ABSTRACT

Title of Document:	THE EFFECTS OF SOCIAL SKILLS INSTRUCTION ON THE SOCIAL BEHAVIORS AND ACADEMIC ENGAGEMENT OF ELEMENTARY STUDENTS WITH CHALLENGING BEHAVIOR
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Social skills are critical to the success of students in elementary school. Antisocial behaviors interfere with the development and maintenance of positive relationships and with the academic success of students. The purpose of this study was to examine the effects of social skills instruction on the social behaviors and academic engagement of elementary school students with challenging behaviors in classroom settings. A multiple probe across participants design was used. Three general education teachers conducted nine lessons from the *SSIS Classwide Intervention Program* during health class. Direct observations of positive social behaviors, antisocial behaviors, and academic engagement were conducted during baseline, intervention, and maintenance conditions on one target student with challenging behaviors in three general education teachers' classrooms during core instructional classes such as math, language arts. and science.

The *SSIS Classwide Intervention Program* positively impacted positive social behaviors and academic engagement for all three target students and these improved

behavioral outcomes persisted two to eight weeks after the intervention ended. Antisocial behaviors decreased for two of the three students and this improved behavioral outcome persisted four to eight weeks after the intervention ended. All three students had some difficulty using the skills learned when a substitute conducted their class. General education teacher participants reported satisfaction with program planning, implementation, and the effectiveness of the intervention for target students and their entire class. Two additional teachers providing intercultural education to the same three classes reported behavioral improvements for all three students but only improved behavior for one teacher's class as a whole. Student participant responses to the intervention were mixed. Overall, the *SSIS Classwide Intervention Program* was an effective and socially valid means of increasing positive social behavior and academic engagement and decreasing antisocial behavior among elementary students with challenging behaviors.

The results of this study contributed to the research based on the efficacy of classwide social skills instruction. Furthermore, the results of this study provided evidence for teachers and administrators advocating for the financial resources and instructional time to implement social skills instruction in the general education program.

THE EFFECTS OF SOCIAL SKILLS INSTRUCTION ON THE SOCIAL BEHAVIORS AND ACADEMIC ENGAGEMENT OF ELEMENTARY STUDENTS WITH CHALLENGING BEHAVIOR

By

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Dedication

In honor of my beloved husband, son, and daughter who supported and sustained me. With deep appreciation and love. You all inspire me.

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CHAPTER I

Introduction

Statement of the Problem

Positive social behaviors (i.e., social skills) are essential to developing relationships with peers and adults in school settings (Cartledge & Milburn, 1995). Malecki and Elliot (2002) report social skills also foster academic achievement. Social skills are considered academic enablers because they are highly related to academic achievement and facilitate academic performance (Caldarella & Merrell, 1997). Antisocial behaviors are often associated with lower levels of academic engagement, which are linked to poor academic performance (Greenwood, Horton, & Utley, 2002). In addition, research demonstrates antisocial behaviors contribute to social maladjustment and peer rejection (Gresham, 2002), as well as low academic achievement and poor post-secondary outcomes (Kauffman, 2005).

Students who struggle to acquire and master social skills, or exhibit antisocial behaviors, need direct and systematic social skills instruction to succeed in school (Martens & Witt, 2004). Due to the emphasis on traditional academics, social skills are rarely taught as part of the school curriculum. Kolb and Hanley-Maxwell (2003) note schools emphasize academic standards and higher test scores, so little time is left in the school day for the nonacademic needs of students (i.e., social skills acquisition). Researchers (e.g., Bos & Vaughn, 2002; Gresham, 1995) emphasize the need for social skills instruction (SSI) in schools, which are considered optimal settings to foster the development of social competence for students with limited social skills and challenging behaviors.

There has been extensive research conducted on the efficacy of school-based social skills interventions. Several meta-analyses and individual research studies are found in the social skills literature (Chen & Bullock, 2004; Choi & Heckenlaible-Gotto, 1998; Gresham, Cook, & Crews, 2004). Social skills interventions include researcher developed programs and commercially available packages. Target behaviors include positive social skills/behaviors, antisocial behaviors, academic performance, and/or academic engagement. Outcome measures include behavior rating scales, interviews, direct observations, and/or standardized academic achievement measures. Participants include students with and without disabilities. Students with or at risk for emotional and behavioral disabilities (EBD) are the focus of much of the research. Research methodologies include control group, with and without random selection and assignment, and single subject designs.

Social skills interventions conducted in schools are further differentiated according to the setting and the complexity of the interventions. Settings in which social skills interventions are implemented include pullout sites (e.g., counseling office, special education classroom) and/or the general education classroom. The complexity of social skills interventions is related to the single or multi-component nature of the interventions. Single component interventions include explicit SSI using a researcher developed program or commercially available program (e.g., *Skillstreaming the Elementary School Child: A Guide for Teaching Prosocial Skills* [McGinnis & Goldstein, 1984]). Multi-component interventions include explicit SSI for students (e.g., *Social Skills Intervention Guide: Practical Strategies for Social Skills Training* [Elliott & Gresham, 1991]) paired

with other strategies (e.g., parent and teacher consultation, reinforcement schedules, parenting classes).

Pullout, single component social skills intervention studies (e.g., Chen & Bullock, 2004; Lane, Wehby, Menzies, Doukas, Munton, & Gregg, 2003) are most frequently cited in the social skills research. Pullout, multi-component social skills intervention studies (e.g., Colton & Sheridan, 1998) are the second most cited studies in the research. Implementers of social skills interventions in pullout settings include research staff and nongeneral educators. Important concerns about social skills interventions implemented in pullout settings by nongeneral educators include the lack of generalization and maintenance of acquired skills (Choi & Heckenlaible-Gotto, 1998). Another concern is the mismatch between outcome measures (e.g., personality tests) and target behaviors (e.g., cooperating with peers) and the lack of sensitivity to incremental behavior changes of outcome measures (e.g., behavior rating scales) (Gresham, Cook, & Crews, 2004). Additional limitations of studies implemented in pullout settings include the poor linkage between identified deficits in social behavior and the social skills that are actually taught (Gresham, 1995). Finally, a lack of social validity measures is an additional limitation of studies examining the effects of pullout social skills interventions.

Lo, Loe, and Cartledge (2002) implemented a single component intervention in the general education classroom and a pullout setting, which is rare in the social skills literature. Implementers included general education teachers and research staff. A limitation of the study design was that the researchers were unable to determine the combined and differential effects of the pullout and classroom-based components.

Multi-component intervention studies, with social skills interventions implemented in the general education classroom and additional components implemented in other settings (e.g., students' home), are frequently cited in the social skills research (e.g., Conduct Problems Prevention Research Group, 1999; Walker, Kavanagh, Stiller, Golly, Severson, & Feil, 1998). Implementers of the various components include research staff and nongeneral educators. The primary limitation of these studies is that the separate and combined effects of the multiple intervention components are not measured. Therefore, conclusions cannot be made about which component or combination of components contributes to the improvements in target behaviors.

For the purpose of this study the most relevant social skills literature focuses on general education classroom-based (i.e., classwide with the general education teacher as implementer) single component social skills interventions. These studies addressed the issues associated with generalization and maintenance of positive social behaviors acquired through social skills interventions. Choi and Heckenlaible-Gotto (1998) stress the need for SSI in the general education classroom, which they consider the best setting to facilitate generalization and maintenance of social skills and sustain improvements in academic performance and engagement. As implementers, general education teachers are able to provide frequent and long-term instruction, reinforce social skills and academic engagement, and thereby increase the likelihood of skill generalization and maintenance. Also, students with challenging behaviors benefit from exposure to socially competent peers who serve as positive social and academically engaged models in the general education classroom (Smith & Daunic, 2004). Modeling further facilitates generalization and maintenance of social skills. Use of a single component social skills intervention in

one setting also enables conclusions to be made regarding the efficacy of the intervention and setting, unlike the difficulty of determining the separate and combined effects of multi-component interventions or a single intervention implemented across multiple settings.

In summary, social skills are critical to the success of students in school (Gresham, 2002). Antisocial behaviors interfere with the development and maintenance of positive relationships and with the academic success of students (Kuperschmidt, Coie, & Dodge, 1990). It is the purpose of this study to address the limitations of past research when investigating the effects of SSI on the behaviors of students with challenging behaviors. More specifically, the limitations of past research includes: (a) SSI conducted in settings other than the general education classroom; (b) SSI delivered by someone other than general education teacher; (c) problems with generalization and maintenance of effects; (d) mismatch between outcome measures and target behaviors and a lack of sensitivity to incremental behavior changes; (e) poor linkage between identified deficits in social behaviors and the social skills actually taught; and (f) lack of social validity measures.

It is hypothesized that a single component social skills intervention implemented classwide by a general educator targeting the SSI to specifically identified social skills deficits should enhance the acquisition and maintenance of social skills. Furthermore, using an outcome measure sensitive to incremental change and directly related to behavioral outcomes, a functional relationship between SSI and the behavioral outcomes for students with challenging behaviors can be established and perceived by study participants as socially valid.

Research Questions

The purpose of this study was to examine the effects of social skills instruction on the social behaviors and academic engagement of elementary school students with challenging behaviors. Research questions included:

1. What are the effects of classroom-based social skills instruction on the positive social behaviors of elementary students with challenging behaviors?
2. What are the effects of classroom-based social skills instruction on the antisocial behaviors of elementary students with challenging behaviors?
3. What are the effects of classroom-based social skills instruction on the academic engagement of elementary students with challenging behaviors?
4. How do teacher and student participants perceive the value and the outcomes of classroom-based social skills instruction?
5. What are the perceptions of specialist teachers regarding the behavioral outcomes of classroom-based social skills instruction?

Significance of the Study

The contributions of this study address some limitations of past research and provide recommendations for future research. Specifically, this study implemented a classwide, single component social skills intervention conducted by general educators; linked specifically identified social skill needs of students to social skill instruction; used measures sensitive to incremental changes in behavior; addressed maintenance of effects; and conducted social validity measures. This study also contributes to the knowledge base and practice of social skills instruction.

This study has particular significance for the participating school system serving a large number of children with military parents. Currently, the school system has Content Standards (n.d.) for grades prekindergarten through twelve in English Language Arts, Math, Science, Social Studies, Foreign Language, Host Nation, Professional Technical Studies, Physical Education, Health Education, Visual Arts, and Music. The school system does not have explicit standards for social skills/behaviors, although some critical social skills are addressed in the Health Education standards. Content standards that address Health Education are organized into seven strands (i.e., Health Literacy Skills, Personal and Community Health; Safety and Injury Prevention; Nutrition and Physical Activity; Mental Health; Alcohol, Tobacco, and Other Drugs; and Family Life and Human Sexuality). Each strand has standards that teach essential and transferable skills to foster healthy behavior. The standards are consistent throughout all grade levels, matched at each grade level with content standards, and progressively change through the grade levels. The seven strands address many important social skills (e.g., communicate care, consideration, respect of self and others; describe ways in which friends support each other for healthful living; provide examples of healthy social behaviors in families and society such as helping others, being respectful of others; cooperation; consideration).

While the school system addresses the importance of student learning and exhibiting social skills, there is no explicit and systematic curricular program adopted by the system for the purpose of providing social skills instruction in the general education classroom by the general educator. Also, with the exception of incidental instruction that occurs during teaching of health there is no dedicated instructional time built into the

school day to address social skills instruction. As a result, there is a dearth of resources (e.g., time, materials, training) available to general educators to promote explicit and systematic social skills instruction in their classrooms.

Given the results of this study, teachers in the school system may be provided with data to advocate for implementation of SSI in their classrooms with requisite administrative support, time, materials, and training. Further, school leaders may have evidence needed to advocate for funds to purchase materials, provide training, and promote SSI as a systemic need and focus for students.

Definition of Terms

Academic engagement is orientation by the student toward the appropriate person or task (Sutherland, Wehby, & Copeland, 2000). For the purpose of this study, behavioral evidence of academic engagement include following directions, paying attention to the speaker, and working on the assigned task.

Antisocial behaviors are negative verbalizations and aggressive physical acts (Miller, Lange, & Wehby, 2005) that interfere with the acquisition and display of social skills. Negative verbalizations include name-calling, teasing, taunting, profanity, disruptive/loud inappropriate comments, and threatening. Acts of physical aggression include hitting, kicking, pushing, pinching, biting, spitting, throwing objects, and threatening gestures.

Challenging behaviors include antisocial behaviors and the antithesis of positive social behaviors. For the purpose of this study challenging behaviors include verbal and physical aggression, uncooperative behaviors, poor self-control, unassertive behaviors, irresponsible behaviors, and a lack of empathetic behaviors.

Social skills are described as a set of competencies that facilitate the initiation and maintenance of social relationships, contribute to peer acceptance, result in satisfactory school adjustment, and allow students to cope with and adapt to the demands of the social environment (Gresham, Van, & Cook, 2006). For the purpose of this study, social skills and positive social behaviors are synonymous. Positive social skills includes cooperation (i.e., listening to others, following the steps, following the rules, talking turns when talking, getting along with others), self-control (i.e., paying attention to work, staying calm with others), assertion (i.e., asking for help), responsibility (i.e., doing the right thing), and empathy (i.e., doing nice things for others).

Social skills instruction is the act of teaching specific and desirable social behaviors that are absent from the student's repertoire (Elliott & Gresham, 1991). For the purpose of this study social skills instruction was defined as the *Social Skills Improvement System (SSIS) Classwide Intervention Program* (Elliott & Gresham, 2007). The *SSIS Classwide Intervention Program* is a classroom-based program taught to all students in the general education classroom by the general education teacher.

Social skills interventions include behavioral, cognitive, or social interventions aimed at teaching social skills and/or remediating social skills deficits (Gresham, Cook, & Crews, 2004). More specifically, interventions include, but are not limited to, reinforcement schedules, social skills instruction, parent and teacher consultation, and parent training. Social skills instruction is a subset of social skills interventions.

CHAPTER II

Review of the Literature

Research on the efficacy of social skills interventions varied in the use of participants (e.g., students, teachers), school settings (e.g., library, counseling office, general education classroom), independent variables (e.g., social skills instruction, parent consultation), dependent variables (e.g., positive social behaviors, antisocial behaviors, academic performance), dependent measures (e.g., behavior checklists, observations), and research designs (e.g., single subject, randomized control group). The purpose of this review was to summarize, evaluate, and synthesize the literature related to school-based social skills interventions for elementary school children with challenging behaviors.

Review Method

Research relevant to social skills interventions in school settings was gathered from electronic and hand searches of the literature published between 1993 and 2008. Articles published within the last fifteen years were considered the most recent and relevant studies for the purpose of this review. The electronic search included the ERIC, PsycINFO, PsycArticles, Academic Search Premier, Family & Society Studies Worldwide, and University of Maryland library databases. Keywords used in generating a list of studies included “social skills training,” “social skills instruction,” “social skills intervention,” “school-based interventions,” “school-wide interventions,” “classroom-based interventions,” and/or “classwide interventions.” This search yielded 2332 matches. The titles of the 2332 studies were examined, leading to further examination of the abstracts of 86 of the 2332 matches to determine whether the articles addressed research studies related to social skills instruction of school-aged children with

challenging behaviors. Of the 86 abstracts reviewed, 55 studies were considered relevant. The reference lists of the 55 articles were also examined and an additional 12 articles related to social skill interventions conducted with school-aged children with challenging behaviors were found, totaling 67 articles.

The focus of this review was narrowed further to research articles related to school-based social skills interventions for elementary school students exhibiting challenging behaviors. Studies that focused primarily on social skill interventions for elementary students with autism, mental illness (e.g., schizophrenia), mental retardation, developmental disabilities, or physical disabilities were excluded. Sixty-seven articles found in the electronic and hand search were again reviewed to determine if they met the criteria of the review. Seventeen research articles (i.e., one mega-analysis, two meta-analyses, 14 individual studies) were appropriate for inclusion in this review. These sources were found in 11 journals.

Results of Literature Review

Studies on the efficacy of social skills instruction (SSI) include large mega- and meta-analyses of the social skills intervention research as well as individual studies. The individual studies included a variety of participants, settings, interventions, target behaviors, outcome measures, and research designs. The social skills intervention research fell into one of five categories based on setting and type of intervention: (a) pullout, single component interventions; (b) pullout, multi-component interventions; (c) combination of pullout and general education classroom settings, single component intervention; (d) multi-component interventions, with one or more components implemented in the general education classroom; and (e) general education classroom-

based, single component interventions. This review examined the results of 17 research studies on school-based social skills interventions for elementary children with challenging behaviors. The studies reviewed included one mega-analysis (i.e., analysis of six meta-analytic studies), two meta-analyses, and 14 individual research studies.

Mega- and Meta-Analyses of School-Based Social Skills Interventions

Research on the efficacy of social skills instruction (SSI) included a mega-analysis (Gresham, Cook, & Crews, 2004) and two meta-analyses (Kavale & Mostert, 2004; Mathur, Kavale, Quinn, Forness, & Rutherford, 1998). See Appendix A for a summary of these studies. The Gresham et al. (2004) study analyzed the meta-analyses conducted by Ang and Hughes (2002), Beelmann, Pfingsten, and Losel (1994), Losel and Beelmann (2003), Quinn, Kavale, Mathur, Rutherford, and Forness (1999), Schneider (1992), and Schneider and Byrne (1985). Gresham et al. examined these six meta-analyses, which included 336 individual studies, in terms of construct, internal, external, and social validity. Results of the Gresham et al. study found students with emotional and behavioral disabilities (EBD) showed a 64% improvement rate relative to controls. These results suggested SSI was an effective intervention strategy for students with EBD across a broad range of challenging behaviors. Weaknesses noted in the meta-analyses and individual studies reviewed included a lack of social validity of outcome measures and the lack of relationship between social skill needs assessed, if any, and skills taught.

Two meta-analyses conducted by Kavale and Mostert (2004) and Mathur, Kavale, Quinn, Forness, and Rutherford (1998) not included in the Gresham et al. (2004) mega-analysis investigated the efficacy of social skills instruction with students with learning disabilities (LD) and emotional and behavioral problems, respectively. Kavale and

Mostert reviewed 53 studies. Modest gains in social skills were found for students with learning disabilities and challenging behaviors. Limitations of studies reviewed included the use of social skills instructional programs with poor validity and pilot testing, relatively short duration of program implementation, and use of dependent variable measures that did not measure social skills taught or incremental changes in behavior.

Mathur et al. (1998) examined 64 single subject research studies to determine the efficacy of the social skills interventions. Effects of interventions were modest. Limitations of the individual studies analyzed included not linking instruction to social skills deficits, limited treatment fidelity data, and lack of social validity measures.

Individual Research Studies on School-Based Social Skills Interventions

Fourteen individual research studies included a variety of participants, settings, interventions, target behaviors, outcome measures, and research designs. These studies fell into one of five categories based on setting and type of intervention: (a) pullout, single component interventions; (b) pullout, multi-component interventions; (c) combination of pullout and general education classroom settings, single component intervention; (d) multi-component interventions, with one or more components implemented in the general education classroom; and (e) general education classroom-based, single component interventions.

Pullout, single component social skills interventions. Three of the 14 individual studies addressed the effects of pullout, single component social skills interventions (Chen & Bullock, 2004; Lane, Wehby, Menzies, Doukas, Munton, & Gregg 2003; Miller, Lane, & Wehby, 2005). See Appendix B for a summary of these studies. All three studies employed single subject research designs. The effects of pullout, single

component social skills interventions on the prosocial behaviors (Chen & Bullock, 2004), and antisocial behaviors and academic engagement (Lane, Wehby, Menzies, Doukas, Munton, & Gregg 2003; Miller, Lane, & Wehby, 2005) of students with, or at risk for emotional and behavioral problems, were examined. The results of Chen and Bullock's study indicated prosocial behaviors increased. Lane et al. (2003) and Miller et al. (2005) targeted student-specific acquisition deficits and found SSI was effective in reducing inappropriate behavior and increasing academic engaged time. Limitations of all three studies included lack of generalizability of findings due to the limited number of participants, limited amount of observation time, and a disconnect between the pullout setting and classroom, which may have impacted the students' efforts to contextualize social behavior. Weaknesses of the Chen and Bullock and Lane et al. studies included lack of follow-up data on the long-term effects of the interventions. Only the Miller et al. study reported social validity data.

Pullout, multi-component social skills interventions. Three of the 14 individual studies investigated the effects of pullout, small and large group, and multi-component interventions (e.g., social skills instruction, parent training) (Colton & Sheridan, 1998; Gresham, Van, & Cook, 2006; Lane, 1999). See Appendix C for a summary of these studies. Two of the three studies used single subject research designs and one used a randomized control group with pre-and posttest methodology.

