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Effects of Student Self-Management on Generalization of Student Performance to Regular Classes

Lloyd Douglas Peterson
Utah State University

EFFECTS OF STUDENT SELF-MANAGEMENT ON GENERALIZATION OF STUDENT PERFORMANCE TO REGULAR CLASSES

by

Lloyd Douglas Peterson

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of the requirements for the degree

of

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ABSTRACT

Effects of Student Self-Management on Generalization

of Student Performance to Regular Classrooms

by

Lloyd Douglas Peterson, Doctor of Education

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Major Professor: Dr. K. Richard Young
Department: Special Education

The use of a student self-monitoring and self-rating/teacher matching strategy to assist generalization of social skills use and decrease off-task behavior of five inner-city at-risk middle school students was investigated. A multiple-baseline design was used to assess the effects of the intervention in up to six different class settings. Results indicated that the self-monitoring and self-rating/teacher matching intervention led to an increase in correct social skills use and a decrease in off-task behaviors with all five students. These data add to the existing literature, suggesting self-monitoring with self-rating/teacher matching is an effective procedure to promote generalization of behavior. Implications for research and practice are discussed.

(140 pages)

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Lloyd D. Peterson

CONTENTS

Page

Page

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

Several factors have been associated with students who are at risk for violence, delinquency, school failure, and drug, alcohol, and tobacco abuse. They include poorly developed social interaction and resistance skills, poor academic skills, and dysfunctional families (Schinke, Botvin, & Orlandi, 1991). The focus of successful prevention programs is to reduce or eliminate these risk factors by developing social competence, teaching self-management and problem-solving skills, remediating academic deficits, and strengthening families. The success of these programs depends, in part, on the extent to which students can use these social and self-management skills in settings other than those in which they were learned.

Research has consistently shown that a variety of social skills can be taught to students at risk and/or with disabilities using a structured learning approach (Mathur & Rutherford, 1991; Schloss, Schloss, Wood, & Kiehl, 1986). The problem is that these skills have not always generalized to nontraining situations (Fox & McEvoy, 1993; Gresham, 1981). The structured learning approach to social skills training, which involves identifying skills, modeling, role-playing, and performance feedback, has produced acquisition of social skills (Kiburz, Miller & Morrow, 1984; Schloss et al., 1986), but practical, easy-to-use methods are needed to facilitate the use of the social skills in regular education classes throughout the entire school day.

LITERATURE REVIEW

The following review is divided into three parts: part one is a brief overview of existing literature regarding the use of some type of self-management procedure to promote generalization; part two is a more in depth look at representative studies of attempts at programmed generalization, through the use of self-management, to promote behavior change in different settings; part three is a summation.

Overview

Stokes and Baer (1977) defined generalization as the occurrence of a response targeted in a training condition also occurring in "different, non-training conditions (i.e., across subjects, settings, people, behaviors, and/or time) without the scheduling of the same events in those conditions as were scheduled in the training conditions" (p. 350). In past years, researchers in special education have acknowledged that, in order to reliably produce generalization effects, some type of programming strategy is necessary (Fox & McEvoy, 1993; Marholin & Siegel, 1978; Mathur & Rutherford, 1991, 1994, 1996; Schloss et al., 1986; Stokes & Baer, 1977; Stokes & Osnes, 1989).

Studies have incorporated a number of programming strategies to facilitate transfer of training, including self-management with a reinforcement contingency, cognitive mediation, peer mediation, programming common stimuli, and using naturally maintaining contingencies (Clees, 1994; Mathur & Rutherford, 1994; Lonnecker, Brady, McPherson, & Hawkins, 1994; Rhode, Morgan, & Young, 1983a, 1983b; Sasso, Meloy,

& Kavale, 1990; Smith, Nelson, Young, & West, 1992). Although studies have produced moderate generalization effects, the results have been limited in the number of settings where generalization occurred. In some cases, the effects of generalization strategies have not been replicated across studies or across subjects within the same study (Sasso, Melloy, & Kavale, 1990). The experiments of Lonnecker et al. (1994), Smith et al. (1992), Sasso et al. (1990), and Mathur and Rutherford (1994) showed generalization of treatment gains to one setting. Clees's (1994) experiment had generalization occurring in two additional settings. The Rhode et al. (1983a) study had generalization to different classes; however, it included only one generalization class per student (the students were in the same class with the same teacher all day other than the special education class where the initial training occurred).

