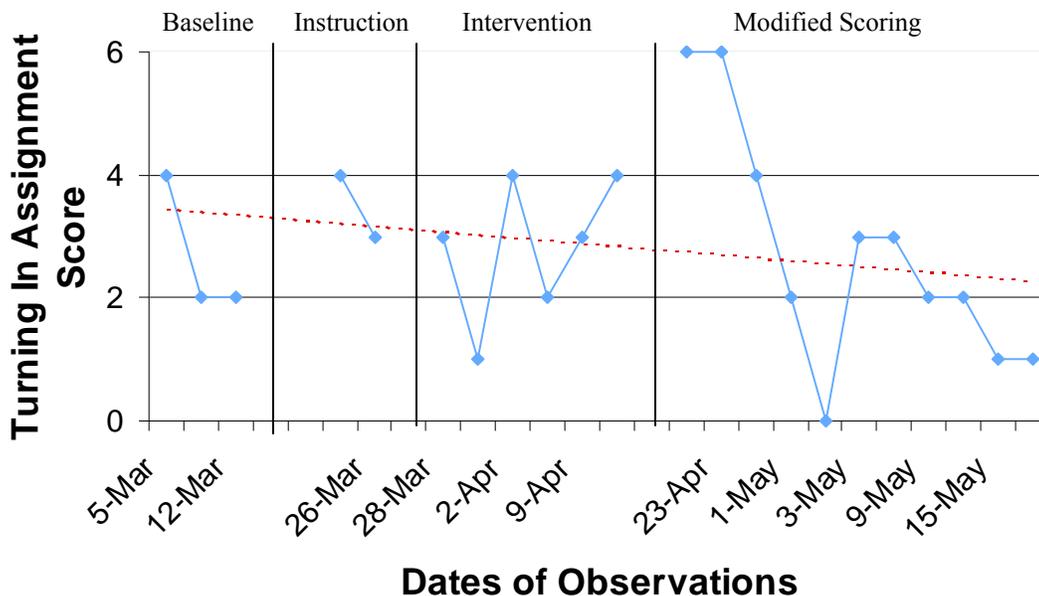


Figure 10. Turning in assignment scores across different phases.

50, almost a full standard deviation change. His antisocial behavior t-score decreased from a 54 to a 41, more than one full standard deviation change. Table 5 outlines the specific areas of improvement in each section.

Only one variable on the social competency scale was scored lower on the post test, “interacts with a wide variety of peers.” Every other variable either remained the same or improved from the beginning of the intervention. On most items, the target student’s behavior improved one raw score rating; however on two social competency items and seven antisocial behavior items, the score improved by two raw score ratings. The teacher noted improved leadership skills, transitions between activities, sharing with other students, being aware of feelings and needs of other students, and decreased arguing and cruelty toward peers, trouble at school, bothering and annoying peers, and overly demanding the teacher’s attention.

Table 5

Changes (Δ) in Pre- and Post- SSBS-2 Raw Scores

<u>Social Competence Scale</u>	<u>Δ</u>	<u>Antisocial Behavior Scale</u>	<u>Δ</u>
Peer Relations		Hostile/Irritable	
Offers help to others students	+1	Will not share w/ other students	-2
Interacts with a wide variety of peers	-1	Disregards feelings/needs of others	-2
Enters appropriately into ongoing activities	+1	Argues or quarrels with peers	-2
Has good leadership skills	+2	Cruel to others students	-2
Is assertive in an appropriate ways	+1	Easily irritated	-1
Is invited by peers to join in activities	+1		
Is "looked up to," respected by others	+1	Antisocial/Aggressive	
		Defiant to teacher/personnel	-1
		Gets into fights	-1
Self-Management/Compliance		Dishonest; tells lies	-1
Cooperates with other students	+1	Threatens; verbally aggressive	-1
Remains calm when problems arise	+1	Gets into trouble at school	-2
Is accepting of other students	+1		
Follows school and classroom rules	+1	Defiant/Disruptive	
Behaves appropriately at school	+1	Overly demanding of teachers' attention	-2
		Is difficult to control	-1
Academic Behavior		Bothers and annoys others	-2
Makes appropriate transitions between activities	+2	Disrupts ongoing activities	-1
Asks appropriately for clarification of instructions	+1	Is not dependable	-1
Asks for help in an appropriate manner	+1	Demands help from others	-1

This instrument shows dramatic behavioral improvement in five months. At the beginning of the study, potential areas of improvement were defined as scoring 1-3 on the social competency scale and 3-5 on the antisocial behavior scale. The post SSBS-2 shows nine social competency variables and nine antisocial behavior variables that would no longer be considered potential areas of improvement by this standard.