Studies investigating the effects of multi-component social skills interventions delivered in pullout settings on cooperative play behavior (Colton & Sheridan, 1998), disruptive behavior, alone time, negative social interaction, and academic competence (Gresham, Van, & Cook, 2006), as well as social competence, problem behavior, and

academic performance (Lane, 1999) were conducted with students with or at risk for emotional and behavioral problems. Results included increased cooperative, positive interactions with peers (Colton & Sheridan, 1998) and a substantial decrease in duration of problem behaviors, increase in social skills, and no changes in academic competence (Gresham et al., 2006). Changes in social competence, problem behavior, and academic competence were not significant in the Lane study. These studies were unable to determine the singular and collective effects of the multi-component interventions. Due to the limited number of participants in the Colton and Sheridan and Gresham et al. studies, it was difficult to generalize the findings. Lane used outcomes measures that were not sensitive to incremental changes in behavior and academic functioning.

Combination of pullout and general education classroom settings, single component social skills intervention. One of the 14 individual research studies investigated the effects of a single social skills intervention implemented in both pullout and general education classroom settings. See Appendix D for a summary of this study. Lo, Loe, and Cartledge (2002) investigated the effects of a social skills program, combining pullout, small group instruction and teacher-directed, classroom-based social skills instruction on antisocial behaviors. A single subject research design was used and the results of the study indicated students showed a mean decrease in antisocial behavior at the end of the study over baseline. The time between the occurrences of antisocial behaviors increased and the intensity and duration of each occurrence period decreased. Limitations of the study included a lack of social validity data. Due to the limited number of participants, findings lack generalizability. No follow-up condition was employed to

assess maintenance of skills over time. Discriminating the separate effects of the pullout and classroom-based interventions was not possible based on the study design.

Multi-component social skills interventions, with one or more components implemented in the general education classroom. Three of the 14 individual studies reviewed examined the effects of multi-component social skills interventions with at least one component (i.e., explicit social skills instruction) implemented in the general education classroom (Conduct Problems Prevention Research Group, 1999; McConaughy, Kay, & Fitzgerald, 1999; Walker, Kavanagh, Stiller, Golly Severson, & Feil, 1998). See Appendix E for a summary of these studies. Each of the three studies used randomized group designs to include randomized control group pretest/posttest, randomized control group pretest/posttest/follow-up, and randomized wait-list control group, pretest/posttest/follow-up/follow-up.

These studies investigated the effects of multi-component social skills interventions on child and family risk factors (Conduct Problems Prevention Research Group, 1999); antisocial behaviors and academic engaged time (Walker, Kavanagh, Stiller, Golly Severson, & Feil, 1998); and problem behaviors (McConaughy, Kay, & Fitzgerald, 1999). The Conduct Problems Prevention Research Group reported the multi-component intervention was effective, in terms of improving children's social cognition, academics, peer relations, and aggressive-disruptive behaviors, as well as parenting behavior and parents' social cognitions. Results from the Walker et al. (1998) study indicated statistically significant measurable intervention effects and maintenance of gains. McConaughy et al. (1999) reported the group receiving parent consultation

services and SSI showed significantly greater reductions in problem behaviors than the SSI only group.

Limitations of the three studies included the lack of social validity data. The separate and combined effects of the multi-components of the interventions were not measured; consequently, conclusions about which component or components contributed to the improvements could not be made for all three studies. Linking the social skill deficits of the students to the social skills instruction was not addressed in any of the three studies.

General education classroom-based, single component social skills interventions. Four of the 14 individual studies reviewed focused on general education classroom-based, single component interventions for improving the social skills of school-aged children (Choi & Heckenlaible-Gotto, 1998; Grossman et al., 1997; Hennessey, 2007; Taub, 2002). See Appendix F for a summary of these studies. All four studies used a control group pre-and posttest design, two with randomization and two with unknown selection and assignment procedures.

The general education classroom-based studies examined the effects of a single component social skills intervention on peer ratings of "Likes to Work With" and "Likes to Play With" (Choi & Heckenlaible-Gotto, 1998); aggressive and prosocial behaviors (Grossman et al., 1997; Taub, 2002); and social skills, problem behavior, and academic achievement (Hennessey, 2007). The SSI was provided by a general educator and co-facilitated by a school psychologist in the Choi and Heckenlaible-Gotto study. Choi and Heckenlaible-Gotto found no statistically significant group differences, however, the

intervention group's scores increased significantly between the pre- and posttest measures for the "Work With" rating. The stability of individual scores over time indicated that when compared to the control group, in which the majority of scores remained unchanged on the "Work With" rating, approximately half the students in the intervention group exhibited increases in their scores. The authors reported the results lent strong support for the effectiveness of general education classroom-based social skill training with collaboration between the general educator and the school psychologist.

Grossman et al. (1997) found change scores were not significantly different between the intervention and control schools for any of the parent- or teacher-reported behavior scales after adjusting for sex, age, socioeconomic status, race, academic performance, household size, and class size. However, behavior observations, conducted two weeks after the end of the treatment, showed an overall decrease in physical aggression and an increase in neutral/prosocial behavior in the intervention group compared with the control group. Most effects persisted six months later. The social skills intervention appeared to lead to moderate increases in prosocial behavior and decreases in antisocial behaviors.

Taub (2002) found an improvement in social competence among the intervention group participants. A slight decrease in antisocial behavior at the intervention school and an increase in antisocial behavior at the comparison school were evidenced. Observed behaviors, engages appropriately with peers and follows directions from adults, were significantly higher for the intervention group compared to the control group at follow-up. Taub concluded SSI appeared to lead to modest increases in prosocial behavior and decreases in antisocial behaviors.

Results of the Hennessey (2007) study indicated modest evidence that students exposed to classroom-based SSI for a full academic year were perceived by their classroom teachers to be more socially skilled and less likely to exhibit problem behaviors than the non-SSI students. There were no appreciable differences between teacher ratings of academic competence by intervention or between student self-ratings by program participation. Hennessey concluded the study added to the growing body of evidence for the efficacy of social skills interventions.

Limitations of the Choi and Heckenlaible-Gotto (1998) study included the lack of variability in the ratings, which may have contributed to the lack of statistical significance. The prosocial skills taught might have been easier to practice and reinforce in the classroom where work-related interactions occurred than the environment where play-related interactions occurred, hence, the lack of significant difference between the intervention and control groups on the "Play With" rating.

Potential limitations of the Grossman et al. (1997) study included only fair to excellent interobserver reliability, which may have been indicative of error in the observations. Effects may have been larger if the curriculum was used as intended, that is, over the course of the whole school year for several years.

Limitations of the Taub (2002) study included limited observational time leading to inadequate sampling of participants' behaviors. Treatment fidelity was not measured so the results of the study could have been attributed to other factors. No one involved in the Taub or Hennessey (2007) studies were blind to the conditions, which could have created expectancy effects.

Future Research and Conclusions

Implications

Several significant points can be garnered from the review of the literature. First, the impact of social skills interventions on reducing problem behaviors and increasing prosocial behaviors is supported, at least in part, in the studies reviewed. Second, a variety of research designs, participants, target behaviors, intervention packages (i.e., single and multi-component), and settings (i.e., pull out and classroom-based) were represented in the studies reviewed and each indicated social skills of school-aged children with challenging behaviors could be improved. Finally, the results of these studies provided support for inclusion of social skills interventions in the school curriculum.

Even though the research provided evidence of the benefits of social skills interventions, not all methods used to teach social skills were equally effective. Studies that implemented multi-component interventions, to include explicit social skills instruction, over extended periods of time were more effective in increasing prosocial skills and reducing problem behaviors (Gresham, Van, & Cook, 2006; Walker et al., 1998). However, studies utilizing multi-components did not investigate the differential effects of the different components. Consequently, the researchers were unable to determine which component or combination of components led to behavioral changes and improvements.

Few reviewed studies specifically assessed social skill deficits and linked social skills instruction to the identified deficits. In addition, the assessment of outcomes was often disconnected from the social skills taught during the instruction. Studies that

utilized direct observations to measure changes in target behaviors were more likely to find evidence of improved social skills and reduced problem behaviors. Direct observations appeared to be more sensitive to behavioral changes than were behavioral rating scales. Maintenance of effects and generalization were not consistently measured or considered. Social validity was seldom assessed in the studies reviewed.

The research described in this review of the literature provided a basis for future research on social skills interventions. Schools need effective social skills interventions to facilitate positive peer and adult relationships and the development of social competencies. With the use of effective social skills interventions schools can significantly impact the social behaviors and functioning of its students.

CHAPTER III

Method

Social skills are critical to the success of students in school (Gresham, 2002). Antisocial behaviors interfere with the development and maintenance of positive relationships and with the academic success of students (Kuperschmidt, Coie, & Dodge, 1990). It was hypothesized that a single component social skills intervention implemented by a general educator in a general education classroom would impact important behavioral outcomes for students with challenging behaviors.

The purpose of this study was to examine the effects of social skills instruction on the social behaviors and academic engagement of elementary school students with challenging behaviors. Research questions included:

1. What were the effects of classroom-based social skills instruction on the positive social behaviors of elementary students with challenging behaviors?
2. What were the effects of classroom-based social skills instruction on the antisocial behaviors of elementary students with challenging behaviors?
3. What were the effects of classroom-based social skills instruction on the academic engagement of elementary students with challenging behaviors?
4. How did teacher and student participants perceive the value and the outcome of classroom-based social skills instruction?
5. What were the perceptions of specialist teachers regarding the behavioral outcomes of classroom-based social skill instruction?

Participants

Primary teacher participants. Three general education teachers teaching the third or fourth grades provided social skills instruction (SSI) and were the primary participants. Demographic information on the primary teacher participants is found in Table 1. The three primary teacher participants were selected based on multiple criteria including: (a) having at least 5 years of teaching experience in a general education classroom, (b) possessing an elementary teaching credential, (c) having at least one student but no more than three with challenging behavior in their classroom, and (d) being willing to participate in the study. A copy of the general education teacher consent form is found in Appendix G.

Table 1

Demographic Information on Primary Teacher Participants

Demographics	Teacher 1	Teacher 2	Teacher 3
Grade Level	4	4	3
Gender	Female	Female	Female
Race	African American	Hispanic	White
Years of Teaching	23	29	9
Teaching Credential	Elementary	Elementary	Elementary/ Middle
Number of Students in the General Education Classroom	26	24	19
SSIS Instructional Setting	Health	Health	Health
Data Collection Setting	Language Arts	Social Studies	Social Studies or Science

Specialist teacher participants. Two specialist teachers providing intercultural education to all the students in the classrooms of Teachers 1, 2, and 3 also participated by responding to a measure of social validity. More specifically, Specialist Teacher 1 provided instruction to Teacher 1's students twice a week and to Teacher 3's students once a week. Specialist Teacher 2 provided instruction to Teacher 2's students twice a week and to Teacher 3's students once a week. These two specialist teachers were selected based on multiple criteria including: (a) having at least 5 years of teaching experience in a general education elementary classroom, (b) possessing an elementary teaching credential, and (c) being willing to participate in the study. Demographic information on the specialist teachers is found in Table 2. The selected teachers were informed via oral and written means about the purpose of the study and their role and commitment as a participant. A copy of the specialist teacher consent form outlining the purpose of the study and their role and commitment as a participant is found in Appendix H.

Table 2

Demographic Information on Specialist Teacher Participants

Teacher	Gender	Race	Years of Experience	Teaching Credential
Teacher 4	Female	White	26	Elementary
Teacher 5	Female	White	25	Elementary

Student participants. Three students with challenging behaviors, one in the third and two in the fourth grade, served as target participants. Demographic information on the students is found in Table 3. Students were selected based on the following criteria: (a) having an Individual Education Program (IEP) with social and/or behavioral goals/objectives, (b) scoring a 1, 2, or 3 on the Prosocial Behavior or Motivation to Learn skill performance areas on the *Social Skills Improvement System Performance Screening Guide* (Elliott & Gresham, 2007), (c) attending the general education program for at least four hours a day, (d) possessing an IQ score of 85 or above, (e) having no physical or sensory impairments or a diagnosis of autism, and (f) and had consistent attendance at school. From the participating school there were four students who met the criteria; however, the one student was excluded from consideration because the student's general education teacher did not meet the teacher selection criteria.

Table 3

Demographic Information on Student Participants

Student Demographics	Student 1	Student 2	Student 3
Gender	Male	Male	Female
Race	White	White	Hispanic
Grade	4	4	3
Disability	Other Health Impaired-ADHD	Specific Learning Disability	Other Health Impaired-ADHD
Social and/or Behavioral Goals on IEP	Time on task, follow directions, work in a group	Interpersonal/social skills	Self-control, time on task
Scores on *SSIS Performance Screening Guide*	Motivation to Learn-3 Prosocial Behavior-3	Motivation to Learn-2 Prosocial Behavior-2	Motivation to Learn-2 Prosocial Behavior-2
Data Collection Setting	Language Arts	Social Studies	Social Studies or Science

The parents or guardians of the students selected were informed verbally and in writing about the purpose of the study and their child's role as a participant. Parent or guardian written informed consent was obtained for all three target students before the start of the study. Prior to completing the measure of social validity, each student was informed verbally and in writing about the purpose of the study and his or her

participation in the measure of social validity. Each student provided written informed assent. Refer to Appendices I and J for parent permission and student assent forms, respectively.

Setting

A school serving a large number of children with military parents comprised of third through fifth grades was the setting of this study. The school served 789 students. The school was located near a moderate sized city (i.e., population of 100,000) in a suburban area.

Social skills instruction was conducted classwide by three general education teachers in each of their classrooms during health instruction, up to three times a week (i.e., Monday, Wednesday, Friday) for a minimum of 30 minutes each session, over a 3-5 week period, for a total of at least 4.5 hours of instruction. Each classroom had 19 to 26 students. Students were seated at individual student desks in each classroom. The effects of the social skills instruction (i.e., the occurrences or nonoccurrences of positive social behaviors, antisocial behaviors, and academic engagement) were observed and recorded in the general education classroom, two times a week (i.e., Tuesday, Thursday), during core instruction (i.e., Student 1, Language Arts; Student 2, Social Studies; Student 3, Social Studies or Science). Teacher and observer schedules dictated which core instruction Students 1, 2, and 3 were observed. Three observers (i.e., data collectors) visited and observed three times in each student's classroom prior to the start of the study to familiarize the teachers and students with the presence of the observers.

Procedures

Experimental design. A multiple probe across participants design was used (Alberto & Troutman, 2008). The multiple probe design was the application of sequential interventions (i.e., SSI) across three students with challenging behaviors in a time-lagged manner. A multiple probe design was selected to reduce the frequency of baseline data collection while still obtaining an adequate sample of data prior to beginning SSI for each participant. The student participants were selected randomly when determining the order in which SSI was implemented.

Baseline observations of positive social behaviors, antisocial behaviors, and academic engagement began early in the spring semester. Student 1 was observed for four baseline sessions at the same time Students 2 and 3 were observed for one baseline observation. Baseline data were stable for Student 1 after four observations and SSI was implemented the day after the fourth baseline observation. Nine social skills instructional sessions were conducted with Student 1 over five weeks. Teacher 1 became ill and district-wide testing was conducted so instruction was halted after three lessons and resumed two weeks after the third instructional session. Baseline data collection (i.e., four data points) began with Student 2 the same day Student 1 was observed for the first intervention observation. Baseline data were stable for Student 2 after five observations, SSI was implemented a week after the fifth baseline observation. The week delay was due to the district-wide testing conducted during that time period. Nine social skills instructional sessions were conducted with Student 2 over six weeks. Interruptions in scheduled sessions included four teacher absences, one teacher workday with no students in attendance, a week of Spring Break, one student absence, and one change in the class

schedule due to a special activity. Baseline data collection began with Student 3 the same day Student 2 was observed for the first intervention observation. Baseline data collection was extended (i.e., total of 10 baseline data points) due to Teacher 3's extended absence after Spring Break when the intervention was originally scheduled to start. Student 3 had stable baseline data and the SSI was implemented. Nine social skills instructional sessions were conducted with Student 3 over three weeks. Maintenance observations were conducted postintervention every two weeks for all three students.

Dependent variables. Positive social behaviors were defined as cooperation (i.e., listening to others, following the steps, following the rules, talking turns when talking, getting along with others), self-control (i.e., paying attention to work, staying calm with others), assertion (i.e., asking for help), responsibility (i.e., doing the right thing), and empathy (i.e., doing nice things for others). Antisocial behaviors were defined as physical aggression (i.e., hitting, kicking, pushing, pinching, biting, spitting, throwing objects, threatening gestures) and verbal aggression (i.e., name calling, teasing, taunting, profanity, disruptive/loud inappropriate comments, threatening)**.** Academic engagement was defined as orientation by the student toward the appropriate person or task (i.e., following directions, paying attention to the speaker, working on the assigned task) (Sutherland et al., 2000).

Observers 1 and 2 used the observational data collection form to record the occurrences or nonoccurrences of positive social behaviors, antisocial behaviors, and academic engagement for Students 1 and 3 during baseline, intervention, and maintenance conditions in the general education classroom during core instruction. Observers 1 and 3 used the observational data collection form to record the occurrences

or nonoccurrences of positive social behaviors, antisocial behaviors, and academic engagement for Student 2 during baseline, intervention, and maintenance conditions in the general education classroom during core instruction. See Appendix K for the observational data collection form.

Positive social behaviors and antisocial behaviors were measured using a partial interval recording method in which students were observed for 1-minute intervals during a 45-minute observation session conducted two times a week during core instruction. A MP3 audio file was developed and installed on a MP3 player for each observer. The MP3 audio file sounded a tone at the start of the 45 minute observation session and then sounded a tone at the 55-second mark and a different tone at the 60-second mark of each of the 45, 1-minute intervals to cue the observers to record their observations. Observer 1 started each MP3 player at the same time to insure synchronicity and each observer had a set of earbud headphones so that the tones did not disrupt the class. Positive social behaviors, the first dependent variable, were measured as the percent of intervals the student engaged in positive social behaviors. Antisocial behaviors, the second dependent variable, were measured as the percent of the intervals the student engaged in antisocial behaviors. Academic engagement, the third dependent variable, was measured using a momentary time sampling procedure within the same 1-minute intervals, during the last five seconds of the 1-minute intervals, over a 45-minute observation session conducted at the same time as data was collected on positive social and antisocial behaviors in the general education classroom. Academic engagement was the percent of intervals the student was academically engaged.

Observer 1, the primary researcher, trained Observers 2 and 3 on the use of the observational data collection form. Occurrences or nonoccurrences of positive social behaviors, antisocial behaviors, and academic engagement were collected during each condition (i.e., baseline, intervention, maintenance) for each observation. Observers were trained to indicate if positive social behaviors and/or antisocial behaviors were exhibited any time during each interval. The observers also indicated if academic engagement was observed during the last 5 seconds of each interval. The number of intervals of occurrences and nonoccurrences of positive social behaviors, antisocial behaviors, and academic engagement were separately totaled at the end of each observation and converted to percent of intervals of occurrence.

During the intervention phase of the investigation, the three dependent variables were observed and recorded during 45 minute observation sessions conducted in the general education classroom, two times a week (i.e., Tuesdays and Thursdays), during a core instructional subject. These observation sessions were conducted the following school day after each SSI session was provided in each participating student's health class on Mondays, Wednesdays, and Fridays. Observations were also conducted on the school days following scheduled intervention sessions that were not conducted due to teacher or student absences or unexpected changes in the schedule. Nine intervention observation sessions were conducted on Student 1. Eleven intervention observation sessions were conducted on Student 2, and seven intervention observation sessions were conducted on Student 3.

Maintenance sessions were conducted across core classes and began two weeks after the last intervention observation for each student and continued every two weeks

until the end of the school year. Student 1 had four maintenance observations, Student 2 had two maintenance observations, and Student 3 had one maintenance observation.

Independent variable. The independent variable was classroom-based social skills instruction using the *SSIS Classwide Intervention Program* (Elliott & Gresham, 2007) which was designed for use by the general education classroom teacher. The *SSIS Classwide Intervention Program* included Upper Elementary/Middle (i.e., third through sixth grades) materials. The Upper Elementary/Middle materials incorporated reading, writing, and group discussion skills using natural and real life examples.

SSIS Classwide Intervention Program materials used included the following: (a) teacher's guide, (b) disc with video clips, (c) student booklets, and (d) *SSIS Performance Screening Guide*. The teacher's guide provided a rationale for teaching social skills, an overview of the instructional approach and assessment tools, and detailed lesson plans. The disc with realistic video clips matched up to each social skills unit and depicted positive models of social behavior and antisocial models of behavior in school settings. The student booklets were workbooks addressing each social skills unit and featured illustrations depicting positive social behaviors and antisocial behaviors to stimulate class discussion. The *SSIS Performance Screening Guide* was a screening of classwide social and academic behaviors using criterion-referenced descriptors of student behaviors. Scoring ranged from one through five with scores of one, two, or three in the significant to moderate difficulty range. The *SSIS Performance Screening Guide* was completed by the general education teachers and used in the selection of student participants.