Secondary-age students, who have five to seven different classes each day, must behave in a socially acceptable manner all day. To date, strategies have not been examined that promote this type of comprehensive generalization. Questions that need to be answered include (a) what procedures can be used to extend the socially acceptable behavior change from special training settings to multiple settings (i.e., all day), (b) how can we ensure that these behavioral improvements continue over time, and (c) can the generalization strategies be practical and simple enough to be used in regular education classes with little additional teacher training. Of the programmed generalization procedures outlined by Stokes and Baer (1977), two pertain to this current experiment: first, programming of common stimuli (presenting stimuli in the nontraining setting which were first introduced in the training setting) and, second, mediated generalization

(teaching a response that is likely to be used across settings). Of the strategies that facilitate generalization and maintenance of treatment gains, self-management is an attractive technique, since students depend less on their teachers for guidance, reinforcement, and control than they did prior to training and it is a common stimuli (Workman & Hector, 1978).

Critique of Studies Incorporating Student Self-Management

Using two male elementary students with learning and behavior problems as subjects, Lonnecker et al. (1994) investigated the effects of an instructional package incorporating videotaped self-assessment, self-modeling, discrimination training, and behavioral rehearsal on cooperative classroom behavior and on the generalization of effects to other settings (classes). The dependent variables were classified as cooperative behaviors and inappropriate behaviors. A multiple-baseline design across students was used.

Prior to the beginning of baseline, student A was videotaped 13 times and student B was videotaped 18 times during their special education language arts class. These tapes were edited to form a pool of personalized videos. Each video within the pool consisted of four vignettes shown in the following pattern: the first vignette demonstrated a cooperative behavior, the second vignette demonstrated an inappropriate behavior, and vignettes three and four demonstrated cooperative behaviors. During the intervention phase, the students would self-monitor their behavior by viewing one of the videotapes with the four vignettes after their language arts class. At this point, the

experimenters used a five-step questioning hierarchy developed by Stowitschek, Stowitschek, Hendrickson, and Day (1984), asking the students to identify cooperative and inappropriate behaviors. This question-and-answer activity was followed by role-playing where the students practiced cooperative behavior. Finally, a debriefing activity occurred during which the experimenter reminded the students how they could watch for trouble spots and avoid inappropriate behaviors in their class settings.

The data indicated an increase in cooperative behaviors and a decrease of inappropriate behaviors in the students' language arts class (the class where the videotapes were made) after intervention began. Lonnecker et al. (1994) reported that this increase of cooperative behaviors and decrease of inappropriate behaviors generalized to the two additional classes under observation. For one student, the behavior generalized to two different classrooms with two different teachers. For the other student, the behavior generalized to two additional classes: one in a different classroom with a different teacher, and the other in the same classroom and same teacher as language arts. However, the intervention was complex and likely difficult to replicate across many teachers, as necessary in secondary schools.

Mathur and Rutherford (1994) examined the effectiveness of a Positive Talk curriculum in promoting specific conversational social skills of nine incarcerated teenage females and a systematic programming of generalized use of those social skills to another setting (the cafeteria) within the correctional facility. The nine subjects' ages ranged from 13 to 17 years and grade levels from 7 to 12. All subjects were classified as having learning disabilities and/or emotional/behavioral disorders.

The nine subjects were divided into three groups of three subjects each. A multiple-baseline design across groups was used. The intervention consisted of a five-lesson social skills training program referred to as Positive Talk. The target social skills were taught as a set of conversational behaviors to each group for 5 days (this training occurred in the students' classrooms). The skills were taught using Goldstein's Structured Learning Approach (Goldstein, Sprafkin, Gershaw, & Klein, 1980), which included modeling, role-playing, performance feedback, and transfer of training. As part of the transfer of training to another setting, the subjects were given a cue card depicting the five conversational social skills taught in the training setting. They carried this cue card to the lunch room where their conversational social skills behaviors were monitored by both audio and video recordings. The different stages of intervention in which behavior was measured in the lunch room were (a) social skills training and prompting, (b) prompting only, and (c) maintenance and follow-up.