The target student's grades show improvement in his language arts scores and stability in his math scores. Grades were given on a scale of 1-4 three times during the school year. The student began meeting with his mentor about half-way through the second trimester and the intervention began toward the end of the second trimester. The student earned 1.5 in reading skills, reading comprehension, and written expression grades the first trimester, 2.0 during the second, and 2.5 during the third. The student earned a 2 in which was consistent across the school year. Finally, the student was graded on homework accountability: he earned a 1 during the first trimester, 1.5 during the second, and 1 during the third.

Social Validity

Social validity was formally measured using program evaluations at the conclusion of the study and informally measured through conversations and feedback during the study. The mentor, one teacher, and student completed the program evaluations. The mentor had an overall positive experience. During the study she reported enjoying her visits with the student especially when she observed his enthusiasm toward their time together. On one occasion, the mentor found the class outside on the playground and noticed the student on the far end of the field. When the student saw his

mentor, he ran across the field and enthusiastically greeted her. She felt great satisfaction and that she was making a difference for this student.

The teacher liked the one-on-one contact with an adult that the student received. She was particularly impressed with mentor's interest in school activities; for example, the mentor came to the school play and gave the student pictures of his performance. The teacher also reported that the target student always had a big smile when his mentor came to the door. Finally, she recommended holding the mentoring after school so that the student did not miss instructional time.

The student liked that his mentor helped him with his homework, particularly with his spelling. He reported working toward a goal to earn 100% on a spelling test. The student said that learning the social skill was "good" and he liked the graphs because they went higher. When asked if he would like to be mentored again, he responded "yes, because they help."

DISCUSSION

A mentoring relationship was used to reinforce and support the teaching of a specific social skill to a student at risk for emotional behavior disorders. Student demonstration of the social skill was measured via direct observation and teacher report. The results of this study suggest that the support given in the mentoring relationship was not sufficient for the student to master the target social skill during the allotted time. However, results do suggest that the support given during the mentoring relationship increased student time on-task, eye-contact, and class participation. It is possible that if given more time with the intervention, perhaps the entire school year, the student may have mastered the target social skill. Social validity questionnaire results and the post-test SSBS-2 indicate that the teacher perceived positive changes in the student's overall school behavior that she felt were more important than completed assignments. Moreover, teacher and student both reported wanting to continue participation in future mentoring programs. Implications, limitations, and recommendations related with the findings are discussed throughout this section.

Implications for Mentoring Students with EBD

Research suggests that students with EBD often display decreased abilities to master academic content (Jolivette et al., 2000). Specifically, research has identified deficiencies in task engagement, task completion, academic skills, and content knowledge (Lane, Wehby, et al., 2005). This study focused on improving both task engagement and task completion using the social skill "Showing Responsibility for Completing Work."

In looking at the effect of the mentoring relationship on the target social skill, the results suggest that the student did not show mastery of the social skill as a whole (reach the behavioral expectation of 90% demonstration of the entire social skill); however, he did show mastery or sustained growth in two of the individual steps. Mentoring research has found that youth involved in mentoring programs for at least a year have more positive outcomes than those in shorter programs (Rhodes et al., 2005). Therefore, it is possible that this intervention may have generated more positive results had more time been allotted.

The student mastered the step measuring time on-task and showed consistent improvement with eye contact. However, the student had difficulty with answering group-asked questions. During the intervention, the student confided to his mentor that he did not like answering questions, the reason being unknown. It could be speculated that the student's level of English proficiency made it difficult to follow language-loaded activities, such as teacher-read-aloud. He may have struggled because he needed more time to process answers or just did not comprehend the story enough to answer the question. Or, perhaps he lacked confidence in knowing the correct answers and therefore was not comfortable in attempting to answer.

Whatever the reason, the student's shyness was unexpected because he was identified as having externalizing behaviors. Shyness is generally attributed to students who display internalizing behaviors (Lane, Wehby, et al., 2005; Utah State Board of Education, 2000). It is theorized that perhaps categorizing children as either externalizing or internalizing is too simplistic or perhaps culturally inappropriate. As illustrated by this target student, at times children demonstrate co-morbid symptoms and exhibit both

externalizing and internalizing behaviors (Merrell & Walker, 2004). When focusing on goals within the mentoring relationship, it may be necessary to consider goals that address internalizing as well as externalizing behaviors to have the greatest possible impact.

One of the challenges faced in this study, involved the measurement of student participation. Even though the teacher was never asked to engage the student more during the intervention, trends clearly show that she did. Without consciously doing so, the teacher provided additional motivation to concentrate on the story during the intervention phase by involving the more. This reinforcement outside of the mentoring relationship may have been an important factor in the student reaching and maintaining mastery in staying on-task. When a mentoring pair is working on a goal that is primarily used in the classroom, it may be necessary for the teacher to provide the immediate positive feedback and reinforcement needed for behavior change to occur.

The fourth step of the social skill, turning in the assignment, showed erratic trends. Several factors inhibited the student from completing or turning in his assignments. First, the student lost his homework folder and did not tell his teacher, so he was marked down on all his homework for two weeks. Second, the student struggled with two daily assignments. The student was expected to return a homework log with his parent's signature and read at home daily. The student returned a signed homework log 18% of the time. Sixty-four percent of the time, the student failed to complete one or both of these assignments.