The *SSIS Classwide Intervention Program* provided teachers with a structured way to teach 10 social skills units including Unit 1-Listening to Others, Unit 2-Following the Steps, Unit 3-Following the Rules, Unit 4-Paying Attention to Your Work, Unit 5-Asking for Help, Unit 6-Taking Turns When You Talk, Unit 7-Getting Along with Others, Unit 8-Staying Calm with Others, Unit 9-Doing the Right Thing, and Unit 10-Doing Nice Things for Others. The 10 units addressed skills subsumed under the positive social behaviors of cooperation (i.e., Units 1, 2, 3, 6, 7), self-control (i.e., Units 4, 8), assertion (i.e., Unit 5), responsibility (i.e., Unit 9), and empathy (i.e., Unit 10).

Each of the 10 social skill units was divided into three, 25- to 30-minute lessons conducted over an instructional week and organized around six instructional phases. The phases included tell, show, do, practice, monitor progress, and generalize. The tell phase included the teacher presenting and defining the social skill and key words, discussing the importance of the skill, and outlining the steps to perform the targeted skill. During the show phase, the teacher presented models of positive social behaviors and models of antisocial behaviors using pictures, video clips, and role play and then led a discussion of ways to accomplish the positive social behavior. The do phase included using role play to review the definition and importance of the skill and the skill steps and give and receive feedback. The practice phase used behavioral rehearsal to review and practice these skills in class. The teacher also encouraged the students to use the skill in class sessions beyond the social skill lessons. During the monitor progress phase, the teacher gave feedback and had the students self-assess using the student booklet. The last phase was to generalize. The teacher provided students homework opportunities to apply their skills.

Prior to baseline measures and the implementation of the *SSIS Classwide Intervention Program,* the three student participants were administered the *SSIS Rating Scales* (Elliott & Gresham, 2007*)* to identify acquisition deficits in seven positive social behaviors (i.e., communication, cooperation, self-control, assertion, responsibility, empathy, engagement, and self-control). The purpose of *SSIS Rating Scales* was to identify each target student's skill deficits and select three social skills units from the 10 available in the *SSIS Classwide Intervention Program* that most closely aligned with his/her deficits. See Appendix L for positive social behaviors assessed with the *SSIS Rating Scale* and the corresponding social skills units from the *SSIS Classwide Intervention Program*. Student 1's ratings on the *SSIS Rating Scales* indicated the areas of deficit included Self-Control and Engagement. The units that most closely aligned with Student 1's social skills deficits included Unit 4-Paying Attention to Your Work, Unit 7-Getting Along with Others, and Unit 8-Staying Calm with Others. Student 2's ratings on the *SSIS Rating Scales* indicated the areas of deficit included Self-Control and Cooperation. The units that most closely aligned with Student 2's social skills deficits included Unit 3-Following the Rules, Unit 4-Paying Attention to Your Work, and Unit 8-Staying Calm with Others. Student 3's ratings on the *SSIS Rating Scales* indicated the areas of deficit included Self-Control and Responsibility. The units that most closely align with Student 3's social skills deficits included Unit 4-Paying Attention to Your Work, Unit 8-Staying Calm with Others, and Unit 9-Do the Right Thing. Linking the pre-intervention assessment of social skills to the specific units taught was intended to help students acquire skills necessary to successfully meet their teachers' social and behavioral expectations (Lane, Givner, & Pierson, 2004).

All students in each of the three general education classrooms, to include the three target students, received direct instruction of social skills using the *SSIS Classwide Intervention Program.* Three units were conducted to address the targeted students' weakest pre-intervention assessment areas. The three general education teachers conducted the *SSIS Classwide Intervention Program* during the time set aside for health instruction for a total of 4.5 hours of instruction.

Each teacher was trained individually on the use of the *SSIS Classwide Intervention Program* two to five weeks prior to the first SSI intervention session of each student. See Appendix M for the training protocol developed by the researcher and used to train the teachers. The first 30 minutes of instruction provided the rationale for and overview of the *SSIS Classwide Intervention Program.* Program materials (e.g., video clips, skill steps cue cards, student booklets), instructional methods (e.g., tell, show, do), and an actual lesson plan to be implemented with their classroom was demonstrated by the researcher. During the second 30 minutes the teacher practiced with the researcher conducting one of the three social skills unit lesson plans and accompanying program materials (e.g., video clips, skill steps charts) to be implemented in their classroom. The researcher provided feedback to the teacher as the teacher worked with the researcher. Feedback included reinforcing the teacher when systematically following the lesson plan script, expanding on information, answering questions, and modeling parts of the lesson.

Interobserver reliability. Three observers were trained on the scoring procedures for recording the occurrences and nonoccurrences of positive social behaviors, antisocial behaviors, and academic engagement. Observer 1 was the primary researcher and Observer 2 and 3 were School Guidance Counselors, all working at the

target school during the school year. Interval by interval interobserver reliability checks were conducted for each student across baseline, intervention, and maintenance conditions during core instruction. See Appendix N for the interobserver reliability form. The following reliability coefficient formula was used: number of agreements (occurrence and nonoccurrence) divided by the number of agreements + disagreements X 100. The reliability requirement was 85% or above agreement for positive social behaviors, antisocial behaviors, and academic engagement. If interobserver reliability was less than 85%, the researcher conducted a booster session with the observers.

Procedural reliability. Two different measures of procedural reliability were collected, the first during the training sessions for the classroom teachers (i.e., teacher training) and the second during the teachers' implementation of the *SSIS Classwide Intervention Program* in the classrooms during social skills instruction in health classes. During the first measure, teachers were instructed on the use of the *SSIS Classwide Intervention Program* by the primary researcher (Observer 1) during an hour training session conducted with each teacher individually 10 to 25 days before the first intervention session with their target student. Observer 4, a Teaching Assistant, completed the training procedural checklist to ensure that all training topics and tasks were addressed in each one-hour training. See Appendix O for the Procedural Reliability Teaching Training Checklist. Procedural reliability was computed by dividing the number of designated items observed by the total number of items on the checklist, and then multiplying by 100. Acceptable teacher training procedural reliability was considered 90% or higher. If procedural reliability was less than 90% the researcher

provided a mini-session to the teacher to address topics and/or tasks omitted prior to the implementation of the *SSIS Classwide Intervention Program*.

Adherence by teachers to the *SSIS Classwide Intervention Program* procedures in each classroom was also assessed to ensure treatment fidelity. Appendix P presented the Procedural Reliability Checklist for the *SSIS Classroom Intervention Program*. Procedural reliability during classroom intervention sessions were computed by dividing the number of items observed by the total number of items on the *SSIS* Procedural Reliability Checklist and then multiplying by 100. Actual procedural reliability checks using the procedural checklist to evaluate the teachers' adherence to *SSIS Classwide Intervention Program* procedures were conducted during the intervention sessions for each student. Acceptable procedural reliability was set at 90% or higher. If procedural reliability measures for teacher implementation of the *SSIS Classwide Intervention Program* were less than 90%, the researcher conducted a booster session to address the topics and/or tasks not addressed in the previous lesson by the teacher.

Social validity. Teacher participants' perceptions of the value and the outcome of classroom-based social skills instruction was obtained to determine the social validity of the intervention. Significance of target behavior, acceptability of treatment procedures, and importance of outcomes (Lane, Beebe-Frankenberger, Lambros, & Pierson, 2001) were assessed at the first maintenance probe for each target student from each of their three general education teachers using a modified form of the Intervention Rating Profile-15 (IRP-15) (Martens, Witt, Elliott, & Darveaux, 1985); refer to Appendix Q. The modifications included personalizing each item so that it was aligned to the specific student or *SSIS Classwide Intervention Program*. The modified IRP-15 contained 15

items about the intervention procedures and student outcomes. Each item was rated on a 6-point Likert-type scale from 1 (strongly disagree) to 6 (strongly agree). Total scores ranged from 15 to 90 with higher scores indicating higher acceptability.

The specialist teachers and student participants were interviewed using a questionnaire and their responses recorded by an MP3 player to obtain their perceptions of the *SSIS Classwide Intervention Program* and the significance of behavioral outcomes. See Appendix R for the interview questionnaires. The specialist teachers were interviewed during the week of the first maintenance probe for each student to whom they provided services. Each student participant was interviewed the week of their first maintenance probe.

CHAPTER IV

Results

Reliability

Interobserver reliability. Interobserver reliability checks were recorded using an interobserver reliability form and conducted across baseline, intervention, and maintenance conditions for each student. The interval by interval reliability formula for determining interobserver reliability was to count the number of agreements among Observer 1 and Observer 2 for Students 1 and 3 and among Observe 1 and Observer 3 for Student 2 when indicating occurrences and nonoccurrences of positive social behaviors on the data collection form; divide the number of agreements by the number of agreements and disagreements; and multiply by 100 to determine the percent of agreement. The same formula was computed for antisocial behavior and academic engagement.

Interobserver reliability data across baseline conditions are presented in Table 4. The results of the interobserver reliability checks for 50% of baseline sessions for Student 1 yielded a mean of 89% for positive social behaviors with no range, a mean of 100% for antisocial behaviors, and a mean of 88% with a range of 87% to 89% for academic engagement. Interobserver reliability checks for 40% of baseline sessions for Student 2 yielded a mean of 90% with a range of 89% to 91% for positive social behaviors, a mean of 97% and a range of 93% to 100% for antisocial behaviors, and a mean of 88% and a range of 87% to 89% for academic engagement. Student 3's interobserver reliability checks for 40% of baseline sessions yielded a mean of 95% with a range of 91% to 98% for positive social behaviors, a mean of 100% for antisocial behaviors, and a mean of

91% with a range of 87% to 98% for academic engagement. Overall, interobserver reliability for baseline conditions across all students was conducted on 42% of all baseline sessions; the mean was 91% and a range of 89% to 98% for positive social behaviors, a mean of 99% with a range of 93% to100% for antisocial behaviors, and a mean of 89% and a range of 87% to 98% for academic engagement.

Table 4

Interobserver Reliability for Baseline Conditions

Student	Dependent Variable	Mean	Range	% of Sessions Observed
1	Positive Social Behaviors	89%	None	
	Antisocial Behaviors	100%	None	50% (2/4)
	Academic Engagement	88%	87%-89%	
2	Positive Social Behaviors	90%	89%-91%	
	Antisocial Behaviors	97%	93%-100%	40% (2/5)
	Academic Engagement	88%	87%-89%	
3	Positive Social Behaviors	95%	91%-98%	
	Antisocial Behaviors	100%	None	40% (4/10)
	Academic Engagement	91%	87%-98%	

	Dependent Variable	Mean Across All Students	Range Across All Students	% of Sessions Observed Across All students
All Students	Positive Social Behaviors	91%	89%-98%	
	Antisocial Behaviors	99%	93%-100%	42% (8/19)
	Academic Engagement	89%	87%-98%	

Data on interobserver reliability across intervention conditions are presented in Table 5. Interobserver reliability checks were conducted across 44% of the intervention sessions for Student 1 and yielded a mean of 98% and a range of 96% to 100% for positive social behaviors, a mean of 100% for antisocial behaviors, and a mean of 92% and a range of 87% to 98% for academic engagement. Interobserver agreement across 36% of the intervention sessions for Student 2 yielded a mean of 92% and a range of 87% to 98% for positive social behaviors, a mean of 99% with a range of 96% to 100% for antisocial behaviors, and a mean of 92% and a range of 89% to 96% for academic engagement. Interobserver reliability checks for 43% of intervention sessions for Student 3 yielded a mean of 95% and a range of 91% to 98% for positive social behaviors, a mean of 99% with a range of 98% to 100% for antisocial behaviors, and a mean of 90% with a range of 89% to 93% for academic engagement. Overall, interobserver reliability for intervention conditions across all students was conducted on 41% of all intervention sessions; the mean was 95% and a range of 87% to 100% for positive social behaviors, a mean of 99% with a range of 96% to 100% for antisocial behaviors, and a mean of 91% and a range of 87% to 98% for academic engagement.

Table 5

Interobserver Reliability for Intervention Conditions

Student	Dependent Variable	Mean	Range	% of Sessions Observed
1	Positive Social Behaviors	98%	96%-100%	
	Antisocial Behaviors	100%	None	44% (4/9)
	Academic Engagement	92%	87%-98%	
2	Positive Social Behaviors	92%	87%-98%	
	Antisocial Behaviors	99%	96%-100%	36% (4/11)
	Academic Engagement	92%	89%-96%	
3	Positive Social Behaviors	95%	91%-98%	
	Antisocial Behaviors	99%	98%-100%	43% (3/7)
	Academic Engagement	90%	89%-93%	

	Dependent Variables	Mean Across All Students	Range Across All Students	% of Sessions Observed Across All students
All Students	Positive Social Behaviors	95%	87%-100%	
	Antisocial Behaviors	99%	96%-100%	41% (11/27)
	Academic Engagement	91%	87%-98%	

Data on interobserver reliability conducted across maintenance conditions are presented in Table 6. Interobserver reliability checks were conducted across 50% of maintenance observations for Students 1 and 2. Reliability checks for Student 1 yielded a

mean of 95% with a range of 89% to 100% for positive social behaviors, a mean of 100% for antisocial behaviors, and a mean of 94% with a range of 87% to 100% for academic engagement. Reliability checks for Student 2 yielded a mean of 93% with no range for positive social behaviors, a mean of 100% for antisocial behaviors, and a mean of 98% with no range for academic engagement. An interobserver reliability check was conducted for the one maintenance session for Student 3. The reliability check yielded 100% for positive social behaviors and antisocial behaviors and 96% for academic engagement. Overall, interobserver agreement for maintenance conditions across all students was conducted on 57% of all maintenance conditions with a mean of 96% and a range of 89% to 100% for positive social behaviors, a mean of 100% for antisocial behaviors, and a mean of 96% and a range of 87% to 100% for academic engagement.

Table 6

Interobserver Reliability for Maintenance Conditions

Student	Dependent Variable	Mean	Range	% of Sessions Observed
1	Positive Social Behaviors	95%	89%-100%	
	Antisocial Behaviors	100%	None	50% (2/4)
	Academic Engagement	94%	87%-100%	
2	Positive Social Behaviors	93%	None	
	Antisocial Behaviors	100%	None	50% (1/2)
	Academic Engagement	98%	None	
3	Positive Social Behaviors	100%	None	
	Antisocial Behaviors	100%	None	100% (1/1)
	Academic Engagement	96%	None	

	Dependent Variables	Mean Across All Students	Range Across All Students	% of Sessions Observed Across All students
All Students	Positive Social Behaviors	96%	89%-100%	
	Antisocial Behaviors	100%	None	57% (4/7)
	Academic Engagement	96%	87%-100%	

Procedural reliability. Training on how to implement the *SSIS Classwide Intervention Program* was conducted with Teacher 1 ten days before implementing the program. Teacher 2 was trained 13 days before implementing the program. Teacher 3 was trained 14 days before the expected start of intervention, however, due to student and teacher absences, an unexpected change in the instructional schedule, a teacher workday without students in attendance, and a week of Spring Break; it was 25 days after the training before the intervention was implemented in Teacher 3's classroom. Procedural reliability of training procedures was conducted during each training session. Procedural reliability was computed by dividing the number of items the trainer completed in the training session by the total number of items required and multiplying by 100. Procedural reliability across the initial training yielded a mean of 100%. No booster sessions were conducted.

Procedural reliability of the intervention implementation by the classroom teachers during health classes was conducted in 33% of the intervention sessions.. Procedural reliability was computed by dividing the number of items implemented by each teacher by the total number of items required and multiplying by 100. Procedural reliability checks yielded a mean of 100% for all three teachers. No booster session were needed or conducted.

Research Questions

Research question 1. Data on positive social behaviors across all three students are presented in Figure 1. Baseline data were collected on positive social behaviors during core instruction in the general education classroom on each student. Student 1 demonstrated stable baseline data over four sessions with a mean of 73% and a range of

67% to 78% of intervals observed of positive social behaviors. Student 2 demonstrated stable baseline data over five sessions with a mean of 70% and a range of 64% to 73% of intervals observed of positive social behavior. Student 3 exhibited stable baseline data over ten sessions with a mean of 79% and a range of 69% to 87% of intervals observed of positive social behaviors.

The students were selected randomly when determining the order in which the *SSIS Classwide Intervention Program* was implemented. The *SSIS Classwide Intervention Program* was implemented for Student 1 after obtaining a stable baseline over four sessions. The *SSIS Classwide Intervention Program* was implemented for Student 2 after obtaining a stable baseline over five sessions and after three sessions of instructional intervention for Student 1. It was intended that Student 2 would begin the *SSIS Classwide Intervention Program* after two weeks/six sessions of intervention were conducted with Student 1, however, Teacher 1 became ill and the schedule was disrupted for Student 1. It was decided to proceed with intervention for Student 2 to keep to the schedule and best insure that the study could be completed during the semester. Student 3 participated in the *SSIS Classwide Intervention Program* after obtaining a stable baseline over 10 sessions and after eight sessions of instructional intervention for Student 2. Student 3 was supposed to begin the *SSIS Classwide Intervention Program* after two weeks/six sessions of intervention were conducted with Student 2, however, Student 3 was absent a session, and there were unexpected changes in the schedule that prevented the administration of the intervention by Teacher 3, and Teacher 3 was absent for three sessions.

Student 1 exhibited an abrupt increase of 23 percentage points in intervals of observed positive social behaviors from the last session of baseline to the first session of observation after intervention started. Student 1 went from a mean of 73% of intervals observed of positive social behaviors during baseline to a mean of 87% of intervals observed of positive social behaviors during the *SSIS Classwide Intervention Program*. During the nine observations conducted during the intervention phase, Student 1 exhibited a range of positive social behaviors from 81% to 96% of intervals observed. At the end of the *SSIS Classwide Intervention Program* Student 1 exhibited positive social behavior for 93% of the intervals observed. There was no overlap of data between the baseline and intervention conditions. Data gathered from the four observations conducted during the maintenance condition indicated Student 1 exhibited a mean of 82% and a range of 67% to 91% of intervals observed of positive social behaviors

Student 2 exhibited a nine percentage point increase in intervals observed of positive social behaviors once the S*SIS Classwide Intervention Program* was introduced compared to the last baseline observation. Student 2 went from a mean of 70% of intervals observed of positive social behaviors during baseline to a mean of 89% of intervals observed of positive social behaviors during the implementation of the *SSIS Classwide Intervention Program*. During the 11 observations conducted during the intervention phase, Student 2 exhibited a range of positive social behaviors from 82% to 96% of intervals observed. At the end of the *SSIS Classwide Intervention Program* Student 2 exhibited positive social behavior 84% of the intervals observed. There was no overlap of data between the baseline and intervention conditions. Data during the maintenance condition indicated Student 2 exhibited a mean of 83% of intervals observed

of positive social behaviors. During the two observations conducted during maintenance conditions Student 2 exhibited positive social behaviors 73% to 93% of observed intervals.

Student 3 exhibited a 13 percentage point increase in intervals of observed positive social behaviors once the S*SIS Classwide Intervention Program* was introduced compared to the last baseline observation. Student 3 went from a mean of 79% of intervals observed of positive social behaviors during baseline to a mean of 90% of intervals observed of positive social behaviors during the *SSIS Classwide Intervention Program*. During the seven observations conducted during the intervention phase Student 3 exhibited a range of positive social from 82% to 96% of intervals observed. At the end of the *SSIS Classwide Intervention Program* Student 3 exhibited positive social behavior 87% of the intervals observed. Fifty-seven percent of the intervention data points did not overlap with the baseline data points. Data collected during the one maintenance observation indicated that Student 3 exhibited positive social behavior for 93% of the intervals observed two weeks after the last intervention observation.