The data reported by Mathur and Rutherford (1991) tend to support that training in one setting and prompting in another setting promote generalized use of social skills. Their data do not tend to support the use of prompting alone without the concurrent training. However, it must be noted that these findings were arrived at in a correctional facility, not regular education classes in a public school setting. In addition, the programmed generalization was attempted in only one setting rather than multiple settings throughout the entire school day.

Concerning the acquisition, maintenance, and generalization of target social skills, Sasso et al. (1990) conducted a 9-month study using a multiple-probe design across

behaviors. Three children with behavioral disorders, ages 7, 10, and 12, participated in the study. All three students were housed in a combination elementary/junior high self-contained classroom where the social skills training sessions occurred. The students participated 2 to 3 hours each day in other integrated classroom settings, but generalization measures were obtained in only one integrated classroom for each student. Maintenance of skills was measured within both the treatment and the one integrated setting for each student.

The students received group instruction pertaining to the subskills within each category. The order of instruction was the following: first taught were the subskills of alternatives to aggression, followed by the subskills of dealing with stress, and last, the subskills of dealing with feelings. These subsets included such skills as accepting consequences, accepting "no," and dealing with anger. Training criterion was reached when each of the subjects demonstrated successful acquisition of the subskill through role-playing within the context of the classroom sessions, followed by completion of homework assignments. These homework assignments were considered complete when the subject reported three successful uses of the subskill. In addition to measures of the above social skills use, three categories of incompatible negative behavior were also measured. They consisted of aggression, off-task, and social distance (lack of concern for others who were having obvious problems [i.e., hurt on playground], poor grade on assignment, and lack of concern for others' property [i.e., destruction of property and stealing]).

Intervention began with social skill training in the special education class. Group instruction in each of the skill areas was introduced sequentially for the three students by the classroom teacher. A token reinforcement program was implemented in which rewards were provided for participation and withheld for disruptive or aggressive behavior. During the maintenance phase, the students recorded weekly frequencies of prosocial target behaviors used in the treatment setting for each of the three major skill areas on a bar graph. No special programs were in effect for the students in the generalization settings. The data indicate that intervention during the training phase and self-recording during the maintenance phase increased the use of desired social skills and decreased the incompatible negative behaviors. Mathur and Rutherford (1994) reported that the generalization probes showed behavior change in the nontreatment setting that coincided with the behavior change in the training setting. However, the generalization probes were measured in only one class setting for student.

Clees (1994) conducted an experiment evaluating the effectiveness of students' self-recording of their behavior that met teachers' expectations. The expectations for each teacher's class were compiled into a list from those supplied by all the teachers. The list included behaviors such as being on time, in seat, and not talking without permission. Four middle school students participated in this study: three 12-year-old students receiving services for learning disabilities (two females and one male), and one 11-year-old male receiving services for behavioral disorders. A multiple-baseline design across participants was used to evaluate and compare the effects on students' behavior between

carrying a list of teacher expectations without self-recording their behavior and carrying the list and self-recording their behavior.

Though the participants carried the list of expectations to five classes, data were collected in only three classes (math, social studies, and science). During the first phase of intervention, the math teacher introduced the teachers' list of expectations to the participants and explained that the sheet was a list of things to do and that they were to carry the list to all their classes. In the second phase of intervention, the participants were instructed to record whether or not they met the expectations by marking "yes" or "no" on the list in each class. In the classes where data were collected, carrying the list without self-recording had no effect on the participants' behavior as recorded by the teachers. When self-recording was added to the intervention, all four participants' behavior improved. Based on these data, Clees stated that the act of self-recording was sufficient to increase the likelihood of behavior change by participants. This study is similar to the current study in that the participants carried a form into each class on which they self-recorded if they did or did not meet that teacher's expectations for that class. It is different from the current study in that there was no teacher matching on the form carried by the participants in the Clees study and in the Clees study, data were collected in only three classes, not in seven classes, as was the case in the current study.

Two other studies, Rhode et al. (1983a) and Smith et al. (1992), have aspects similar to the study reported here. Rhode et al. (1983a) conducted a study in which they examined the effects of using a self-evaluation procedure to obtain generalization of appropriate classroom behaviors from a special education class to regular education

classes. Six elementary students with behavioral disorders participated in the study. The students were from 6 to 10 years of age (two first grade, one second grade, one fourth grade, and two fifth grade). A multiple baseline across pairs of participants was used to examine what effects using the self-evaluation process had on generalization.