The mentor attempted to encourage, create homework reminders, emphasize the importance of reading at home, and create a homework contract, but the two daily

assignments remained a stumbling block. Social skill research (Lane, Menzies, et al., 2005) has shown that social skill instruction is most effective in the applicable setting and the classroom is the next best location. All of the mentoring activities took place at school; however, the student primarily struggled with completing homework outside of school. Parental involvement, particularly with the homework aspect of the social skill, may have been necessary to see behavior change (Haviland, 1999). This suggests that when selecting goals within a mentoring relationship, the pair ought to determine if others outside the mentoring pair could be included to help and support in reaching the goal. Depending on the goal, parent or teacher involvement may be necessary or beneficial so that the student receives appropriate feedback, encouragement, and reinforcement.

Ancillary measures were used to measure general student social and academic behavior change. Interesting changes were documented by the SSBS-2. One teacher completed the post-intervention SSBS-2 and reported improvements in all three social competency categories: peer relations, self-management, and academic behaviors. Scores also showed lower levels of anti-social behaviors in all three categories: irritable, aggressive, and defiant. These results correlate and/or mirror findings from three different studies. Hancock (2003) found that mentoring is related to improvements in peer and adult relations. Kamps et al. (2000) showed reduced physical aggression and other inappropriate behaviors, increased behavioral compliance, and increased academic behaviors in mentored students. Keating et al. (2002) documented decreased internalizing and externalizing behaviors after only six months of mentoring. These combined results

support the assertion that mentoring is an appropriate, research-based intervention for students at risk for EBD.

Finally, the changes in the student's grades showed improvement in the student's language arts scores and stability in his math scores across the school year. This study specifically monitored turning in assignments and not accuracy of assignments, so it cannot be assumed that the mentoring intervention caused this improvement; however, his grade increases correlate with the timing of the mentoring program. Additionally, the student's homework accountability grades decreasing the third trimester positively correlate with student turning in assignment data (step four of the social skill). Academic improvement or increased grades have been reportedly connected to mentoring interventions in other studies (Hancock, 2002; Herrera, 1999). However, this correlation should be cautiously considered as this was an ancillary measure which was not controlled to minimize confounding factors.

Implications for Social Skills Research

This study followed empirical-based research guidelines on developing and implementing a social skills intervention (Lane, Menzies, et al., 2005). The target student was identified using the SSBD, a research-based screening instrument. Social skills were evaluated through the SSBS-2, an empirically-based teacher rating scale and the intervention was designed based on the individual skill deficits identified by the SSBS-2. Because this was a single-subject case study, groups were not organized. The interventionist's responsibilities were divided between two people: a researcher with prior experience in social skill instruction was selected as the social skill teacher and the mentor reinforced and practiced the social skill with the student.

Placing a mentor in the role of reinforcing and practicing a specific social skill was unique to other studies. Previous studies emphasized the importance of relationship building to increase social competency based on the theory that students will follow the examples of people who show empathy and praise (Karcher, 2005). In this study, the mentoring relationship allowed the student to have more positive support and time with an adult without burdening the teacher. However, there was difficulty with generalization outside of the mentoring visits and role plays. Social skill demonstration was monitored during class, but the student practiced the skill with his mentor outside of class. Learning and practicing the skill outside of the classroom may have been a limitation to this method of social skill instruction (Lane et al., 2005). Connecting mentoring with social skill instruction may be more appropriate if the mentor is able to practice and reinforce in the applicable setting.

Limitations and Recommendations

One limitation of this study was that the intervention did not reach the reversal stage due to time constraints and unstable performance data. Previous mentoring research has struggled with being methodologically weak (Keating et al., 2002). Data analysis and observer training took more time than expected, so this study began three months before the end of school. Because the intervention ran during the last three months of school, assignment routines were interrupted to accommodate for school play rehearsals and end-of-the-year testing. The limited time frame impeded the implementation of a methodologically stronger intervention. Additionally, mentoring research has shown that youth involved in a mentoring relationship at least a year have more positive outcomes than those who terminate sooner (Karcher, 2005; Rhodes et al., 2005). Karcher reported

that frequency of contact in a mentoring relationship predicted positive outcomes better than the length of the mentoring program. Three months may have been too small of a time frame for the mentoring pair to have enough contact meeting only once a week.

Unstable performance data also prevented the intervention reversal. This may have been related to two weeks of low treatment integrity at the beginning of the study or potential confounding factors such as not involving parents. Due to a miscommunication between the researcher and mentor, the student did not initially receive the planned behavior feedback which prevented the mentoring pair from moving to new short-term goals in a time-efficient manner. The two weeks of low treatment integrity make it difficult to determine if the lower outcomes were a result of not implementing the intervention correctly or if the intervention needed to be modified (Lane, Menzies, et al., 2005). Treatment integrity is essential to make confident assertions regarding the effectiveness of a program.