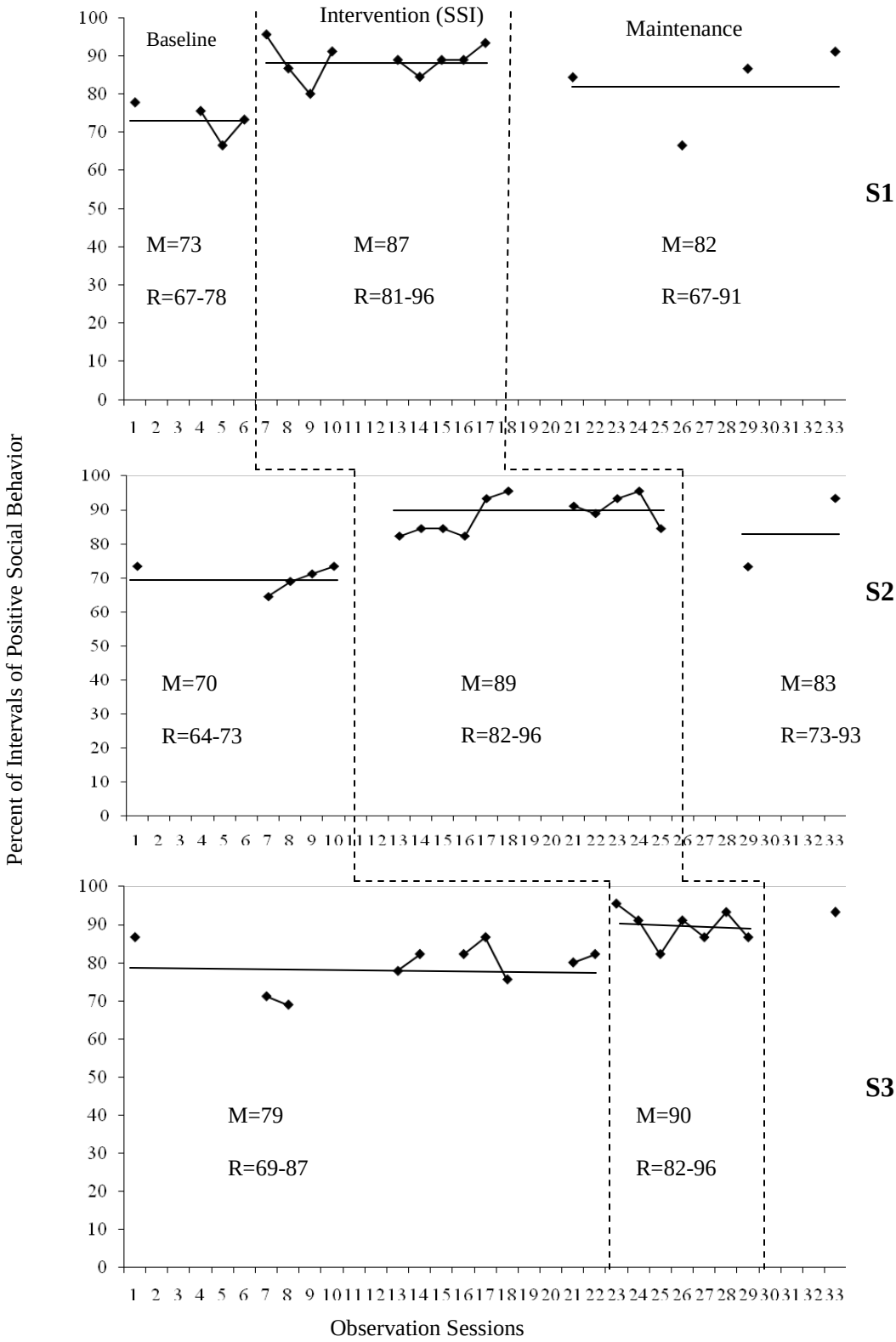

Figure 1. Effects of *SSIS Classwide Intervention Program* on Positive Social Behaviors

Research question 2. Data on antisocial behaviors across all three students are presented in Figure 2. Baseline data were collected on antisocial behaviors during core instruction in the general education classroom on each student. Student 1 demonstrated stable baseline data over four sessions with a mean of 23% and a range of 20% to 27% of intervals observed of antisocial behaviors. Student 2 demonstrated stable baseline data over five sessions with a mean of 13% and a range of 9% to 20% of intervals observed of antisocial behaviors. Student 3 exhibited stable baseline data over ten sessions with a mean of 4% and a range of 0% to 9% of intervals observed of antisocial behaviors.

Student 1 exhibited a seven percentage point decrease in intervals of observed antisocial behaviors when the *SSIS Classwide Intervention Program* was introduced after the last baseline session. Student 1 decreased from a mean of 23% of intervals observed of antisocial behaviors during baseline to a mean of 7% of intervals observed of antisocial behaviors at the start of the *SSIS Classwide Intervention Program*. During the nine observations conducted during the intervention phase, Student 1 exhibited a range of antisocial behaviors from 4% to 13% of intervals observed. At the end of the *SSIS Classwide Intervention Program* Student 1 exhibited antisocial behavior for 4% of the intervals observed. There was no overlap of data between the baseline and intervention conditions. Data collected during the four observations conducted during maintenance conditions indicated Student 1 had a mean of 4% and a range of 2% to 7% of intervals observed of antisocial behavior.

Student 2 exhibited a five percentage point increase in intervals of observed antisocial behaviors once the S*SIS Classwide Intervention Program* was introduced when compared with the last baseline session. However, Student 2 decreased from a mean of

13% of intervals observed of antisocial behaviors during baseline to a mean of 5% of intervals observed of antisocial behaviors during the *SSIS Classwide Intervention Program*. Data collected during the 11 intervention phase observations ranged from of 0% to 18% of intervals observed of antisocial behaviors. At the end of the *SSIS Classwide Intervention Program* Student 2 exhibited antisocial behavior 0% of the intervals observed. Eighty-two percent of the intervention data did not overlap with the baseline data. Data collected during the maintenance condition indicated that Student 2 exhibited antisocial behavior 0% of the intervals observed two and four weeks after the last intervention observation.

Compared to the last baseline observation session (i.e., 4% of intervals observed), Student 3 exhibited no decrease in intervals of observed antisocial behaviors once the S*SIS Classwide Intervention Program* was introduced. Student 3 had a mean of 4% of intervals observed of antisocial behaviors during baseline and intervention conditions. During the seven observation sessions conducted during the intervention phase, Student 3 exhibited a range of antisocial behaviors from 0% to 13% of the observed intervals. At the end of the *SSIS Classwide Intervention Program,* Student 3 exhibited antisocial behavior 13% of the intervals observed. Fourteen percent of the intervention data did not overlap with the baseline data. Data collected during the one observation conducted during the maintenance condition indicated Student 3 exhibited antisocial behavior 2% of the intervals observed two weeks after the last intervention observation.

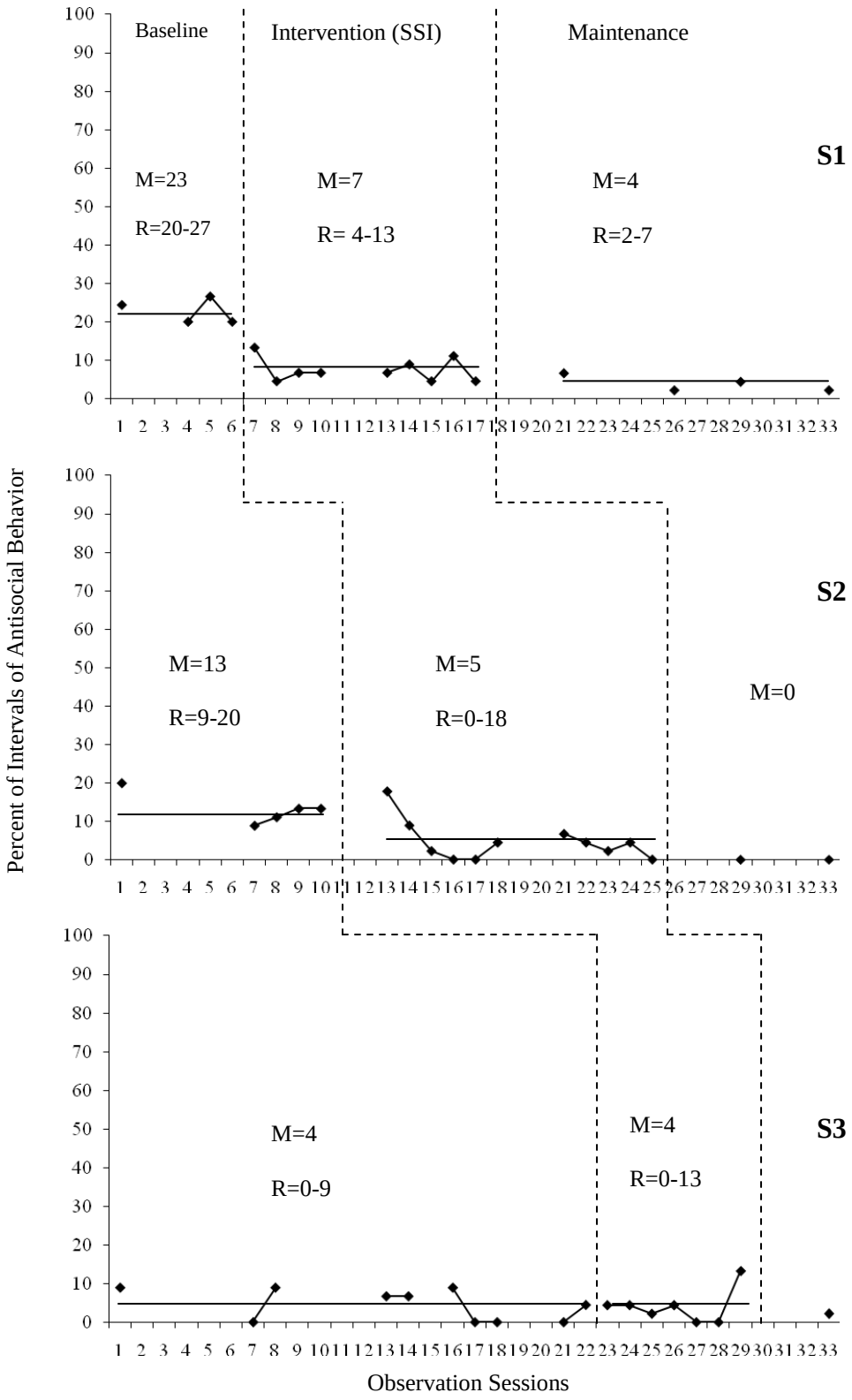

Figure 2. Effects of *SSIS Classwide Intervention Program* on Antisocial Behaviors

Research question 3. Data on academic engagement across all three students are presented in Figure 3. Baseline data were collected on academic engagement during core instruction in the general education classroom on each student. Student 1 demonstrated stable baseline data over four sessions with a mean of 60% and a range of 56% to 64% of observed intervals of academic engagement. Student 2 demonstrated stable baseline data over five sessions with a mean of 59% and a range of 51% to 64% of observed intervals of academic engagement. Student 3 exhibited stable baseline data over ten sessions with a mean of 62% and a range of 58% to 67% of intervals observed of academic engagement.

Student 1 exhibited an 11 percentage point increase in intervals of observed academic engagement when the *SSIS Classwide Intervention Program* was introduced compared to the last baseline session. Student 1 went from a mean of 60% during baseline to a mean of 77% of intervals observed of academic engagement during the *SSIS Classwide Intervention Program.* Student 1 exhibited a range of academic engagement from 71% to 82% of intervals observed during the nine observations conducted during the intervention phase. At the end of the *SSIS Classwide Intervention Program* Student 1 exhibited academic engagement for 76% of the intervals observed. There was no overlap of data between the baseline and intervention conditions. Data collect during the four observations conducted during maintenance conditions indicated Student 1 had a mean of 77% and a range of 62% to 87% of intervals observed of academic engagement.

Student 2 exhibited a seven percentage point increase in intervals of observed academic engagement once the S*SIS Classwide Intervention Program* was introduced compared to the last baseline session. Student 2 went from a mean of 59% of observed

intervals of academic engagement during baseline to a mean of 78% of observed intervals of academic engagement during the *SSIS Classwide Intervention Program.* During the 11 observation sessions conducted during the intervention phase Student 2 exhibited a range of academic engagement from 69% to 89% of the intervals observed. At the end of the *SSIS Classwide Intervention Program* Student 2 exhibited academic engagement 76% of the intervals observed. There was no overlap of data between the baseline and intervention conditions. Data collected during the two observations conducted during maintenance conditions indicated Student 2 exhibited a mean of 71% and a range of 56% to 87% of intervals observed of academic engagement.

Student 3 exhibited an abrupt increase of 22 percentage points of observed intervals of academic engagement once the S*SIS Classwide Intervention Program* was introduced compared to the last session of baseline. Student 3 went from a mean of 62% of observed intervals of academic engagement during baseline to a mean of 77% of observed intervals of academic engagement during the *SSIS Classwide Intervention Program.* Intervals of observed academic engagement ranged from 67% to 84% during the seven observations conducted during the intervention phase. At the end of the *SSIS Classwide Intervention Program* Student 3 exhibited academic engagement 71% of the intervals observed. Eighty-six percent of the data did not overlap between the baseline and intervention conditions. Data collected during the one observation conducted during the maintenance condition indicated Student 3 exhibited academic engagement 87% of the intervals observed two weeks after the last intervention observation.

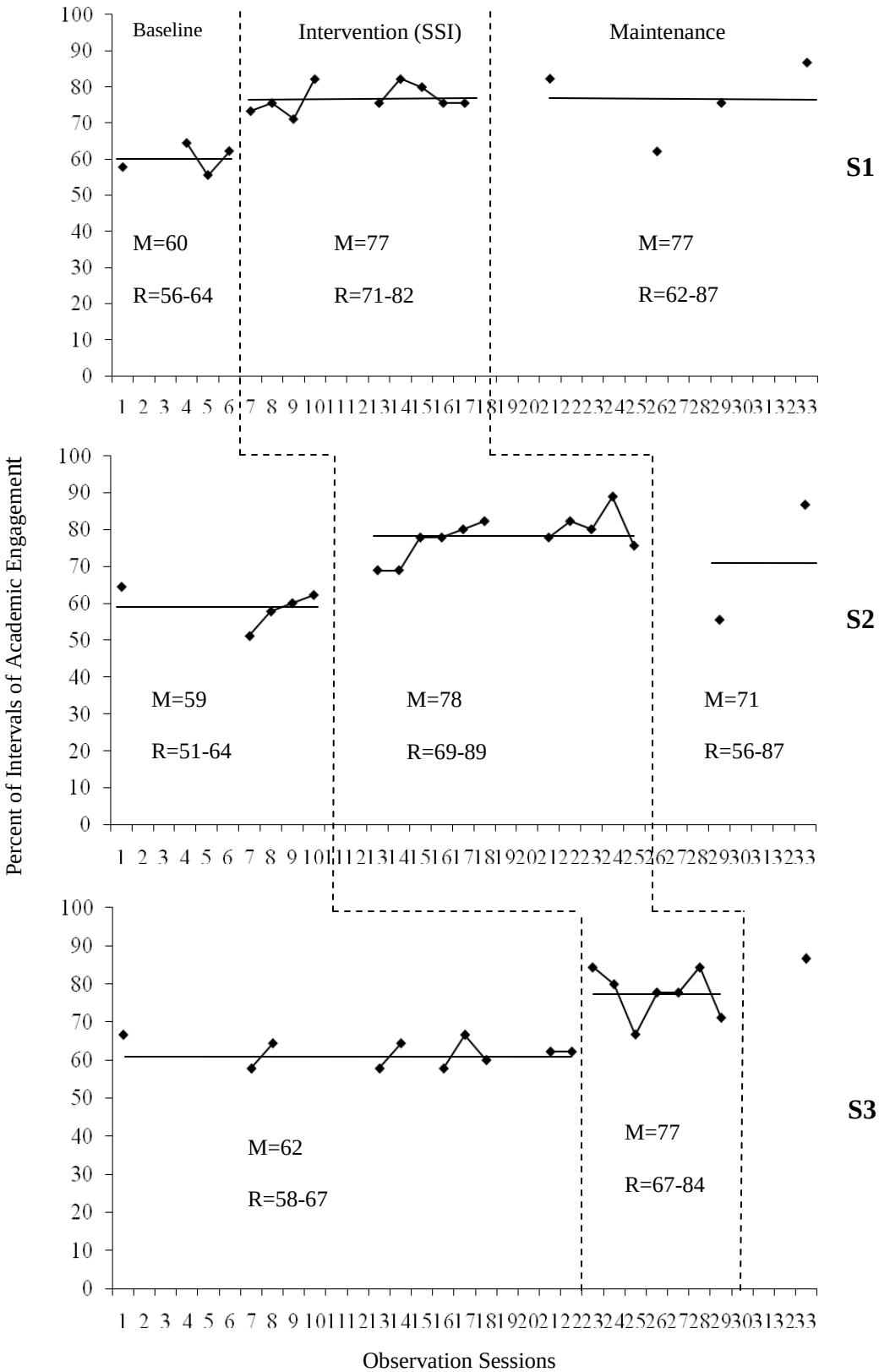

Figure 3. Effects of *SSIS Classwide Intervention Program* on Academic Engagement

Research question 4. Teacher and student participants' perceptions on the value and the outcomes of the classroom-based social skills instruction were assessed. See Table 7 for a summary of teacher responses. Significance of target behavior, acceptability of treatment procedures, and importance of outcomes (Lane, Beebe-Frankenberger, Lambros, & Pierson, 2001) were assessed for Teachers 1, 2, and 3 at the first maintenance probe for their target student using a modified form of the Intervention Rating Profile-15 (IRP-15) (Martens, Witt, Elliott, & Darveaux, 1985). Modifications to the IRP-15 included personalizing it to the student and *SSIS Classwide Intervention Program*. The modified IRP-15, found in Appendix Q, contained 15 items about the intervention procedures and student outcomes. Each item was rated on a 6-point Likert-type scale from 1 (strongly disagree) to 6 (strongly agree). Total scores ranged from 15 to 90 with higher scores indicating higher acceptability.

Teacher 1 reported a total score of 70 out of 90 on the modified IRP-15 for Student 1. Her ratings ranged from slightly agree to agree (i.e., mean score of 4.67). Teacher 1 agreed with the following items found in Table 7: the *SSIS Classwide Intervention Program* was an acceptable intervention for Student 1's challenging behavior; most teachers would find this intervention program appropriate for challenging behaviors; I would suggest the use of this intervention program to other teachers; most teachers would find this intervention program suitable for students with challenging behaviors, making time to provide social skills instruction is important, this intervention program did not result in negative side effects for Student 1; the time needed to implement this intervention program in my classroom was reasonable; the intervention program was a fair way to handle Student 1's challenging behaviors; I liked the

procedures used in this intervention program; and the time needed to plan for this intervention program was reasonable.

Teacher 2 reported a total score of 69 out of 90 on the modified IRP-15 for Student 2. Her ratings ranged from slightly agree to strongly agree. Teacher 2 had a mean score rating of 4.6. Teacher 2 strongly agreed with the following items found in Table 7: Student 2's challenging behavior was severe enough to warrant use of this intervention program; making time to provide social skills instruction is important; and this intervention program did not result in negative side effects for Student 2. Teacher 2 agreed with the following statements: the *SSIS Classwide Intervention Program* was an acceptable intervention for Student 2's challenging behavior; the time needed to implement this intervention program in my classroom was reasonable; and the time needed to plan for this intervention program was reasonable.

Teacher 3 reported a total score of 76 out of 90 on the modified IRP-15 for Student 3. Teacher 3's ratings ranged from agree to strongly agree. Teacher 3 had a mean score rating of 5.07. Teacher 3 strongly agreed with the following item found in Table 7: making time to provide social skills instruction is important. Teacher 3 agreed with the following items found in Table 7: the *SSIS Classwide Intervention Program* was an acceptable intervention for Student 3's challenging behavior; most teachers would find this intervention program appropriate for challenging behaviors; this intervention program proved effective in changing Student 3's behavior; I would suggest the use of this intervention program to other teachers; Student 3's challenging behavior was severe enough to warrant use of this intervention program; most teachers would find this intervention program suitable for students with challenging behaviors; this intervention

program did not result in negative side effects for Student 3; the time needed to implement this intervention program in my classroom was reasonable; this intervention program was consistent with those I have used in classroom settings; this intervention program was a fair way to handle Student 3's challenging behavior; this intervention program addressed the challenging behaviors of all my students; I liked the procedures used in this intervention program; this intervention program was a good way to handle Student 3's challenging behavior; and the time needed to plan for this intervention program was reasonable.

Table 7

Summary of Teacher Responses to the Modified IRP-15 with Ratings Ranging from 1 (Strongly Disagree) to 6 (Strongly Agree)

Questions	Teacher 1 Ratings	Teacher 2 Ratings	Teacher 3 Ratings
The *SSIS Classwide Intervention Program* was an acceptable intervention for _____'s challenging behavior.	5	5	5
Most teachers would find this intervention program appropriate for _____'s challenging behaviors.	5	4	5
This intervention program proved effective in changing _____'s challenging behavior.	4	4	5
I would suggest the use of this intervention program to other teachers.	5	4	5
_____'s challenging behavior was severe enough to warrant use of this intervention program.	4	6	5
Most teachers would find this intervention program suitable for students with challenging behaviors.	5	4	5
Making time to provide social skills instruction is important.	5	6	6
This intervention program did *not* result in negative side effects for _____.	5	6	5
The time needed to implement this intervention program in my classroom was reasonable.	5	5	5
This intervention program was consistent with those I have used in classroom settings.	4	4	5
The intervention program was a fair way to handle _____'s challenging behavior.	5	4	5
This intervention program addressed the challenging behaviors of all my students.	4	4	5
I liked the procedures used in this intervention program.	5	4	5
This intervention program was a good way to handle _____'s challenging behavior.	4	4	5
The time needed to plan for this intervention program was reasonable.	5	5	5

Student participants were interviewed using a questionnaire found in Appendix R. Their responses were recorded by an MP3 player to obtain their perceptions of the *SSIS Classwide Intervention Program* and the significance of behavioral outcomes. Each student participant was interviewed the week of his or her first maintenance probe.