Intervention for all six participants occurred in their special education class. The participants were informed of the class rules and what constituted appropriate class behavior. The special education teacher and participants then modeled and role-played examples and nonexamples of each rule. The teacher introduced and implemented a point system that coincided with the amount of appropriate behaviors displayed by each participant. This phase was followed by the introduction of a student self-evaluation form which the participants used to evaluate their in-class behavior; they presented the form to the special education teacher for her to record her evaluation of their behaviors. The participants received points for near matches with the teacher (within one) and bonus points for exact matches. In this rating system "H" was given for engaging in all appropriate behaviors and was worth 4 points, a rating of "S" represented emitting only one inappropriate behavior and was worth 3 points, "N" represented engaging in two inappropriate behaviors and was worth 2 points, and "U" represented three or more inappropriate behaviors and was worth 1 point. If the participant recorded a rating of "H" and the teacher also recorded a rating of "H," the participant would receive 4 points for the rating plus an additional point for an exact match (H/H). In a case where the participant recorded a rating of "S" and the teacher recorded a rating of "N," the participant would receive 2 points for a near match (S/N). In any near match (within one

rating of each other), the participant always received the points of the teacher's rating. A number of phases continued wherein the time between self-recording increased and presenting the form for matching decreased.

After the participants worked their way through the different phases of intervention in the special education class, they were instructed to begin carrying and marking their self-evaluation forms in their regular class. The participants were elementary students who had only one teacher other than the special education class teacher with whom they began the self-evaluation/teacher matching process. A similar, but less-involved process, as in the first setting, was implemented. The participants recorded their self-ratings and presented their forms to their teachers. The student/teacher matching process was faded by increasing times between each marking. The results supported the use of a student/teacher matching process to increase the participants' appropriate behavior and decrease inappropriate behavior. Each of the participants showed change in both the special education class and regular education class settings following intervention.

Smith et al. (1992) examined the effects of a self-management procedure on the off-task behavior and academic work of students with mild disabilities. Also, they studied the effects of a peer-mediated variation of the procedure for facilitating the generalization of treatment gains from the training setting (special education class) to a regular education class (English). Eight male high school students 15 to 16 years of age classified as learning and/or behaviorally disordered participated in the study. A multiple baseline across settings experimental design was used.

Intervention in the training setting began by the special education teacher explaining the class rules to the students and providing them with examples and nonexamples of each rule. The students were instructed in the use of a behavioral rating form and rated their class behavior as excellent, very good, average, below average, poor, and unacceptable (each rating was worth points: 5, 4, 3, 2, 1, 0). They would then present their rated forms to the special education teacher and she would rate each student. If a student's rating matched that of the teacher, he would receive as many points as the particular rating (e.g., 5, 4, 3, 2, 1, 0) plus a bonus point for matching. If the rating was within one of the teacher's rating, a student would receive the points for the teacher's rating, but no bonus point. If the rating was more than one removed from that of the teacher (e.g., the student rating was 5 and the teacher's rating was 3), the student received no points. This rating/matching occurred during 30-minute sessions. At first, the rating process occurred three times (every 10 min.) per session, then was faded to twice per session, then once per session. After this fading occurred, the students would write academic goals on the rating forms. Points were awarded for setting an appropriate goal, meeting the goal, and turning in assignments on time.

For intervention into the generalization setting, the students were divided into three groups consisting of three, three, and two students each. Each group of students began intervention in the generalization setting on a different date (at least 5 days between implementation). Intervention in the generalization setting had the students recording academic goals and matching their ratings with an assigned trained peer

(instead of the regular education teacher) three times per session, then once, then only recording academic goals.

The data indicated that off-task behavior decreased in the training setting following intervention and maintained lower rates throughout the fading process. In the generalization setting, off-task behavior decreased following intervention. Off-task behavior of three of the eight students appeared to be decreasing prior to intervention; however, the variability of that behavior reduced further after intervention. The off-task behavior remained low through the fading process, but increased variability appeared during the "academic goal setting only phase" in six of the eight students.

The above results support the use of self-management as a means to increase generalization across settings. Two concerns are noted. Each of the eight students had one special education class for three periods per day and three regular education classes, for a total of four different settings (classes) per day. Though all eight students displayed behavior change in their regular English class, this generalization of skills was measured in only one class. The procedure was not extended to the other two regular education classes. Additionally, while this intervention may be practical in regard to regular education teachers' time requirements, it may not be practical because of the time involved in training and monitoring the student peers.