One important academic variable was neglected when planning and implementing this study: the appropriateness of the instructional level. According to teacher report on the SSBS-2, the target student struggled with academic behaviors as identified such as completing and turning in homework, producing work of acceptable quality, asking for help and clarification, following teacher directions, and making appropriate transitions. It is possible that the student struggled with academic behaviors because he was did not understand the academic content. The scores reported by the teacher on the post-SSBS-2 indicated that the target student improved in his ability to transition between activities and ask for help and clarification. The student did not improve in completing homework, turning in homework, or producing work of acceptable quality. Considering the

appropriateness of the instructional level is essential when implementing an academically-focused intervention.

Other limitations were related to cultural factors. Cultural expectations regarding eye-contact, class participation, and homework completion were not considered in defining the behavioral expectations. Better practice would have researched into the cultural background of the student to better understand cultural rules for school behavior and defining the behavioral expectations accordingly (Smith, 2004). For example, the student showed good increase in eye-contact behaviors, but not mastery as defined in the study. For his culture, eye contact 80% of the time may have been very respectful and appropriate. Researchers should remember to identify potential cultural confounding factors in future studies.

Another cultural limitation was the unknown validity of the SSBD and SSBS-2 for English language learners. Though the SSBD was standardized using a large sample across states, there is limited information regarding the ethnic diversity of the sample. The SSBS-2 was standardized using a sample somewhat representative of the ethnic diversity of the United States, but again there is limited information regarding whether it is appropriate to use the instrument with students learning English as their second language. With the lack of validity evidence for English language learners, results from these two instruments should be cautiously interpreted.

This study demonstrated student performance growth toward steps of a target social skill, but not mastery of the whole skill. More research is needed to verify whether mentoring and social skill support can be successfully paired because many students with or at risk for EBD demonstrate social skill deficiencies (Lane, Wehby, et al., 2005). Extra

supports are necessary to teach these identified students social skills. Mentoring may be a program that can support social skill instruction if the mentors are trained and given enough time for behavior change. It is recommended to look further into this combination of services.

Additionally, when researching the combination of mentoring and social skills training, it may be important to identify social skills that may be more effectively taught and mastered within a mentoring relationship. As previously mentioned, an important factor is whether the mentor can instruct and practice in the setting where the social skill will be used (Lane et al., 2005). Reinforcement planning is another factor that needs to be considered. In the current study, the student showed increased time on-task, but his verbal participation growth was not consistent. With this skill, there may not have been sufficient reinforcement for behavior change (Lane & Beebe-Frankenberger, 2004) as the mentor visited once a week. Either social skills that will not require immediate reinforcement should be selected for mentoring relationships or reinforcement schedules may need to be implemented by both teachers and mentors. Moreover, when focusing on a social skill that includes both home and school environments, it may be necessary to include both home and school reinforcements.

A final recommendation is that future studies ought to look at using in-school mentoring within a PBS framework as a higher-level intervention. The number of in-school mentoring programs is increasing and there is a need to assess the outcomes of these programs (Jekielek et al., 2002). Additionally, one of the common limitations of mentoring is that there are more students who need mentors than volunteers available. Within a PBS framework, theoretically, at least 80% of the students will have their needs

met through primary-level structures (Lane & Beebe-Frankenberger, 2004; Walker et al., 2005). This allows the limited mentoring resource to be used more efficiently by serving those students with greater needs. Further research could compare whether mentoring is more effective as a secondary or tertiary-level intervention.

Conclusion

In summary, this study has provided a stepping stone to determine the effectiveness of combine mentoring and social skill instruction as a secondary intervention in a PBS model targeting students at risk for EBD. Social skill instruction is already being implemented as a secondary-level support within many PBS models; however, little research documents using mentoring as a secondary support. Further research is recommended to concretely determine the effectiveness of mentoring as a social skill instructional support or as a secondary-level support within a PBS model.

REFERENCES

- Achenbach, T. M. & Edelbrock, C. S. (1991). Behavior problems and competencies reported by parents of normal and disturbed children aged through sixteen. *Monographs of the Society for Research in Child Development, 46*, 467-469.
- Alberto, P. A. & Troutman, A. C. (2003). *Applied behavior analysis for teachers: 6th edition*. Upper Saddle River, NJ: Merrill Prentice Hall.
- Berry, J. D. (2000). *Success...one child at a time*. Tampa, FL: Plan for Social Excellence. (ERIC Document Reproduction Service No. PS030470).
- Big Brothers Big Sisters (2006). *Who we are*. Retrieved October 5, 2006, from www.bbbs.org/site/c.diJKKYPLJvH/b.1538759/k.2640/Who_We_Are.htm
- Carr, E. G., Dunlap, G., Horner, R. H., Koegel, R. L., Turnbull, A. P., Sailor, W., et al. (2002). Positive behavior support: Evolution of an applied science. *Journal of Positive Behavior Interventions, 4*(1), 4-16, 20.
- Colley, H. (2003). *Mentoring for social inclusion: A critical approach to nurturing mentor relationships*. New York: Routledge Falmer.
- Collins, K. M. T. & Onwuegbuzie, A. J. (2001). *Effects of an after-school tutorial program on academic performance of middle school students at-risk*. Little Rock, AR: Annual Meeting of the Mid-South Educational Research Association. (ERIC Document Reproduction Service No. ED467717)
- Day, A. (2006). The power of social support: Mentoring and resilience. *Reclaiming Children and Youth, 14*(4), 196-198.
- Drummond, T. (1993). *The student risk screening scale (SSRS)*. Grants Pass, OR: Josephine County Mental Health Program.