Student 1 reported in a recorded interview that he enjoyed the SSIS Classwide Intervention Program. Student 1 enjoyed the role playing activities, especially role playing a negative model. He also reported his class enjoyed the role playing. He indicated that he learned new skills. He said the program taught him with next year in mind since he didn't know how the class would be set up and if he would have to work in a group or not. He initially reported that his behavior did not improve but in further conversation, he noted he had improved paying attention to his work and how to deal with someone who was disturbing him while he was trying to work. He noted that since the program started, he had been in trouble less often and that what he learned in the program really helped him on days he forgot his "pill" (Student 1 took stimulant medication to treat his symptoms of ADHD). He reported he did not know if his classmates' behaviors had improved because he was not really paying attention to their behaviors.

Student 2 reported in a recorded interview that he did not enjoy the *SSIS Classwide Intervention Program*. He thought it was "kinda boring." He reported he did not learn any new skills and that his behavior did not improve. He also reported that since the program had started he had not been in trouble less often because "people lie about stuff…they say I hit them and I didn't." He indicated his behavior did not improve

because the program was “too boring.” He noted he did not know if his classmates’ behavior improved.

Student 3 reported in a recorded interview that she enjoyed the program but her mother “was like, wow you have to do that?” Student 3’s family did not cooperate and help her with the homework so she went to a friend’s house to complete the homework. Student 3 reported she liked the homework because it gave her an opportunity to go over to a friend’s house and they could watch TV after the homework was finished. Student 3 reported she did not learn any new skills because she already had most of the skills; however, she did report that while the program was “kinda boring” she did learn a little bit about consequences. She also reported that her behavior did not improve because she was still the same “wacky and weird” student. She indicated she had gotten into trouble less often since the program started but she attributed that to her parents being clearer about what she had to do to stay out of trouble and that she did not want to get in trouble. She reported the behavior of her classmates had not improved because there were “a lot of boys being disrespectful” and the class was very talkative. She volunteered that the program could be improved by doing “something cool with it, like making a board game to go with it.”

Research question 5. The perceptions of two specialist teachers regarding the behavioral outcomes of classroom-based social skill instruction were assessed. The specialist teachers were interviewed using a questionnaire and their responses recorded by an MP3 player to obtain their perceptions of the *SSIS Classwide Intervention Program* and the significance of behavioral outcomes. The specialist teachers were interviewed during the week of the first maintenance probe for each student.

Specialist Teacher 1 provided intercultural instruction to Teacher 1's class twice a week and to Teacher 3's class once a week. Specialist Teacher 1 reported there might have been positive changes in the behavior of Teacher 1's whole class. Specialist Teacher 1 reported the class was more cohesive, more of a team, and more caring of each other during the second semester. Specialist Teacher 1 also reported she had noticed positive changes in Student 1's behavior. He was more focused, more willing to work, more participatory, and blurted out with less frequency. Specialist Teacher 1 reported there were not positive changes in the behavior of Teacher 3's whole class. Specialist Teacher 1 reported positive changes in Student 3's behavior. Student 3 exhibited better control of herself and her emotions, was more participatory and willing to try things on her own, and more willing to listen to others. The acceptance of Student 3 by her class also improved.

Specialist Teacher 2 provided intercultural instruction to Teacher 2's class twice a week and to Teacher 3's class once a week. Specialist Teacher 2 reported no positive changes in the behavior of Teacher 2's class as a whole. Specialist Teacher 2 reported positive changes in Student 2's behavior. Student 2 reduced talking out of turn and correcting others and improved waiting his turn and controlling his anger. Specialist Teacher 2 reported there were no positive changes in the behavior of Teacher 3's class as a whole. Specialist Teacher 2 reported no positive changes in the behaviors of Student 3; however, Special Teacher 2 indicated Student 3's behavior was significantly different in her classroom versus Specialist Teacher 1's classroom. That was, Student 3's behavior was usually better in Specialist Teacher 1's classroom than in Specialist Teacher 2's classroom.

CHAPTER V

Discussion

Gresham (2000) indicated that social skills were critical to the success of students in school while antisocial behaviors interfered with the development and maintenance of positive relationships and with the academic success of students (Kuperschmidt, Coie, & Dodge, 1990). It was the purpose of this study to address the limitations of past research when investigating the effects of social skills instruction (SSI) on the social behaviors and academic engagement of students with challenging behaviors. It was found that a single component social skills intervention implemented classwide by a general educator targeting specific social skill deficits increased positive social behaviors, decreased antisocial behaviors, increased academic engagement, and enhanced the generalization and maintenance of these skills. Furthermore, it was found that a functional relationship between the SSI and behavioral outcomes were established and perceived by study participants and specialist teachers as socially valid.

Reliability

Interrater reliability exceeded the minimum level of acceptability (i.e., 80%) indicating that observational data were collected in a consistent manner across all observers, students, and conditions. High procedural reliability indicated all teachers were trained in the same manner. Teachers conducted the *SSIS Classwide Intervention Program* with great fidelity. As a result of the high level of interrater reliability, procedural reliability for teacher training, and intervention fidelity, the data collected were sound and a function of program implementation as opposed to confounding factors

related to inconsistent observational and training practices and/or program implementation.

Research Question 1

The purpose of the first research question was to examine the effects of the *SSIS Classwide Intervention Program* on the positive social behaviors of three elementary students with challenging behaviors. All students demonstrated stable baselines prior to the initiation of the *SSIS Classwide Intervention Program.* Student 1, 2, and 3 demonstrated increases in positive social behaviors when the *SSIS Classwide Intervention Program* was initiated and during intervention. Student 3; however, demonstrated less clear improvements in positive social behaviors during intervention than did Students 1 and 2. This was probably due to two factors. First, Student 3 exhibited relatively high levels of positive social behaviors during baseline; consequently, she had less room for improvement than did Students 1 and 2. In addition, Student 3 had a substitute teacher during an intervention observation in which she exhibited fewer positive social behaviors. The substitute teacher did not refer students to the intervention skill steps or the social skills taught, which Teacher 3 was observed to do frequently.

Students 1, 2, and 3 evidenced levels of positive social behaviors in maintenance similar to that evidenced during intervention. There was one exception during maintenance for both Student 1 and 2 when they engaged in fewer positive social behaviors. These inconsistencies were believed to be due to the presence of a substitute teacher during the period in which both students were observed. The substitute teacher did not refer students to the intervention skill steps posted on the wall or make any other reference to the students about the *SSIS Classwide Intervention Program.* This was in

direct contrast to Student 1 and 2's classroom teachers who frequently reinforced positive social behaviors and reminded students to use the social skills they had learned when they engaged in inappropriate behaviors in the classroom.

The *SSIS Classwide Intervention Program*, implemented by the general education teacher, increased the positive social behaviors of all three students, and the students maintained the positive social behaviors. These results were consistent with single component social skills interventions implemented in the general education classroom by Choi and Heckenlaible-Gotto (1998), Grossman (1997), Hennessey (2007), and Taub (2002). The results of this study may be a product of linking each student's deficits in social behavior to specific lessons in the *SSIS Classwide Intervention Program* as recommended by Gresham et al. (2004). That is, the teachers directly taught the students the specific positive social skills they needed to exhibit. In addition, the social skills were taught in the general education classroom, the setting in which the skills were expected to be exhibited, observed, and reinforced with socially competent peers serving as models. These factors facilitated the acquisition and maintenance of positive social behaviors for all three students. Due to the structure of the lessons students were active participants and learners which may have contributed to their improved social behaviors. Also, the general education teachers provided frequent and long-term instruction, reinforcement of positive social skills, reminders to engage in positive social behaviors, and thereby increased the likelihood of skill acquisition and maintenance.

Another issue had to do with the limited number of students meeting this study's selection criteria. It was the author's impression that many more students in the participating school had challenging behaviors but many were excluded from

participation due to the selection criteria used. Specifically, there appeared to be several students with challenging behaviors but they either did not have an IEP or they had an IEP but did not have social/behavioral goals/objective which excluded them from participation. This begs the question, is the school missing the opportunity to provide needed services to students with challenging behaviors? The school district may need to provide more explicit programming via an IEP for these students to better meet their needs.

Research Question 2

The second research question examined the effects of the *SSIS Classwide Intervention Program* on the antisocial behaviors of three students with challenging behaviors. All students demonstrated stable baselines prior to the initiation of the *SSIS Classwide Intervention Program.* A decrease in antisocial behaviors was observed for Students 1 and 2 during intervention and maintenance conditions.

Student 1 exhibited a decrease in antisocial behaviors from baseline to the introduction of the *SSIS Classwide Intervention Program* and demonstrated decreased antisocial behaviors during intervention which were maintained over eight weeks. However, Student 2 demonstrated an increase in antisocial behaviors from baseline to the introduction of the *SSIS Classwide Intervention Program*. During the first observation conducted during the intervention phase, Student 2 got into trouble on the playground and came into class angry. He muttered and mumbled profanity and name-called at least once during the first eight minutes of the observation. Overall, Student 2's antisocial behaviors decreased during intervention compared to baseline despite the first

intervention observation. During maintenance, Student 2 exhibited no antisocial behaviors indicating that Student 2 maintained skills learned during intervention.

Overall, Students 1 and 2 demonstrated decreases in antisocial behaviors during the intervention and maintained these decreased antisocial behaviors after the intervention was discontinued. These results were consistent with single component social skills interventions implemented in the general education classroom by Grossman (1997), Hennessey (2007), and Taub (2002).

Student 3 demonstrated no change in antisocial behaviors from baseline to the introduction of the *SSIS Classwide Intervention Program*. This may have been a result of Student 3's infrequent display of antisocial behaviors during baseline rather than a function of the intervention. During intervention, Student 3 had a significant amount of data overlap with her baseline data. This was a result of Student 3's continued demonstration of infrequent antisocial behaviors with the exception of the last observation session. During the last intervention session, Student 3 had a substitute teacher with whom she became frustrated and quietly, but audibly, called the teacher names and talked about how much she hated the substitute and the task assigned. During maintenance, Student 3 continued to exhibit infrequent antisocial behaviors. The *SSIS Classwide Intervention Program* appeared to have made little impact on Student 3's antisocial behaviors as she exhibited infrequent antisocial behaviors prior to intervention.

The effects of the *SSIS Classwide Intervention Program* on antisocial behaviors were positive for students with frequently observed antisocial behaviors. With low levels of antisocial behavior during baseline, there was little room for improvement, but a bad day certainly stood out. It may be that measuring the frequency of antisocial behavior for

students with low levels of antisocial behaviors was not meaningful data to collect. Collecting data on intensity, duration, and/or the amount of time between antisocial acts, as were collected by Lo et al. (2002) may have been more relevant.

Research Question 3

Research Question 3 investigated the effects of the *SSIS Classwide Intervention Program* on the academic engagement of three students with challenging behaviors. All students demonstrated stable baselines prior to the initiation of the *SSIS Classwide Intervention Program.* Academic engagement was observed for all three students during baseline, intervention, and maintenance conditions.

Student 1, 2, and 3 exhibited increases in academic engagement, compared to baseline, when the *SSIS Classwide Intervention Program* was introduced. Students 1, 2, and 3were more academically engaged during intervention than during baseline. Student 3 exhibited more engaged behaviors during intervention with one exception, which may have been associated with a substitute teacher in the classroom. The substitute teacher did not remind students of social skills taught, refer them to posted Skills Steps, or reinforce academically engaged behaviors. This was contrary to Teacher 3's behavior in the classroom.

Students 1, 2, and 3 evidenced levels of academic engagement in maintenance similar to that evidenced during intervention. There was one exception during maintenance for both Student 1 and 2 when they were less academically engaged. These inconsistencies were believed to be due to the presence of a substitute teacher during the period in which both students were observed. The substitute teacher did not refer students to the intervention skill steps posted on the wall or make any other reference to

the students about the *SSIS Classwide Intervention Program*. This was in direct contrast to Student 1 and 2's classroom teachers who frequently reinforced academic engagement and reminded students to use the listening and paying attention to work skills they had learned when they engaged in off-task and/or inattentive behaviors in the classroom.

The *SSIS Classwide Intervention Program*, implemented by the general education teacher, increased the academic engagement of all three students. This outcome may be a result of linking each student's deficits in engaged behaviors to specific lessons in the *SSIS Classwide Intervention Program* as recommended by Gresham et al. (2004). Pullout, single component studies conducted by Lane et al. (2003) and Miller et al. (2005) targeted student-specific deficits and found the social skills intervention implemented was effective in increasing academic engagement. Also, the engagement skills were taught in the general education classroom, the setting in which the skills were expected to be exhibited and observed, with engaged peers serving as models. These factors facilitated the acquisition and maintenance of academically engaged behaviors for all three students. In addition, the general education teachers provided frequent and long-term instruction, reinforcement of engaged behaviors, reminders to listen and pay attention to their work, and thereby increased the likelihood of skill acquisition and maintenance. This was born out by the decrease in academic engagement when a substitute teacher was in the classroom, who did not provide the reinforcement of or reminders for academic engagement.

Research Question 4

Gresham et al. (2004) indicated in their review of six meta-analyses which included 336 individual studies that these studies seldom investigated the social validity

of the SSI or behavioral outcomes. That is, the perceptions of the teachers, the implementers, and the students, the targets of SSI, were not examined. Investigating the social validity of an intervention and the outcomes of that intervention are important in predicting whether the intervention is feasible and likely to be implemented again. In response to this, the fourth research question examined teacher and student participants' perceptions of the value and behavioral outcomes of the *SSIS Classwide Intervention Program*.

General education teachers and student participants were surveyed and interviewed, respectively, to gather social validity data. All three teachers agreed the *SSIS Classwide Intervention Program* was an acceptable intervention for their target student's challenging behavior and the time needed to implement and plan for the program was reasonable. The teachers also reported the *SSIS Classwide Intervention Program* was effective in changing their target student's challenging behaviors and they would suggest the use of the *SSIS Classwide Intervention Program* to other teachers. The teachers also indicated that most teachers would find the program suitable for students with challenging behaviors. Based on how positive the teachers were about the *SSIS Classwide Intervention Program* and student behavioral outcomes, it was not surprising that all three teachers reported that making time to provide social skills instruction was important. All three teachers were aware of the purpose of the study and the behaviors being observed and measured. It may be that the teachers reported positively about the intervention and outcomes because it was what they expected. Overall, the three teachers believed that the *SSIS Classwide Intervention Program* had value and that students benefited from the program and demonstrated important behavioral improvements.

The three teachers did not suggest any modifications to or improvement of the *SSIS Classwide Intervention Program*. At the end of the study, Teacher 1 asked permission to keep the program materials so she could prepare to fully implement the program during the 2010-2011 school year. She requested technical assistance from the school psychologist and financial support from building administration to purchase student booklets so she could implement all 10 social skills units for the following school year.

Students 1, 2, and 3 were interviewed to obtain their perceptions about the quality of the *SSIS Classwide Intervention Program* and the effects of the program on their behavior and that of their classmates. Student reviews of the program were disparate. Student 1 was the most positive about the program and his behavioral improvements. Student 2 was negative about the program and had nothing positive to say about the program or the effects of the program on his behavior. Student 3 enjoyed the program and reported learning something from the program but accorded no behavioral improvements to the program. None of the students reported improvements in their peers' behavior. Only Student 3 had suggestions on how to improve the program, which included spicing the program up with an accompanying board game.

It appeared students were not accurate evaluators of their own or their peers' behavioral changes. It may be the students did not view the *SSIS Classwide Intervention Program* as anything special, different, or linked to their behavioral needs and outcomes. In addition, students may have found the program boring compared to many of the instructional activities in the classroom that incorporated technology and hands-on activities. Improvements to the program may include more hands-on activities to include

drawing pictures by hand or on the computer, selecting pictures from the internet, or taking their own photographs to illustrate a positive or negative model.

Research Question 5

The final research question investigated the perceptions of two specialist teachers regarding the behavioral outcomes of the *SSIS Classwide Intervention Program* in a setting outside of the general education teachers' classrooms. The two specialist teachers providing intercultural instruction to Teacher 1, 2 and 3's classes, participated in an interview to obtain their perceptions about the impact of the *SSIS Classwide Intervention Program* on the behaviors of Student 1, 2, and 3 and their classmates. Positive changes in behavior for Students 1, 2, and 3 were reported, which were consistent with the observational data collected and general education teacher perceptions. This provided some evidence that the social skills learned generalized and transferred to another school setting. There was conflicting information from Special Teachers 1 and 2 regarding Student 3, however, both teachers acknowledged that Student 3 exhibited much more appropriate behaviors in Specialist Teacher 1's class than in Specialist Teacher 2's class.

Positive changes were noted for Teacher 1's class, which was consistent with Teacher 1's reports. Teacher 1's students went to specials (i.e., music, art, physical education, intercultural education) after the classroom observations. Prior to leaving for specials, Teacher 1 reminded the class to use their Skills Steps and cautioned them that she would be checking with the specialist teacher about their behavior. Positive changes were not noted for Teacher 2's or Teacher 3's classes which was not consistent with Teacher 2 or Teacher 3's reports. The inconsistencies between the specialist teachers' and general education teachers' perceptions may be due to the class, as a whole, not

being reminded to use the skills learned, lack of teacher follow-up with the specialist teacher, and inadequate generalizability and transfer of skills to a different school setting by the class.

Summary

Generally, the *SSIS Classwide Intervention Program* positively impacted positive social and academic engagement for all three target students and these improved behavioral outcomes persisted two to eight weeks after the intervention ended. Two of the three students demonstrated decreases in antisocial behaviors and these improvements persisted four to eight weeks after intervention. All three students had some difficulty using the skills learned when a substitute conducted their class. General education teacher participants reported satisfaction with program implementation and planning and the effectiveness of the *SSIS Classwide Intervention Program* for target students and their entire class. All three teachers recommended the use of the program to other teachers and believed social skills instruction was important. The two specialist teachers reported improvements in the behavior of all three students but only improvement in Teacher 1's class, as a whole. The responses of the student participants were mixed. There was some reported behavioral improvements but not improvements in classwide behavior. Overall, the *SSIS Classwide Intervention Program* was an effective and socially valid means of increasing positive social behavior and academic engagement and decreasing antisocial behavior among elementary students with challenging behaviors.

Recommendations for Future Research

The *SSIS Classwide Intervention Program* was intended to be implemented in its entirety (i.e., 10 social skills units across thirty lessons) during a school year. Future

research should investigate the effects of implementing the entire program across a school on important behavioral outcomes. Also, investigating the impact of the program on various settings in the school would also provide additional information on the transfer of skills to different settings. For example, collecting data in a structured, highly supervised setting (e.g., classroom) and a less structured and supervised setting (e.g., recess) would provide information on the transfer of learned skills to settings other than those in which the lessons are conducted. In addition, examining the maintenance of effects across a longer time period would provide additional information on the longevity of the learned skills and the possible need for and frequency of booster sessions for students.

In conclusion, classwide social skills instruction was a feasible and effective intervention for increasing positive social behaviors and academic engagement and decreasing antisocial behaviors for students with challenging behaviors. The results of this study contributed to the research on the efficacy of classwide social skills instruction. Furthermore, the results of this study provided evidence for teachers and administrators advocating for the financial resources and instructional time to implement social skills instruction in the general education program.

Appendices

Appendix A. An Overview of Mega-and Meta-Analytic Studies Examining the Efficacy of Social Skills Interventions

Reference	Purpose	Studies Examined	Methods /Procedures	Analyses	Results
Gresham, Cook, and Crews (2004)	To analyze current knowledge base in regards to construct, internal, external, and social validity of SSI with students at risk for or with EBD	6 meta-analyses which included 336 individual studies	Comprehensive examination of all the group-based meta-analyses performed on social skills training (i.e., behavioral, cognitive, or social interventions) aimed at training social skills and/or remediating social skills deficits from 1980 to 2004 including samples of participants with or at risk for EBD.	Binomial Effect Size Display (BESD)	Construct validity-3 domains of social interaction, prosocial behavior, and social-cognitive skills adequately represented the social skill construct. Internal validity-SSI was an effective intervention for students with EBD, 64% improvement rate relative to controls. External validity- SSI was effective across a broad range of behavioral problems. Social validity-weaknesses in SSI outcome measures. Overall, SSI was an effective and essential part of a comprehensive program for students with EBD.
Mathur, Kavale, Quinn, Forness, and Rutherford (1998)	To examine the efficacy of SSI with students with EBD	64 single-subject research studies	Studies included met the following criteria: sample of students with behavioral problems, to include autism; SSI to increase prosocial responses; valid single subject research design; and direct measure of overt behavior change	Percentage of Nonoverlapping Data (PND)`	Mean PND across all studies was 62% with a SD of 33%, which represented mild treatment effect. Social interaction skills were most amenable to SSI compared to communication. Delinquent students benefited the most from SSI compared to students with autism and EBD. Elementary and secondary students benefited more from SSI than did preschoolers.