- DuBois, D. L., Holloway, B. E., Valentine, J. C., & Cooper, H. (2002). Effectiveness of mentoring programs for youth: A meta-analytic review. *American Journal of Community Psychology, 30*(2), 157-197.
- Fuchs, D., Fuchs, L. S., Mathes, P. G., & Martinez, E. A. (2002). Preliminary evidence on the social standing of students with learning disabilities in PALS and no-PALS classrooms. *Learning Disabilities Research & Practice, 17*(4), 205-215.
- Hancock, K. (2003). The case for in-school mentoring. *Education Canada, 43*(1), 24-25.
- Haviland, D. (1999). The systematic teaching and modeling of social skills to students exhibiting disruptive behavior (Ed D. practicum, Nova Southeastern University, 1999). (ERIC Document Reproduction Service No. ED435072).
- Herrera, C. (1999). *A first look into its potential*. Philadelphia: Public/Private Ventures.
- Holmes, S. R., Brandenburg-Ayres, S. J., & Cronic, D. T. (2003). Connecting students 'at-risk' to schools: Social program interventions. *Journal of Gang Research, 10*(4), 39-46.
- Horner, R. H. (2000). Positive behavior supports. *Focus on Autism and Other Developmental Disabilities 15*(2), 97-105.
- Institute for the Study of Children, Youth and Families At Risk. (SCYFAR; 1997). *Prevention plus: A comprehensive school program for the prevention of antisocial behavior*. North Logan, UT.
- Jackson, Y. (2002). Mentoring for delinquent children: An outcome study with young adolescent children. *Journal of Youth and Adolescence, 31*(2), 115-122.
- Jekielek, S., Moore, K. A., & Hair, E. C. (2002). *Mentoring programs and youth development: A synthesis*. Washington, D.C.: Child Trends.

- Jolivet, K., Stichter, J. P., Nelson, C. M., Scott, T. M., & Liaupsin, C. J. (2000). *Improving post-school outcomes for students with emotional and behavioral disorders*. (ERIC/OSEP Digest E597). Arlington, VA: ERIC Clearinghouse on Disabilities and Gifted Education. (ERIC Document Reproduction Service No. ED447616)
- Kamps, D., Kravits, T., Rauch, J., Kamps, J. L., & Chung, N. (2000). A prevention program for students with or at risk for ED: Moderating effects of variation in treatment and classroom structure. *Journal of Emotional & Behavioral disorders*, 8(3), 141-155.
- Karcher, M. J. (2005). The effects of developmental mentoring and high school mentors' attendance on their younger mentee's self-esteem, social skills, and connectedness. *Psychology in the Schools*, 42(1), 65-77.
- Kauffman, J. M., Mostert, M. P., Trent, S. C., & Pullen, P. L. (2006). *Managing classroom behavior: A reflective case-based approach*. Boston: Pearson Education.
- Keating, L. M., Tomishima, M. A., Foster, S., & Alessandri, M. (2002). The effects of a mentoring program on at-risk youth. *Adolescence*, 37(148), 717-734.
- Lane, K. L. & Beebe-Frankenberger, M. (2004). *School-based interventions: The tools you need to succeed*. Boston: Pearson Education.
- Lane, K. L. & Carter, E. W. (2006). Supporting transition-age youth with and at risk for emotional and behavioral disorders at the secondary level: A need for further inquiry. *Journal of Emotional and Behavioral Disorders*, 14(2), 66-70.