Reference	Purpose	Studies Examined	Methods /Procedures	Analyses	Results
Kavale and Mostert (2004)	To examine the efficacy of SSI with students with SLD	53 studies	Collected a representative and inclusive set of research studies investigating the efficacy of SSI for students with SLD	Effect Size (ES) and BESD	Effect Size of .211-students with SLD who received SSI were better off than 58% of students not receiving SSI; BESD- 55% improvement rate relative to controls; modest gains or an ES magnitude considered small. Self-ratings indicated that 60% of students with SLD believed SSI was beneficial. Teachers perceived least improvement.

Appendix B. An Overview of Pullout, Single Component Social Skills Interventions

Reference	Purpose	Design	IV	DV and DV Measures	Participants	Methods /Procedures	Analyses	Results
Chen and Bullock (2004)	To investigate effects on social competence and prosocial behaviors.	AB design, with pretesting/ posttesting	Social skills instruction using a story book and telecommunications	Problem behaviors and prosocial behaviors Rating scale and teacher interviews	8 males, 1 female in grades 1 through 7, in a regional EBD program	30 minute sessions, 4 days a week, for 8 weeks, for total of 32 sessions	Compared pre- and post-test scores on behavior checklist and used descriptive means for interviews	Decrease in problem behavior and increase in prosocial behaviors for 6 out of 9 students; positive change in behaviors for 7 out of 9 students
Lane, Wehby, Menzies, Doukas, Munton, and Gregg (2003)	To examine effects on behaviors exhibited in classroom and playground settings	Multiple baseline across intervention groups	Social Skills Intervention Guide (SSIG): Practical Strategies for Social Skill Training	Disruptive behaviors, academic engaged time, negative social interactions Observations	5 males, 2 females in grades 2-4, at risk for antisocial behavior and 7 not at risk peers (no data collected)	30 minute sessions, 2 days a week, over 10 weeks	Visual inspection, mean score comparisons across phases, and effect sizes	Fewer disruptive behaviors, fewer negative social interactions, and increased academic engaged time

Reference	Purpose	Design	IV	DV and DV Measures	Participants	Methods /Procedures	Analyses	Results
Miller, Lane, and Wehby (2005)	To investigate the effects on inappropriate classroom behavior and academic engaged time	Multiple-baseline across groups/ subjects	SSIG	Inappropriate classroom behavior, academic engaged time, social validity Observations; token economy system; rating scale for social validity.	5 boys, 2 girls in grades 1, 3, & 4 with high incidence disabilities and significant behavior problems in a self-contained special education setting	30-minute sessions, 3-4 days a week, over 6 weeks	Visual inspection, mean score comparisons and effect sizes	Decreased inappropriate classroom behavior and increased in academic engaged time. Students maintained or improved their behavior into the postintervention phase.

Appendix C. An Overview of Pullout, Multi-Component Social Skills Interventions

Reference	Purpose	Design	IV	DV and DV Measures	Participants	Methods /Procedures	Analyses	Results
Colton and Sheridan (1998)	To assess impact on cooperative play	Multiple probe across participants	Conjoint Behavioral Consultation (CBC) and Skillstreaming	Cooperative play behavior Behavior rating scale and observations	3 boys, ages 8 & 9, diagnosed with ADHD	CBC-4 stages; Skillstreaming -over 15 days	PND and averaged percentages compared across conditions	Increases in cooperative, positive interactions with peers. Little evidence for maintenance of changes over time.
Gresham, Van, and Cook (2006)	To examine the maintenance of effects across settings and over time	ABAB design, with follow-up phase	SSIG and differential reinforcement of other behaviors (DRO)	Disruptive behavior, alone time, negative social interactions Behavior rating scales and direct observations	2 males and 2 females, between ages of 6 and 8, at risk for E/BD	3 hours a week over 20 weeks DRO procedures used by teachers and parents throughout 20 weeks	PND, comparison of pretest and posttest means and percentiles to assess social validity	Interobserver agreement 74.17%. Substantial decrease in duration of target behaviors and other problem behaviors and increases in social skills. No appreciable effects on academic competence. Maintenance of 2 of 3 target behaviors at 2 months.

Reference	Purpose	Design	IV	DV and DV Measures	Participants	Methods /Procedures	Analyses	Results
Lane (1999)	To examine the impact on academic performance, social competences, and problem behaviors	Randomized control group, pretest/ posttest/ follow-up	Phonological awareness training and SSIG	Academic performance, social competence, problem behavior Behavior rating scales, standardized achievement tests, and records review	23 boys and 16 girls in the first grade from 2 schools, 39 with externalizing behaviors and poor reading skills and 14 randomly selected (no data collected)	30 minute sessions, 4 days a week, for 6 weeks	Hierarchical Analysis of Variance	Academic intervention group scored significantly higher on phonological awareness than social skill or control groups. Changes in social competence and problem behavior were not significant for any group. At follow-up no significant changes found for the academic and social skills groups. The control group increased significantly on the problem behavior variable.

Appendix D. An Overview of Combined Pullout and General Education Classroom-based Studies with a Single Component Social Skills Intervention

Reference	Purpose	Design	IV	DV and DV Measures	Participants	Methods /Procedures	Analyses	Results
Lo, Loe, and Cartledge (2002)	To determine the effects on antisocial behaviors in the classroom and lunchroom	Multiple baseline across subjects	Working Together: Building Children's Social Skills Through Folk Literature	Antisocial behavior Direct observations	Target participants (data collected)- 1 girl and 4 boys in grades 3 and 4, enrolled in general education, at risk for E/BD in an urban public elementary school Four students with E/BD and 5 socially competent peers were also included in the intervention groups. Data were not collected on these students.	Pullout, small group social skills instruction, conducted for 20-25 minutes per session, 3 times a week Three teachers delivered all classroom based social skills instruction for 25-30 minutes per session, 3 times a week.	Visual inspection and Mean score comparisons.	All students showed a mean decease in antisocial behavior at the end of the study over baseline. The time period between occurrences of antisocial behaviors increased and intensity and duration of each occurrence decreased.

Appendix E. Overview of Multi-Component Social Skills Intervention Studies with One or More Components Implemented in the General Education Classroom

Reference	Purpose	Design	IV	DV and DV Measures	Participants	Methods/ Procedures	Analyses	Results
Conduct Problems Prevention Research Group (1999)	To investigate the effects on child risk factors and on family risk factors	Randomized control group pretest/ posttest	Fast Track Program: PATHS curriculum, parent groups, child social skills training groups, parent-child sharing time, home visits, child-peer pairing, and academic tutoring.	Emotional recognition, social problem solving, word-attack skills, friendships at school, disruptive behavior, parental warmth, parental support, and type of parental punishment Ratings, interviews, peer nominations, and school and home observations	891 behaviorally disruptive end-of year kindergarten students and their parents from 4 areas of the country	Fast Track was implemented during the first grade in home and school settings involving both parents and children.	A two-level model using ASA PROC MIXED, Effects were tested using Type 1 (hierarchical) sums of squares. Three variations of the model to test each two-way intervention interaction, controlling for all other two-way interactions were conducted. An estimate of the size of the treatment effect was computed.	Significant improvement in emotional recognition, emotional coping, social problem solving, decreased aggressive retaliation, more positive peer interactions, and higher peer social preference scores. Parents participating in the Fast Track program had less use of physical punishment, greater parental involvement in school, more parental warmth, more appropriate and consistent discipline, and more satisfaction with and ease of parenting.

Reference	Purpose	Design	IV	DV and DV Measures	Participants	Methods/ Procedures	Analyses	Results
McConaughy, Kay, and Fitzgerald (1999)	To examine the problem behaviors of young children	Randomized control group, pretest/ posttest/ follow-up	Achieving, Behaving, Caring project: Parent-Teacher Action Research Teams (PTAR) and SSI	Internalizing and externalizing behaviors, prosocial behaviors, and parental empowerment Behavior rating scales, Direct Observations	82 children at risk for ED; Cohort 1-28 boys and 8 girls attending 8 different schools with 14 first grade and 16 second grade teachers; Cohort 2-28 boys and 18 girls enrolled in 12 different schools with 20 first grade and 29 second grade teachers	PTAR team meetings ranged from once a week to every 6 weeks, with most occurring for 1 hour a month. All students received whole-class SSI for a minimum of 15-20 minutes, 2 times a week from October through May using the same curriculum for both first and second grades.	Fixed effects 2 X 2 MANOVAs, followed by ANOVAs and least square means pairwise tests, employing general linear models procedures.	PTAR group showed significantly greater reductions than the control group on teacher-reported internalizing problems and delinquent behavior; parent-reported total problems, externalizing, and delinquent behavior; and observed internalizing problems in the classroom. PTAR group parents reported significantly greater increases in their children's cooperation, self-control, and total competence, as well as in their own feelings of empowerment.

Reference	Purpose	Design	IV	DV & DV Measures	Participants	Methods/ Procedures	Analyses	Results
Walker, Kavanagh, Stiller, Golly, Severson, and Feil (1998)	To evaluate the effects on antisocial behaviors	Randomized experimental wait-list control-group design, pretest/ posttest/ follow-up/ follow-up	First Step to Success (FSS): Universal screening, school social skills intervention, and parent training and involvement	Antisocial behaviors Behavior rating scales, observations	Cohort 1 consisted of 24 students and Cohort 2 had 22 students. Participants attended school in the Eugene School District.	Cohort 1 exposed to FSS and followed up into Grade 2. Cohort 2 exposed to FSS the next school year and followed up into Grade 1.	Analyses of covariance for each of the five dependent measures, where preintervention measures were used as a covariate, were computed. Effect sizes were also calculated.	Results indicated statistically significant measurable intervention effects for both cohorts and maintenance of gains into the primary grades. Effect sizes averaged .86, which was considered a large effect.

Appendix F. An Overview of General Education Classroom-Based, Single Component Social Skills Interventions

Reference	Purpose	Design	IV	DV and DV Measures	Participants	Methods/ Procedures	Analyses	Results
Choi and Heckenlaible-Gotto (1998)	To examine issues of transfer and generalization using the general education teacher and school psychologist as co-facilitators in a general education classroom	Control group pretest/ posttest	Skill-streaming	Peer ratings on likes to Work With and likes to Play With Peer rating sociometric	12 girls and 13 boys in grade 1 from 2 different schools	Skillstreaming co-facilitated in the general education classroom by the classroom teacher and a school psychologist for 30 minutes, 2 times a week, for 4 weeks.	One-way analysis of covariance; Paired *t* tests- within-group comparisons to examine differences between the pre- and post-test measures; and percentages of individual scores that increased, decreased, or remained the same after the intervention-	No significant group differences on the rating scale. Stability of scores over time indicated that half the students in the intervention group exhibited increases in their Work With scores compared to the control group in which the majority of the scores remained unchanged.

Reference	Purpose	Design	IV	DV and DV Measures	Participants	Methods/ Procedures	Analyses	Results
Grossman et al. (1997)	To determine effects on aggressive behavior and prosocial behavior	Randomized control group, pretest/ posttest/ follow-up	Second Step curriculum	Aggressive and prosocial behaviors Behavior rating scales, observations on a subsample of students	790 students in 2nd and 3rd grades in 6 matched pairs of schools in 4 school districts	Thirty, Second Step lessons, each about 35 minutes in length, were conducted 1or 2 times a week over 16 to 20 weeks in general education classrooms	Generalized estimating equation regression method was used to adjust for individual level covariates under cluster randomization	No significant differences between intervention and control schools as measured by parent or teacher behavior scales. Decrease in physical aggression and increase in prosocial behavior in intervention group based on observational data. Most effects persisted 6 months later.

Reference	Purpose	Design	IV	DV & DV Measures	Participants	Methods/ Procedures	Analyses	Results
Hennessey (2007)	To evaluate the efficacy of the Open Circle Program (OCP) to address the void of quantitative research on the OCP	Control group, pretest/ posttest	OCP	Social skills, problem behaviors, academic competence Behavior rating scales	86 boys and 68 girls from 8 fourth grade classrooms from 4 schools	Open Circle Program was conducted 2-3 times a week throughout the school year in general education classrooms. Children in control general education classrooms had no exposure to Open Circle or any other systematic social skills curriculum .	Multivariate procedure; doubly repeated measures mixed-design MANOVA to test for differences between groups/subgroups of students at Time 1 and Time 2; and examination of cell means coupled with a series of paired (dependent) *t* tests and mixed factorial design incorporating a repeated (within subjects) factor	Teachers reported only modest evidence that the OCP group was more socially skilled and less likely to exhibit problem behaviors. No appreciable differences for academic competence by program participation were found.

Reference	Purpose	Design	IV	DV & DV Measures	Participants	Methods/ Procedures	Analyses	Results
Taub (2002)	To investigate the impact on the social behavior of students in a rural elementary school	Randomized control group, pretest/ posttest/ follow-up	Second Step curriculum	Social competence, antisocial behavior, engages appropriately with peers, follows directions from adults, bothers or annoys other students, fights or argues with peers and follows classroom rules Behavior rating scales, observations	87 students in grades 3-5 from 2 schools	Second Step was conducted by the classroom teacher for 30 minutes a session, twice a week, from January to May in the general education classroom	Repeated measures 2X3 ANOVAs to determine if there was significant change in social competence and antisocial behavior by school, 2X3 repeated measures ANOVAs computed on four targeted behaviors observed at each school	The intervention group was rated much less socially competent than the control group prior to intervention. Posttest data- intervention group engaged less appropriately with peers and followed adult direction more than the control group. At the end of 1 year teachers noted improvement in social competence , following adult directions, and decreases in antisocial behavior for the intervention group; and an increase in antisocial behavior , decreases in following adult directions, and engaging appropriately with peers for the control group.

Appendix G. General Education Teacher Consent Form

Page 1 of 3
Initials____ Date_____

CONSENT FORM (General Education Teachers)

Project Title	The Effects of Social Skills Instruction on the Social Behaviors and Academic Engagement of Elementary Students with Challenging Behaviors
Why is this research being done?	This is a research project being conducted by Sharon Kieta, doctoral student, under the supervision of Dr. Frances Kohl at the University of Maryland, College Park, MD. We are inviting you to participate in this research project because you are a certified elementary school teacher working with students with challenging behaviors in your general education classroom. The purpose of this research project is to investigate the effects of class wide social skills instruction on the positive social behaviors, antisocial behaviors, and academic engagement of elementary students with challenging behavior. This research is unique in that social skills instruction is conducted by a general educator and provided to all students in a classroom to facilitate transfer and maintenance of improved behaviors.
What will I be asked to do?	The procedures for general education teachers include the following: (a) completion of the Social Skills Improvement System (SSIS) Performance Screening Guide as part of the student selection process; (b) completion of the SSIS Rating Scale on the target student to identify social skills deficits; (c) 2 hour training session on the use of the SSIS Classwide Intervention Program; (d) implementation of the SSIS Classwide Intervention Program with the entire class during social studies or health instruction three times a week for 30 minutes a session over three weeks for a total of 4.5 hour of instruction; (e) Ms. Kieta will observe your implementation of the SSIS Classwide Intervention Program one time/week for the 30 minute session; (f) a 30 minute booster session will be conducted if implementation of the program isn't consistent with the training; (g) Ms. Kieta will observe the target student in your class twice a week for 45 minutes during language arts instruction; (h) a second trained observer will observe the target student in your class with Ms. Kieta for every third observation conducted; (i) you will be asked to complete a short questionnaire taking you 10-15 minutes to complete toward the end of the study.

Initials _____ Date _____

Project Title	The Effects of Social Skills Instruction on the Social Behaviors and Academic Engagement of Elementary Students with Challenging Behaviors
What about confidentiality?	We will do our best to keep your personal information confidential. To help protect your confidentiality your name will not be included on the program implementation checklist, questionnaire, or other collected data. A code will be placed on the program implementation checklist, questionnaire, and other collected data. Through the use of an identification key, only Ms. Kieta will be able to link your program implementation checklist, questionnaire, and other collected data to your identity. Only Ms. Kieta will have access to the identification key. All data will be secured in locked filing cabinets in the Ms. Kieta's home office. Computer files will be stored on a password-protected computer in the Ms. Kieta's home office. If we write a report or article about this research project, your identity will be protected to the maximum extent possible.
What are the risks of this research?	There are no known risks associated with participating in this research project.
What are the benefits of this research?	The benefits to you include an expanded skill set to provide social skills instruction to students in your class. Also the results of this study may help the researcher learn more about the effects of class wide social skills instruction on the behavior of students with challenging behaviors. We hope that, in the future, other people might benefit from this study through improved understanding of the impact of class wide social skills instruction.

Initials _____ Date _____

Project Title	The Effects of Social Skills Instruction on the Social Behaviors and Academic Engagement of Elementary Students with Challenging Behaviors	
Do I have to be in this research? May I stop participating at any time?	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify	
What if I have questions?	This research is being conducted by Sharon Kieta under the supervision of Dr. Frances Kohl, in the Special Education Department at the University of Maryland, College Park. If you have any questions about the research study itself, please contact **Dr. Frances Kohl at: Department of Special Education 1308 Benjamin Building College Park, MD 20742, (telephone) 301-405-6490, (email) flkohl@umd.edu**. If you have questions about your rights as a research subject or wish to report a research-related injury, please contact: **Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (e-mail) irb@umd.edu; (telephone) 301-405-0678** This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.	
Statement of Age of Subject and Consent	Your signature indicates that: you are at least 18 years of age; the research has been explained to you; your questions have been fully answered; and you freely and voluntarily choose to participate in this research project.	
Signature and Date	**NAME OF SUBJECT**	
	SIGNATURE OF SUBJECT	
	DATE	

Appendix H. Specialist Teacher Consent Form

Page 1 of 4
Initials_____ Date_____

CONSENT FORM (Specialist Teachers)

Project Title	The Effects of Social Skills Instruction on the Social Behaviors and Academic Engagement of Elementary Students with Challenging Behaviors
Why is this research being done?	This is a research project being conducted by Sharon Kieta, doctoral student, under the supervision of Dr. Frances Kohl at the University of Maryland, College Park. We are inviting you to participate in this research project because you are a certified elementary school teacher working with students with challenging behaviors in your classroom. The purpose of this research project is to investigate the effects of class wide social skills instruction on the positive social behaviors, antisocial behaviors, and academic engagement of elementary students with challenging behavior. This research is unique in that social skills instruction is conducted by a general educator and provided to all students in a classroom to facilitate transfer and maintenance of improved behaviors.
What will I be asked to do?	The procedures for specialist teachers include one to three, 30 minute audiotaped interviews. Ms. Kieta will conduct the interviews. Interview questions will focus on your perceptions of the behavioral outcomes of one to three of the target students and the overall behavior of the classes. The interviews will be conducted two weeks after the conclusion of social skills instruction. The ending date of social skills instruction is staggered so interviews will be conducted in a staggered manner. Your responses will be audiotaped.

Initials _____ Date _____

Project Title	The Effects of Social Skills Instruction on the Social Behaviors and Academic Engagement of Elementary Students with Challenging Behaviors
What about confidentiality?	We will do our best to keep your personal information confidential. This research project involves making audiotapes of you. Your interview with the investigator will be audiotaped so that your responses are most accurately reflected. To help protect your confidentiality your name will not be included on the audiotape and interview form. A code will be placed on the audiotape and interview form. Through the use of an identification key, Ms. Kieta will be able to link your audiotape and interview form to your identity. Only Ms. Kieta will have access to the identification key. All audiotapes and interview forms will be secured in locked filing cabinets in Ms. Kieta's home office. Computer files will be stored on a password-protected computer in the researcher's home office. If we write a report or article about this research project, your identity will be protected to the maximum extent possible.
What are the risks of this research?	There are no known risks associated with participating in this research project.
What are the benefits of this research?	This research is not designed to help you personally, but the results may help the investigator learn more about the effects of class wide social skills instruction on the behavior of students with challenging behaviors. We hope that, in the future, other people might benefit from this study through improved understanding of the impact of class wide social skills instruction.

Initials _____ Date _____

Project Title	The Effects of Social Skills Instruction on the Social Behaviors and Academic Engagement of Elementary Students with Challenging Behaviors
Do I have to be in this research? May I stop participating at any time?	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify
What if I have questions?	This research is being conducted by Sharon Kieta under the supervision of Dr. Frances Kohl, in the Special Education Department at the University of Maryland, College Park. If you have any questions about the research study itself, please contact **Dr. Frances Kohl at: Department of Special Education 1308 Benjamin Building College Park, MD 20742, (telephone) 301-405-6490, (email) flkohl@umd.edu**. If you have questions about your rights as a research subject or wish to report a research-related injury, please contact: **Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (e-mail) irb@umd.edu; (telephone) 301-405-0678** This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.
Statement of Age of Subject and Consent	Your signature indicates that: you are at least 18 years of age; the research has been explained to you; your questions have been fully answered; and you freely and voluntarily choose to participate in this research project.
Consent for Audiotaping	_____I agree to be audiotaped during my participation in this study. _____I do not agree to be audiotaped during my participation in this study.

Initials_____Date_____

Project Title	The Effects of Social Skills Instruction on the Social Behaviors and Academic Engagement of Elementary Students with Challenging Behaviors	
Signature and Date	**NAME OF SUBJECT**	
	SIGNATURE OF SUBJECT	
	DATE	

Appendix I. Parent Permission Form

Page 1 of 3
Initials _____ Date_____

Parent Permission Form-Child in Special Education

Project Title	The Effects of Social Skills Instruction on the Social Behaviors and Academic Engagement of Elementary Students with Challenging Behaviors
Purpose	This is a research project being conducted by Sharon Kieta, doctoral student, under the supervision of Dr. Frances Kohl at the University of Maryland, College Park. We are inviting your child to participate in this research because he/she has an Individual Education Plan (IEP) that addresses social and/or behavioral goals and objectives. The purpose of this research is to examine the effects of class wide social skills instruction on the positive social behaviors, antisocial behaviors, and academic engagement of elementary students with challenging behavior. Social skills instruction is designed to teach students appropriate social behaviors to increase positive social behaviors and academic engagement and reduce antisocial behaviors.
Procedures	In this study, your child will be selected to participate based on a review of his/her educational records, to include the Individual Education Plan (IEP) and a social skills screening completed by your child's general education teacher. Prior to your child's participation in the study your child's teacher will also complete a social skills rating scale to identify your child's social skills needs, which will be targeted during social skills instruction. Your child and his/her classmates will receive class wide social skills instruction from his/her general education teacher three times a week for 30 minutes each session over three consecutive weeks. We will observe and record your child's behaviors twice a week during the three weeks of social skills instruction. Your child will also be observed two weeks after the social skills instruction concludes and observations will continue to be conducted once every two weeks until the school year ends. Your child will be interviewed two weeks after social skills instruction concludes. The interview will focus on your child's perceptions of the social skills program, your child's progress, and the progress of your child's peers. Your child's responses to the interview questions will be audiotaped to ensure accurate analysis of responses to the questions.

Initials_____ Date_____

Project Title	The Effects of Social Skills Instruction on the Social Behaviors and Academic Engagement of Elementary Students with Challenging Behaviors
Confidentiality	We will do our best to keep the personal information about your child confidential. To help protect your child's confidentiality we will put a code number on all observation forms, graphs, auidotapes, and interview forms. Only Ms. Kieta will have your child's name that is linked to the code number. That information is stored in a locked filing cabinet. If we write a report or article about this research project, your child's identity will be protected to the maximum extent possible.
Risks	There are no known risks for your child's participation in this study.
Benefits	This study is designed to help your child increase positive social behaviors and academic engagement and decrease antisocial behaviors. This study will help educators decide how to best provide social skills instruction so that a child's behavior improves, transfers to different settings, and is maintained over time. We will be happy to share your child's progress with you.
Do I have to be in this research? May I stop participating at any time?	Your child's participation in this study is completely voluntary. You may choose not to have your child take part at all. If you decide to have your child participate in this research, you may stop your child's participation at any time.
What if I have questions?	This research is being conducted by Sharon Kieta under the supervision of Dr. Frances Kohl in the Department of Special Education at the University of Maryland, College Park. If you have any questions about the research study itself, please contact Dr. Frances Kohl, 1308 Benjamin, University of Maryland, College Park, MD 20742, (telephone) 301 405-6490, (email) flkohl@umd.edu If you have questions about your rights as a parent/guardian of a research subject, please contact: Institutional Review Board Office, University of Maryland, College Park, MD 20742; email: irb@deans.umd.edu; telephone: 301-405-0678. This research has been reviewed according to the University of Maryland College Park IRB procedures for research involving human subjects.

Inititals_____ Date_____

Project Title	The Effects of Social Skills Instruction on the Social Behaviors and Academic Engagement of Elementary Students with Challenging Behaviors
Statement of Age of Subject and Consent	Your signature indicates that: (1) you are at least 18 years of age; (2) the research has been explained to you; (3) your questions have been fully answered; and (4) you choose to allow your child to participate in this research project.
Consent for Audiotaping	___ I agree to allow my child to be audiotaped during his/her participation in this study. ___ I do not agree to allow my child to be audiotaped during his/her participation in this study.
Signature and date	Child's Name _____ Your Name _____ Signature _____ Date _____

Appendix J. Student Assent Form

Assent Form-Child in Special Education (to be read to child)

Project Title	The Effects of Social Skills Instruction on the Social Behaviors and Academic Engagement of Elementary Students with Challenging Behaviors
Purpose	My name is Ms. Kieta. I'm at student at the University of Maryland, College Park working with Dr. Frances Kohl. We are working on a project that looks at the effects of teaching social skills. We'd like you to participate in our project
Procedures	In this study, you will be interviewed two weeks after your teacher finishes up with the social skills lessons. We will use an interview form with questions and audiotape your answers to our questions. The interview should take about 15 to 20 minutes.
Confidentiality	We will do our best to keep your information confidential.
Do I have to be in this research? May I stop participating at any time?	You can agree to participate in our project or not and if you don't want to participate that is okay. If you want to quit once we start the interview you just let us know and that will be okay.
What if I have questions?	If you have any questions now or during the interview just ask and we will answer your questions. Do you have any questions?
Statement of Age of Subject and Consent	Your signature indicates that: (1) the research has been explained to you; (2) your questions have been fully answered; and (3) you choose to participate in this research project.
Assent to participate in the study and have my responses audiotaped	___ I agree to participate in an interview and have my responses audiotaped. ___ I do not agree to participate in an interview and have my responses audiotaped. Date_____

Appendix K. Observational Data Collection Form

Data Collection Form

Observer:_____ Date/Session:_____/_____ Student:_____

Time:_____ √ **=Behavior observed**

Minute Intervals	Social Skills	Antisocial Behaviors	Academic Engagement
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3			
4			
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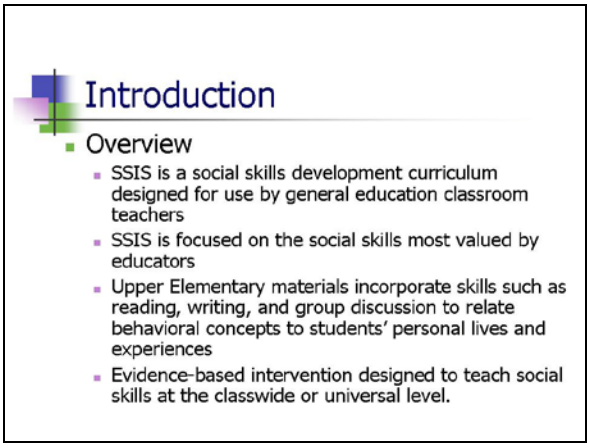
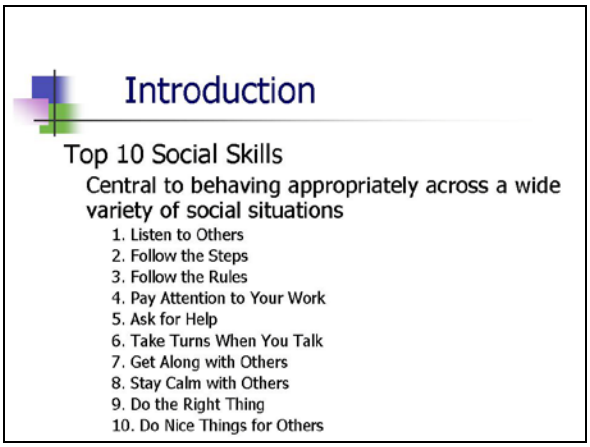
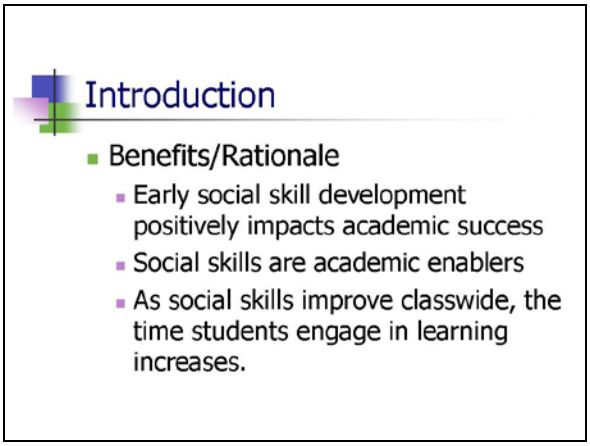
Appendix L. Linking the *SSIS Rating Scale* to the *SSIS Classwide Intervention Program*

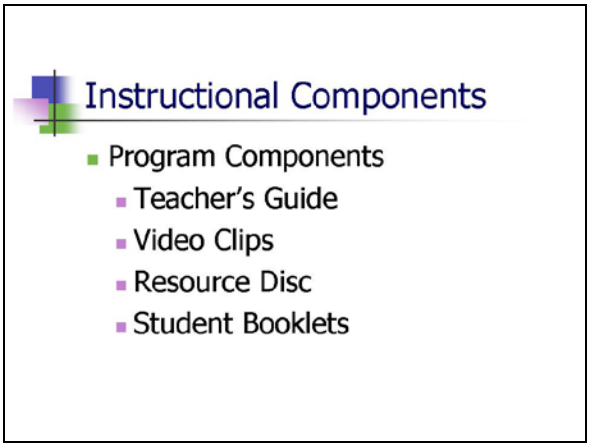
	Positive Social Behaviors Assessed on the *SSIS Rating Scale*				
	Cooperation and Communication and Engagement	Self-Control	Assertion	Responsibility	Empathy
Units from the *SSIS Classwide Intervention Program*	Unit 1: Listening to Others Unit 2: Following the Steps Unit 3: Following the Rules Unit 6: Taking Turns When Talking Unit 7: Getting Along with Others	Unit 4: Paying Attention to Your Work Unit 8: Staying Calm with Others	Unit 5: Asking for Help	Unit 9: Doing the Right Thing	Unit 10: Doing Nice Things for Others

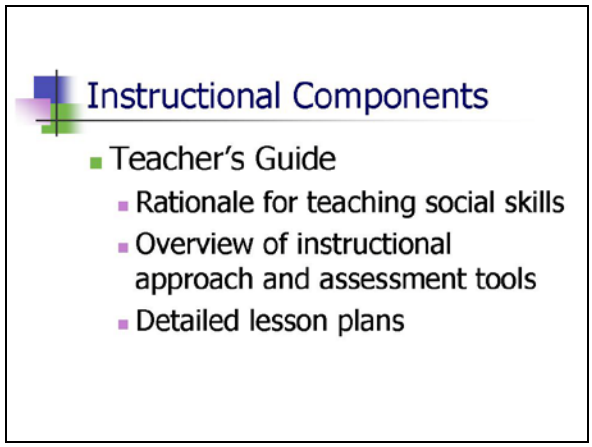
Appendix M. SSIS Classwide Intervention Program Training Protocol: PowerPoint Presentation

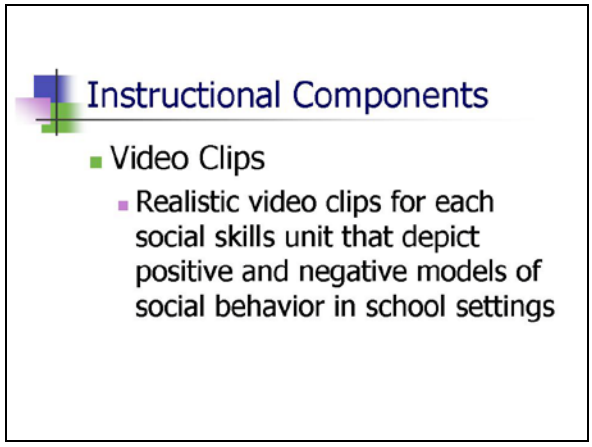


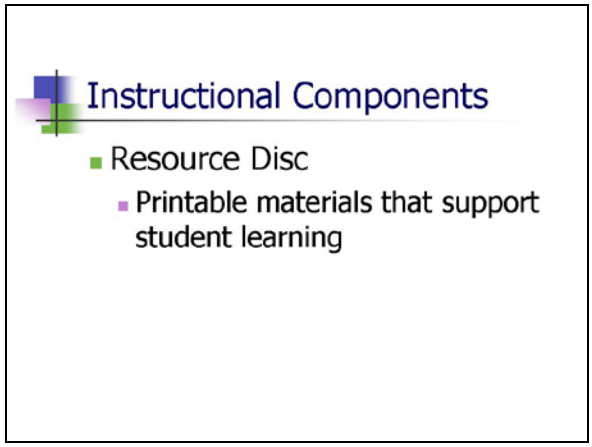

Introduction
Top 10 Social Skills
Central to behaving appropriately across a wide variety of social situations
1. Listen to Others
2. Follow the Steps
3. Follow the Rules
4. Pay Attention to Your Work
5. Ask for Help
6. Take Turns When You Talk
7. Get Along with Others
8. Stay Calm with Others
9. Do the Right Thing
10. Do Nice Things for Others

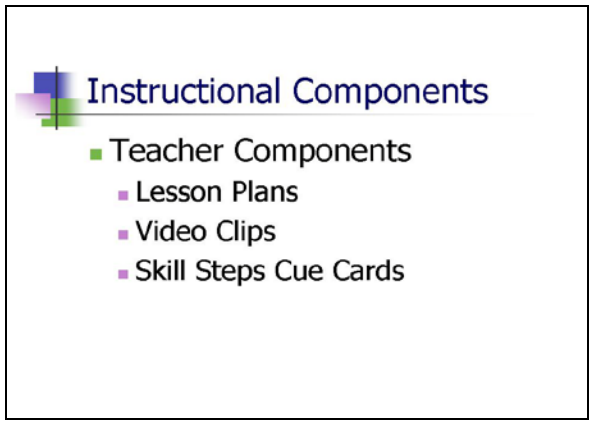

Introduction
Benefits/Rationale
Early social skill development positively impacts academic success
Social skills are academic enablers
As social skills improve classwide, the time students engage in learning increases.

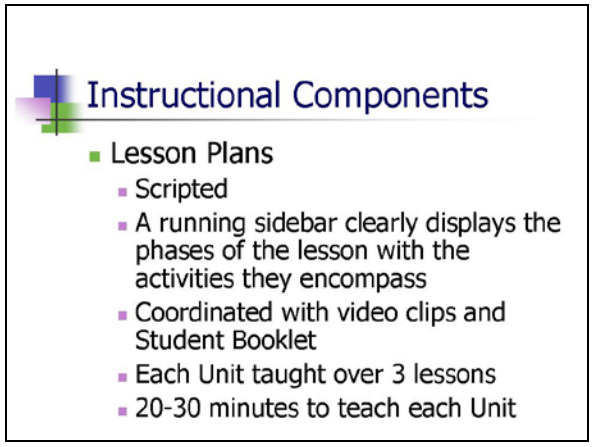

Instructional Components
Program Components
Teacher's Guide
Video Clips
Resource Disc
Student Booklets

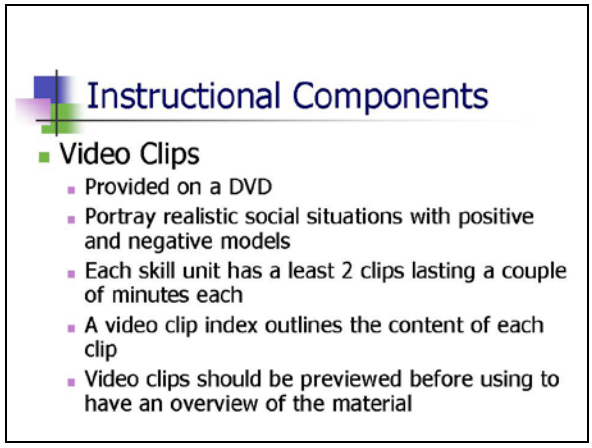

Instructional Components
Teacher's Guide
Rationale for teaching social skills
Overview of instructional approach and assessment tools
Detailed lesson plans

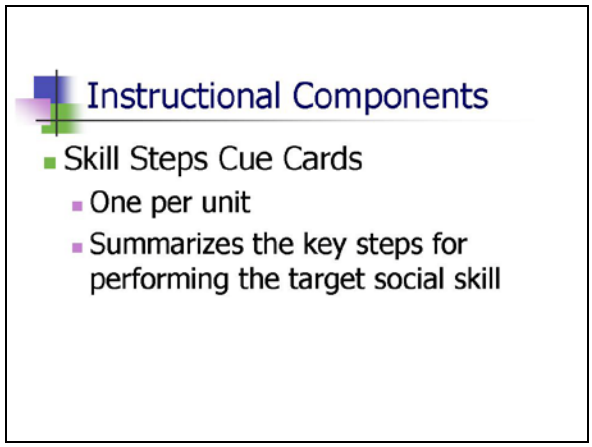

Instructional Components
Video Clips
Realistic video clips for each social skills unit that depict positive and negative models of social behavior in school settings

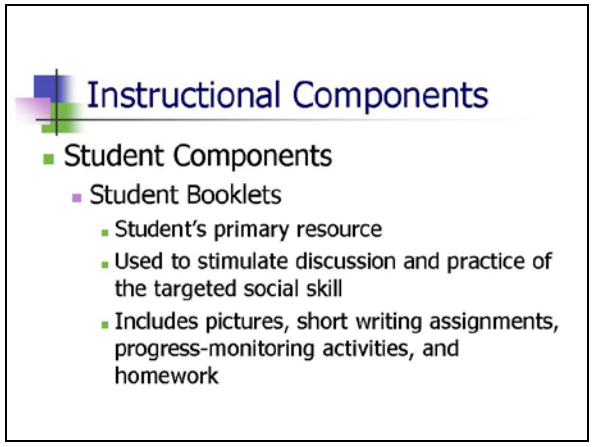

Instructional Components
Resource Disc
Printable materials that support student learning

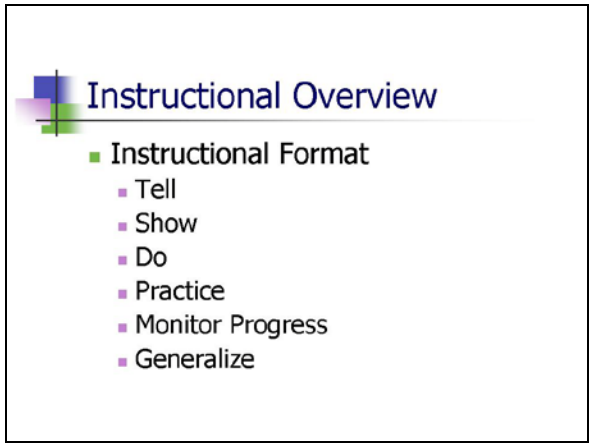

Instructional Components
Teacher Components
Lesson Plans
Video Clips
Skill Steps Cue Cards

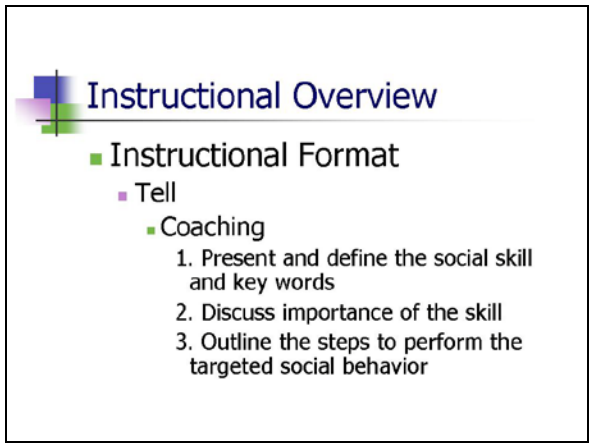

Instructional Components
Lesson Plans
Scripted
A running sidebar clearly displays the phases of the lesson with the activities they encompass
Coordinated with video clips and Student Booklet
Each Unit taught over 3 lessons
20-30 minutes to teach each Unit