- Lane, K. L., Carter, E. W., Pierson, M. R., & Glaeser, B. C. (2006). Academic, social, and behavioral characteristics of high school students with emotional disturbances or learning disabilities. *Journal of Emotional and Behavioral Disorders, 14*(2), 108-117.
- Lane, K. L., Gresham, F. M., & O'Shaughnessy, T. E. (2002). Serving students with or at-risk for emotional and behavioral disorders: Future challenges. *Education and Treatments of Children, 25*(4), 507-521.
- Lane, K. L., Menzies, H. M., Barton-Arwood, S. M., Doukas, G. L., & Munton, S. M. (2005). Designing, implementing, and evaluating social skill interventions for elementary students: Step-by-step procedures based on actual school-based interventions. *Preventing School Failure, 49*(2), 18-26.
- Lane, K. L., Wehby, J., Barton-Arwood, S. M. (2005). Students with and at risk for emotional and behavioral disorders: Meeting their social and academic needs. *Preventing School Failure, 49*(2), 6-9.
- Lewis, J. T. & Sugai, G. (1999). Effective behavior support: A systems approach to proactive schoolwide management. *Focus on Exceptional Children, 31*(6), 3-22.
- Marchant, M., Anderson, D. H., Caldarella, P., Fisher, A., Young, B., Young, K. R. (in press). School-wide screening and programs of positive behavior support: Informing universal interventions. *Preventing School Failure*.
- McGinnis, E. & Goldstein, A. P. (1997). *Skillstreaming the elementary school child: New strategies and perspectives for teaching prosocial skill, revised edition*. Champaign, IL: Research Press.

- McLearn, K. T., Colasanto, D., & Schoen, C. (1998). *Mentoring makes a difference: The commonwealth fund 1998 survey of adults mentoring young people*. Retrieved October 5, 2006, from http://www.cmwf.org/usr_doc/McLearn_mentoring.pdf
- Merrell, K. W. (2002). *School social behavior scales (2nd ed., SSBS-2)*. Eugene, OR: Assessment-Intervention Resources.
- Merrell, K.W. & Walker, H. M. (2004). Deconstructing a definition: Social maladjustment versus emotional disturbance and moving the EBD field forward. *Psychology in the Schools, 41*(8), 899-910.
- Meier, C.R., DiPerna, J. C., & Oster, M. M. (2006). Importance of social skills in the elementary grades. *Education and Treatment of Children, 29*(3), 409-419.
- Miller, M. J., Lane, K. L., & Wehby, J. (2005). Social skill instruction for students with high incident disabilities: A school-based intervention to address acquisition deficits. *Preventing School Failure, 49*(2), 27-39.
- Murray, C & Greenberg, M. T. (2006). Examining the importance of social relationships and social contexts in the lives of children with high-incidence disabilities. *The Journal of Special Education, 39*(4), 220-233.
- Reynolds, C. R. & Kamphaus, R. W. (1992). *Behavior assessment system for children manual*. Circle Pines, MN: American Guidance Service.
- Rhodes, J., Reddy, R., Roffman, J., & Grossman, J. B. (2005). Promoting successful youth mentoring relationships: A preliminary screening questionnaire. *The Journal of Primary Prevention, 26*(2), 147-167.
- Royse, D. (1998). Mentoring high-risk minority youth: Evaluation of the brothers project. *Adolescence, 33*(129), 145-158.

- Search Institute. (2005). *Asset category*. Retrieved October 5, 2006, from <http://www.search-institute.org/>
- Smith, T. B. (2004). *Practicing multiculturalism: Affirming diversity in counseling and psychology*. Boston: Pearson Education.
- Sugai, G. & Horner, R. (2002). The evolution of discipline practices: School-wide positive behavior supports. *Child & Family Behavior Therapy, 24*(1/2), 23-50.
- Sutherland, M. B. & MacMillan, R. C. (2001). *Preventing high school dropout among students with mild disabilities: A literature review*. (ERIC Document Reproduction Service No. ED456610)
- Terry, J. (1999). A community/school mentoring program for elementary students. *Professional School Counseling, 2*(3), 237-241.
- Utah State Board of Education. (2000). *Special education rules*. [www page]. www.usu.edu/teachall/text/rules/NewGrules.pdf
- Walker, H. M. (1994). Replication of the systematic screening for behavior disorders (SSBD) procedure for the identification of at-risk children. *Journal of Emotional and Behavioral Disorders, 2*(2), 66-78.
- Walker, B., Cheney, D., Stage, S., & Blum, C. (2005). Schoolwide screening and positive behavior supports: Identifying and supporting students at risk for school failure. *Journal of Positive Behavior Interventions, 7*(4), 194-204
- Walker, H. M., & Severson, H. H. (1992). *Systematic screening for behavior disorders (SSBD): User's guide and administration manual*. Longmont, CO: Sopris West.
- Young, R. K., West, R. P., Smith, D. J., and Morgan, D. P. (1991). *Teaching self-management strategies to adolescents*. Longmont, CO: Sopris West.

APPENDIX A

Goal Setting Handout

Helping the mentee set goals is one of the main goals for the mentor.

Long-term goals are set first and determine what **short-term goals** are going to be. A long-term goal such as graduating from high school will be preceded by short-term goals such as participating in class, completing homework assignments on time, and attending classes on a regular basis.

Goal setting may be in the following areas:

- **Personal Goals**
- **Behavior Goals**
- **Academic Goals**
- **Attendance Goals**

My goal:

I will do the following to achieve my goal:

1. _____

2. _____

3. _____

I will know I have achieved my goal when:

APPENDIX B

Behavior Card

Student Name: _____

Date: _____

Teacher Name: _____

Time In: _____

Observer Name: _____

Time Out: _____

Class Activity: _____

Social Skill: How to Accept Responsibility in Completing your Work

	Never ≈0%	Rarely ≈1-30%	Sometimes ≈31-60%	Often ≈61-90%	Always ≈91-100%	# of Opportunities
1. Look at teacher or where she indicates during instructions	0	1	2	3	4	
2. Begin assignment within 5 Seconds (Follow directions, get out materials, write, read, etc.)	0	1	2	3	4	_____
3. Work on the assignments (read, write, on-task, etc.) until time runs out	0	1	2	3	4	

Key Instructional Words –

- | | | |
|----------|-----------|-----------|
| 1. _____ | 7. _____ | 13. _____ |
| 2. _____ | 8. _____ | 14. _____ |
| 3. _____ | 9. _____ | 15. _____ |
| 4. _____ | 10. _____ | 16. _____ |
| 5. _____ | 11. _____ | 17. _____ |
| 6. _____ | 12. _____ | 18. _____ |

Notes about the observation: _____

Questions about observing: _____

APPENDIX C

Worksheet #2

Listening is important when you are playing a game. It is important that both people know the rules so they know how to play. When you listen to the rules of the game, you will understand better how to play and have more fun. Review the rules and play the following game.

Blind Copy Cat

Materials

- a manila folder
- a plastic bag with 2 sets of colored shapes

Directions and Rules

Players will sit across from each other with the manila folder standing between them. Player one will then make a design with his/her shapes behind the folder so that player two cannot see the shape. Player one will then instruct player two how to arrange their pieces to make the same shape.

Player two should practice the social skill steps as he/she is listening and following directions. Player two may ask clarifying questions to player one. Players are not allowed to see the other's design until the very end. Play for a minute and see how close the designs get. On the second round, players should switch positions.

POST-GAME SURVEY

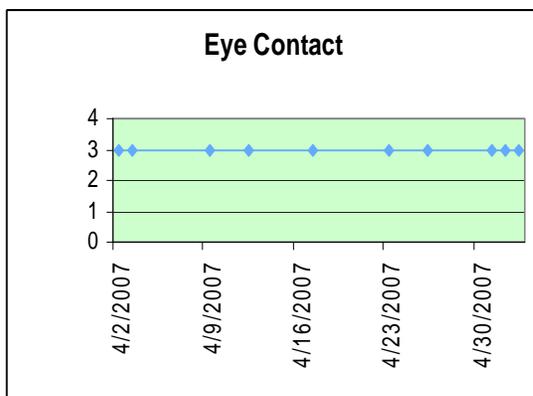
	rarely	Sometimes	Frequently	Almost Always
Mentee made eye contact while the mentor was speaking	1	2	3	4
Mentee followed direction immediately	1	2	3	4
Mentee played game to the end	1	2	3	4

How to Accept Responsibility in Completing your Work

1. Look at the teacher or where she indicates when she is speaking.
2. Respond to questions or begin assignment within 5 seconds.
3. Work on the assignments/task until it is complete or time runs out.
4. Turn in the assignment (give to the teacher, turn-in basket, etc.).

APPENDIX D

Behavior Graph

**DOING GREAT!!!**

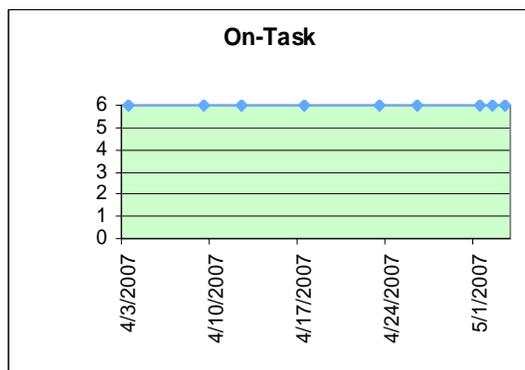
To keep and improve your score...

- ✚ Look at the teacher when she gives instructions.
- ✚ Look at the teacher when she is asking question about the read-a-loud story.

How to improve you score...

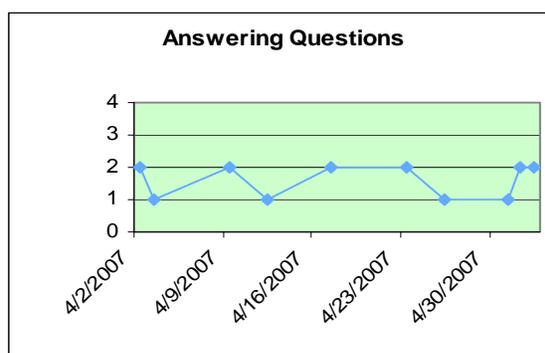
- ✚ Raise your hand when Mrs. Terry asks questions during teacher read-a-loud.
- ✚ Answer questions when your teachers ask you something.
- ✚ Follow directions immediately.