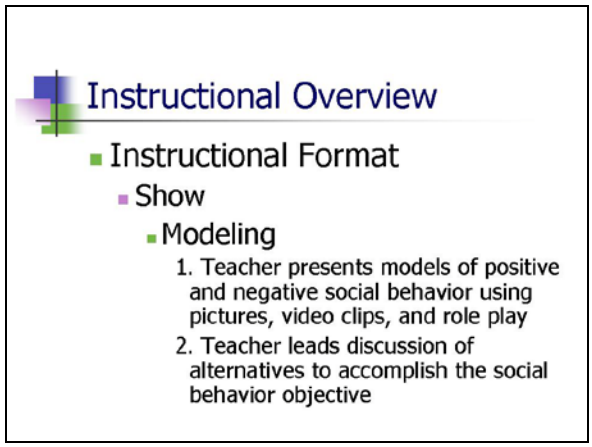

Instructional Components
Video Clips
Provided on a DVD
Portray realistic social situations with positive and negative models
Each skill unit has a least 2 clips lasting a couple of minutes each
A video clip index outlines the content of each clip
Video clips should be previewed before using to have an overview of the material

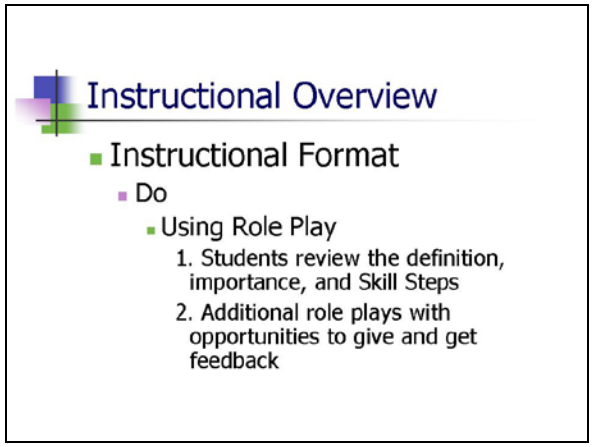

Instructional Components
Skill Steps Cue Cards
One per unit
Summarizes the key steps for performing the target social skill

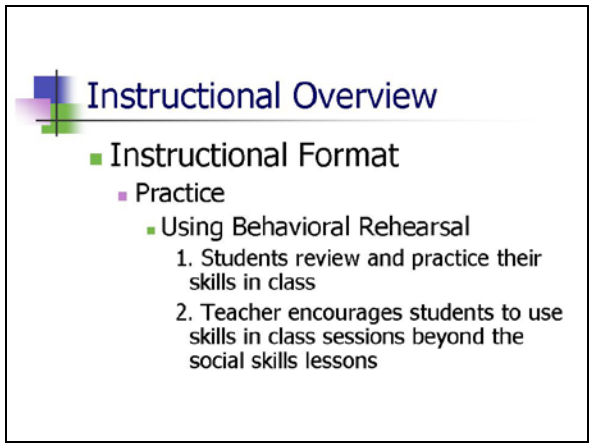

Instructional Components
Student Components
Student Booklets
Student's primary resource
Used to stimulate discussion and practice of the targeted social skill
Includes pictures, short writing assignments, progress-monitoring activities, and homework

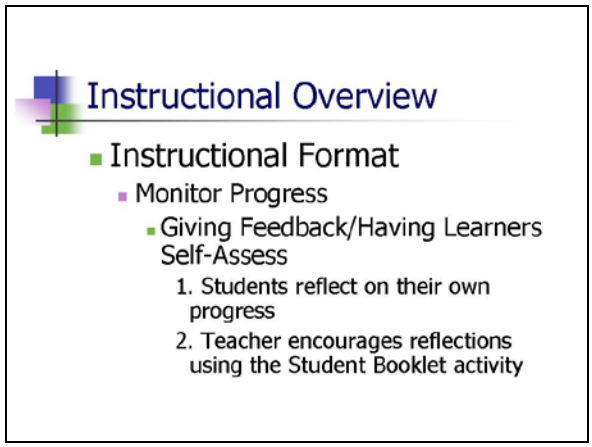

Instructional Overview
Instructional Format
Tell
Show
Do
Practice
Monitor Progress
Generalize

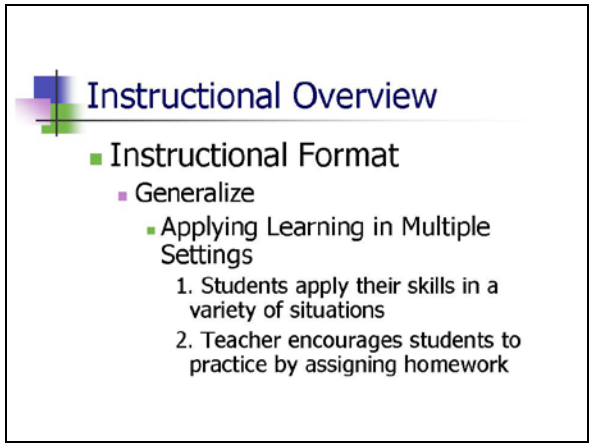

Instructional Overview
Instructional Format
Tell
Coaching
1. Present and define the social skill and key words
2. Discuss importance of the skill
3. Outline the steps to perform the targeted social behavior

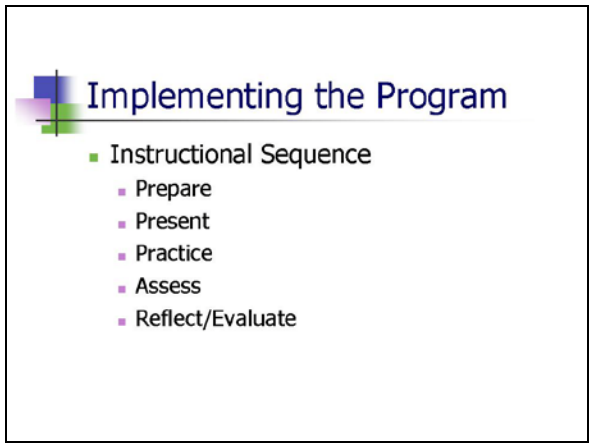

Instructional Overview
Instructional Format
Show
Modeling
1. Teacher presents models of positive and negative social behavior using pictures, video clips, and role play
2. Teacher leads discussion of alternatives to accomplish the social behavior objective

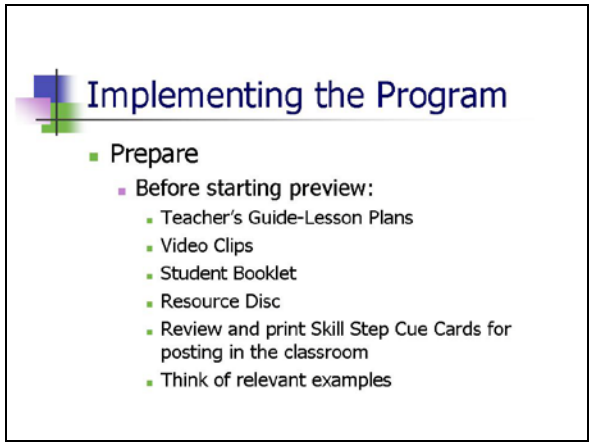

Instructional Overview
Instructional Format
Do
Using Role Play
1. Students review the definition, importance, and Skill Steps
2. Additional role plays with opportunities to give and get feedback

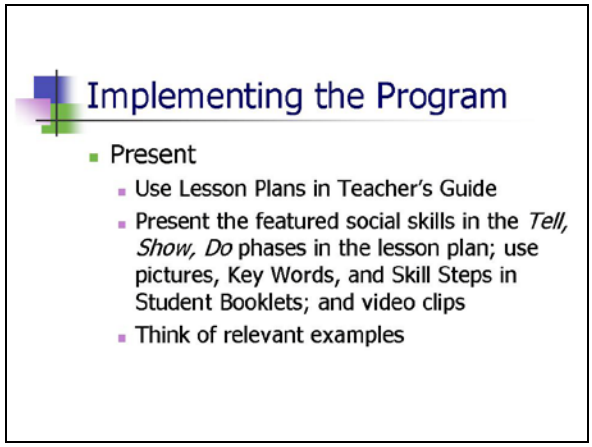

Instructional Overview
Instructional Format
Practice
Using Behavioral Rehearsal
1. Students review and practice their skills in class
2. Teacher encourages students to use skills in class sessions beyond the social skills lessons

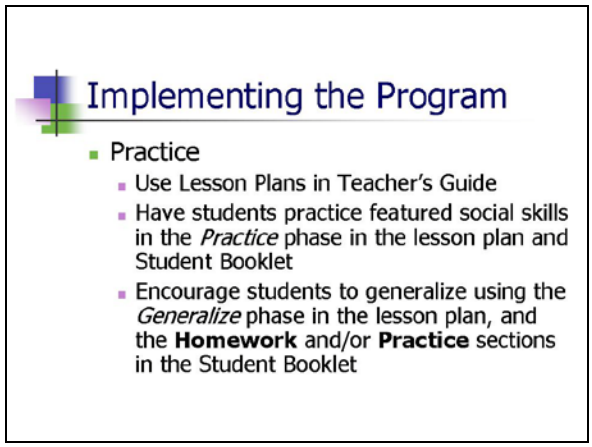

Instructional Overview
Instructional Format
Monitor Progress
Giving Feedback/Having Learners Self-Assess
1. Students reflect on their own progress
2. Teacher encourages reflections using the Student Booklet activity

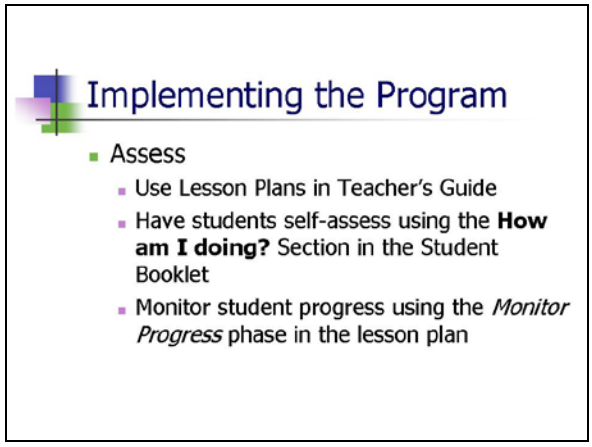

Instructional Overview
Instructional Format
Generalize
Applying Learning in Multiple Settings
1. Students apply their skills in a variety of situations
2. Teacher encourages students to practice by assigning homework

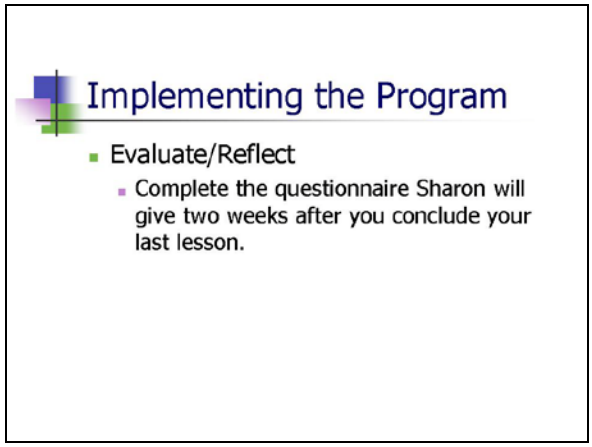

Implementing the Program
Instructional Sequence
Prepare
Present
Practice
Assess
Reflect/Evaluate


Implementing the Program
Prepare
Before starting preview:
Teacher's Guide-Lesson Plans
Video Clips
Student Booklet
Resource Disc
Review and print Skill Step Cue Cards for posting in the classroom
Think of relevant examples


Implementing the Program
Present
Use Lesson Plans in Teacher's Guide
Present the featured social skills in the Tell, Show, Do phases in the lesson plan; use pictures, Key Words, and Skill Steps in Student Booklets; and video clips
Think of relevant examples


Implementing the Program
Practice
Use Lesson Plans in Teacher's Guide
Have students practice featured social skills in the *Practice* phase in the lesson plan and Student Booklet
Encourage students to generalize using the *Generalize* phase in the lesson plan, and the **Homework** and/or **Practice** sections in the Student Booklet


Implementing the Program
Assess
Use Lesson Plans in Teacher's Guide
Have students self-assess using the **How am I doing?** Section in the Student Booklet
Monitor student progress using the *Monitor Progress* phase in the lesson plan


Implementing the Program
Evaluate/Reflect
Complete the questionnaire Sharon will give two weeks after you conclude your last lesson.

Tips

- Preview materials to brainstorm relevant experiences
- Understand each instructional phase
- Follow the instructional phases and make accommodations
- Monitor progress and provide supportive feedback
- Plan for success, but expect some students to need more practice
- Help make connections beyond the classroom

Information Particular to Your Target Student

- 3 Social Skills Units
- Schedule of Observations

3 Social Skills

- To provide instruction on 3 of the 10 social skills
  - Units ___, ___, and ___
  - The 3 social skills units presented to your class are tailored to the acquisition deficits of the target student in your class.

Schedule of Observation

- Observations of target student
  - Minimum of 45 minutes in a content area (i.e., language arts, math, science, social studies)
- Observations of your lessons
- If asked why I'm in class please tell your class I'm watching how the class works, the lesson, etc.

Schedule of Observation

- Observations of target student
  - Minimum of 45 minutes in a content area (i.e., language arts, math, science, social studies)
- Observations during 3 out of the 9 lessons to ensure program implementation is consistent with training.
- If asked why I'm in class please tell your class I'm watching how the class works, the lesson, etc.

Practice of Lesson Plan

Hands on practice and review of resource materials

Appendix N. Interobserver Reliability Form

Interobserver Reliability

Student:_____ Teacher:_____ Date/Session:_____/_____

POSITIVE SOCIAL BEHAVIORS

Minute Intervals	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Ob #1																		
Ob #2																		
Agree																		
Disagree																		
Minute Intervals	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Ob #1																		
Ob #2																		
Agree																		
Disagree																		
Minute Intervals	37	38	39	40	41	42	43	44	45									
Ob #1																		
Ob #2																		
Agree																		
Disagree																		

# of Agreements / # of Agreements & Disagreements X 100 = _____% of Agreement for Positive Positive Social Behaviors

ANTISOCIAL BEHAVIORS

Minute Intervals	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Ob #1																		
Ob #2																		
Agree																		
Disagree																		
Minute Intervals	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Ob #1																		
Ob #2																		
Agree																		
Disagree																		
Minute Intervals	37	38	39	40	41	42	43	44	45									
Ob #1																		
Ob #2																		
Agree																		
Disagree																		

# of Agreements_____ X 100 = _____% of Agreement for Antisocial Behaviors
# of Agreements & Disagreements

ACADEMIC ENGAGEMENT

Minute Intervals	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Ob #1																		
Ob #2																		
Agree																		
Disagree																		
Minute Intervals	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Ob #1																		
Ob #2																		
Agree																		
Disagree																		
Minute Intervals	37	38	39	40	41	42	43	44	45									
Ob #1																		
Ob #2																		
Agree																		
Disagree																		

# of Agreements / # of Agreements & Disagreements X 100 = _____% of Agreement for Academic Engagement

Appendix O. Procedural Reliability Form for Teacher Training

Procedural Reliability

SSIS Classwide Intervention Program Teacher Training

Observer:_____ **Date/Session:_____/_____**

Setting:_____ **Trainer:_____**

PROCEDURES	YES	NO
1. Trainer welcomes teacher.		
2. Trainer provides a written agenda		
3. Trainer provides a copy of the PowerPoint presentation		
4. Trainer provides rationale and overview of the SSIS program		
5. Trainer reviews SSIS program materials		
6. Trainer demonstrates lesson plan from one of the units to be implemented by teacher in the classroom		
7. Trainer allows for teacher to practice using a lesson plan from one of the units to be implemented in his/her classroom		
8. Trainer provides behavior specific feedback to teacher		
9. Trainer addresses teacher concerns and/or questions		
TOTAL		

# of Yeses X 100= _____% of Procedural Reliability
9 Procedures

Appendix P. Procedural Reliability Form for *SSIS Classroom Intervention Program* Implementation

Procedural Reliability

SSIS Program Implementation in the Classroom by the Teacher

Observer:_____ Date/Session:_____/_____ Teacher:_____

Instructional Phase	Procedures	YES	NO
TELL	1. Teacher introduced/reviewed the skill		
	2. Teacher asked questions about the skill		
	3. Teacher defined/reviewed the skill		
	4. Teacher discussed Key Words		
	5. Teacher discussed why the skill was important		
	6. Teacher identified the Skill Steps and had the students repeat them		
	7. Teacher summarized the skill steps		
SHOW	8. The skill was modeled by the teacher, student(s), an illustration, or on a video clip		
	9. Students role played the skill		
DO	10. Teacher reviewed with students by posing questions		
	11. Teacher asked students to repeat the skill steps		
MONITOR PROGRESS (FOR 1ST AND 3RD LESSONS OF A UNIT ONLY)	12. Teacher asked students to assess how well they implement the skill by rating themselves on the progress monitoring form		
PRACTICE	13. Students were assigned an activity in their Student Booklet or a hands-on activity to practice the skill.		
GENERALIZE	14. Teacher asked students about other places or situation they may implement the skill.		
	15. Teacher assigned a homework activity		
	TOTAL		

# of Yeses X 100 = % of Procedural Reliability for 1st and 3rd lessons of each social skills unit
15 Procedures

# of Yeses X 100 = % of Procedural Reliability for the second lesson of each social skills unit
14 Procedures

Appendix Q. Modified Intervention Rating Profile (IRP-15)

Modified Intervention Rating Profile –15 (IRP-15)

The purpose of this questionnaire is to obtain information about the *SSIS Classwide Intervention Program*. This intervention program was used by teachers of children with behavior problems. Please circle the number that best describes your agreement or disagreement with each statement using the scale below.

1=strongly disagree	2=disagree	3=slightly disagree	4=slightly agree	5=agree	6=strongly agree

1. The *SSIS Classwide Intervention Program* was an acceptable intervention for _____'s challenging behavior.	1 2 3 4 5 6
2. Most teachers would find this intervention program appropriate for challenging behaviors.	1 2 3 4 5 6
3. This intervention program proved effective in changing _____'s challenging behavior.	1 2 3 4 5 6
4. I would suggest the use of this intervention program to other teachers.	1 2 3 4 5 6
5. _____'s challenging behavior was severe enough to warrant use of this intervention program.	1 2 3 4 5 6
6. Most teachers would find this intervention program suitable for students with challenging behaviors.	1 2 3 4 5 6
7. Making time to provide social skills instruction is important.	1 2 3 4 5 6
8. This intervention program did *not* result in negative side effects for _____.	1 2 3 4 5 6
9. The time needed to implement this intervention program in my classroom was reasonable.	1 2 3 4 5 6
10. This intervention program was consistent with those I have used in classroom settings.	1 2 3 4 5 6
11. The intervention program was a fair way to handle _____'s challenging behavior.	1 2 3 4 5 6
12. This intervention program addressed the challenging behaviors of all my students.	1 2 3 4 5 6
13. I liked the procedures used in this intervention program.	1 2 3 4 5 6
14. This intervention program was a good way to handle this _____'s challenging behavior.	1 2 3 4 5 6
15. The time needed to plan for this intervention program was reasonable.	1 2 3 4 5 6

Appendix R. Interview Questionnaires

Specialist Teacher Interview

The *SSIS Classwide Intervention Program* was implemented in the classrooms of _____ from _____ to _____.

1. While in your class did you notice positive changes in the behaviors of _____ 's whole class ? YES NO
(Teacher 1)

If yes, what were the changes?

2. While in your class did you notice positive changes in the behaviors of _____ 's whole class ? YES NO
(Teacher 2)

If yes, what were the changes?

3. While in your class did you notice positive changes in the behaviors of _____ 's whole class ? YES NO
(Teacher 3)

If yes, what were the changes?

5. Did you notice any positive changes in the behaviors of _____? YES NO
(Student 1)
If yes, what were the changes

6. Did you notice any positive changes in the behaviors of _____? YES NO
(Student 2)
If yes, what were the changes?

7. Did you notice any positive changes in the behaviors of _____? YES NO
(Student 3)
If yes, what were the changes?

Student Interview

Your teacher, _____, used a new program in your class this year to teach social skills. I would like to get your opinion on what you thought of the program and how your class and you might have changed because of the program.

1. Did you enjoy the program? YES NO

Why or why not?

2. Did you learn new skills? YES NO

If yes, what did you learn?

3. Did your behavior improve? YES NO

If yes, what behaviors improved?

If no, why didn't your behavior improve?

4. Did the behavior of your classmates improve? YES NO

If yes, what behaviors improved?

If no, why didn't their behavior improve?

5. Since the program started would you say you have been in trouble less often? YES NO

If yes, why?

If no, why?

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