KEEP TRYING, YOU ARE MAKING GOOD IMPROVEMENT!!



How to always get good scores...

- ✚ Try to do every problem on your assignments before turning them in.
- ✚ Turn in your assignments when the teacher tells you they are due.
- ✚ Complete your home reading and have your parent sign your homework log.

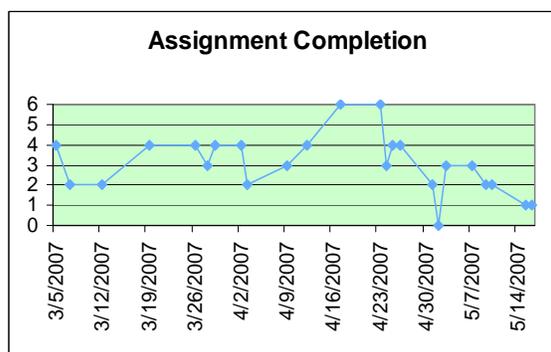


**** **WOW** ****

PERFECT SCORES EVERY DAY!!

To keep getting great scores...

- ✚ Work on assignments whenever you are given time in class.
- ✚ Watch the teacher and listen carefully during teacher read-a-loud.
- ✚ Participate during group activities
- ✚ Don't talk to your friends if you are supposed to be working.



APPENDIX F

Training Checklists

*Orientation Training Checklist**Practical information*

- Introductions to school personnel: principal, secretary, etc
- Basic information about school schedule/provide a school calendar
- Information on procedures for checking in and out, recording visit in journal
- Other school items
 - Where to meet with mentee
 - What to do if you can't meet
 - Where to park
 - What to do in an emergency

Training: laying a foundation

- Identifying a mentor:
 - What is a mentor (includes history and present day mentoring information)
 - What is expected of a mentor?
- Goals of the mentoring relationship
- Signs of success
- What is school-based mentoring?
- Who are the children being mentored?
 - Issues children face today-why we need mentors
 - How are they chosen?
 - Characteristics of different age groups
- Benefits of mentoring to mentee
- Benefits of mentoring to mentor

Training: skills

- Communication Skills
 - Listening
 - Questioning Skills
 - Problem Solving Skills
 - Giving Honest Praise
- Social Skills
 - Explain the school-wide PBSI program
 - What social skills does this child need?
- Goal Setting Skills
 - What area does this child need to set a goal in? (Academic, social, personal, or attendance, etc.)

- Teach Goal setting skills
- Set personal goals with the child

Additional Items every mentor needs to know:

- Confidentiality
- Boundaries
- Giving gifts
- Physical contact
- Stages in a relationship

Suggested Activities

- Suggestions for things to do on the first day
- Getting-to-know-you activities
- List of suggestions for activities

General Introduction to the Single Subject Study

- Complete interest surveys

Social Skill Mentoring Training Checklist

- ___ Briefly introduce social skill
 - ___ Give mentor laminated social skill card
 - ___ Explain that their mentee will teach them the steps

- ___ Teach steps to honest praise
 - ___ Name and describe honest praise
 - ___ Give rationale why it is important
 - ___ Model honest praise
 - ___ Have mentor say the steps & practice giving honest praise
 - ___ Provide feedback & praise
 - ___ Stress using honest praise as their mentee reaches goals, demonstrates good behavior, etc.

- ___ Explain that we will provide weekly worksheets once their mentee has been taught the social skill. These worksheets will be short, structured activities for them to do together to practice the skill.

- ___ Introduce the data graph example and explain how to read it

- ___ Discuss how the mentoring binder will be used to exchange worksheets and data graphs

Group Observer Training Checklist

- Introductions
- Social Skill Teaching
 - Give everyone a copy of the social skill behavior card and directions on scoring.
 - Detail the importance of knowing what each step looks like and making sure that everyone has the same vision
 - Ask person to walk, ask what did we see example
 - Walk through each step, answer questions.
 - Quiz individuals about the steps
 - Give feedback and praise
 - Inform that we will be coming back to the skill at the end
- The observation process
 - How to minimize observer effect
 - Ignore students if they want to talk to you
 - Don't make eye contact with students
 - Avoid staring straight at target student, use peripheral vision at time to monitor him.
 - Reliability checks
 - Periodic training meetings
- General Business
 - Location of school
 - How to check in
 - Scheduling each observation
 - Schedule next stage 2 of training

Student Semi-Structured Interview

In order to improve the mentoring program, we would like to know how you liked it. Please answer questions openly and honestly, as your responses will not be shared with your mentor or teacher.

1. What do you like about having a mentor?

2. What would you change about the mentoring program?

3. What do you think was the most important part of having a mentor?

4. Would you like your parent(s) and mentor to meet each other?

5. Would you like to be in the mentoring program again? Why or why not?

6. Other Comments