Summary

In the preceding review, studies were discussed that show generalization of treatment gains to nontreatment settings when some type of student self-management

strategy was utilized. The experiments of Lonnecker et al. (1994), Smith et al. (1992), Sasso et al. (1990), and Mathur and Rutherford (1994) showed generalization of treatment gains to one setting. Clees's (1994) experiment had generalization occurring in two additional settings. Rhode et al. (1983a) had generalization to several different classes; however, there was only one generalization class per student (the students were in the same class with the same teacher all day other than the special education class where the initial training occurred).

Of the above studies, the Rhode et al. (1983a) and Smith et al. (1992) studies not only incorporated students self-monitoring and recording their behaviors, but also included a matching process to help promote generalization. The self-management strategy, with a matching process, has been an effective technique to promote generalized use of socially acceptable class behaviors, but only in a limited number of different settings.

This review of literature provides support for student self-management to promote generalized use of prosocial, cooperative behaviors in other settings. However, since secondary (middle school, junior high school, and high school) students typically have five to seven different classes per day, frequently all with different teachers, there is a need for strategies that promote the generalization of socially appropriate behaviors in all these classes. A need also exists to examine the use of a practical technique (i.e., one that requires minimal teacher time and effort).

The purpose of this experiment was to examine the effects of a student self-management procedure, involving self-monitoring and teacher matching, designed to

facilitate improved class behavior and social skills in six regular education classes with six different teachers after initial training in the Prevention Plus class. The experimental question addressed was, Does a functional relationship exist between the use of a student self-monitoring and self-rating/matching procedures and the generalized use of target behaviors in six different classroom settings? The social validity measures helped to answer the questions of the practicality of the strategy, the appropriateness of the target behaviors, and consumer satisfaction with the results.

METHOD

Participants

Five seventh- and eighth-grade students attending a middle school in a large urban school district in Utah, participating in Prevention Plus (West & Young, 1994), a program emphasizing a comprehensive approach for preventing or reducing antisocial behavior of at-risk youth, were selected to participate in this study. Students were nominated for placement in the Prevention Plus class by teachers, parents, administrators, and the students themselves. Criteria for placement included one or more of the following: poor academic performance, a lack of commitment to school, constant transitions and mobility, a lack of attachment to the neighborhood, economic hardship, a history of problem behaviors and conflict within the family, early onset and persistence of antisocial behavior, and involvement with peers who displayed problematic behaviors. The teachers completed a screening checklist for each referred student (Appendix A). Student selection to participate in the Prevention Plus program was based on these screening checklist scores, parental permission, and student permission. The five students in this experiment were not selected for enrollment into the Prevention Plus class that began in the fall semester. The selection committee deemed their behavior too severe and more in need of an intervention program rather than a prevention program. For the purpose of this experiment, these students were entered into the Prevention Plus class for the spring semester beginning in January 1998. Though socioeconomic status

Table 1

Participant Demographic Information

Participant	Age	Grade	Sex	Parent/guardian	Ethnicity
Angela	13	8	F	Grandmother	Hispanic
Robert	13	7	M	Mother	European
Joe	14	8	M	Mother	European
Ken	12	7	M	Mother	European
Bill	12	7	M	Mother & stepfather	European

(SES) was not a selection factor, the SES of all five participants was low enough to qualify for the free lunch program. Table 1 describes the students in greater detail (pseudonyms are used to protect the anonymity of the students).

Settings

The participants attended an urban middle school. Class size varied depending on which subject was being taught. Class size ranged from 24 to 34 students, with a mean of 29 students. Each class period was 45 minutes in duration. Since the setting for training was different than the generalization setting, the Prevention Plus program (the training setting) will be discussed prior to the description of the regular classroom (generalization) settings.

Prevention Plus Classroom

This classroom was staffed by a teacher and an instructional assistant who had received instruction in the implementation of the student self-management program (Young, West, Smith, & Morgan, 1991) and an instructional format that emphasized: direct teaching, instructional praise, corrective teaching, and behavioral directives, with the use of modeling, role playing, and performance feedback. Students attended the Prevention Plus class one period each day. Class size ranged from 10 to 13 students.

Upon entering class each day, students viewed the day's schedule listed on the chalkboard along with two analogies (e.g., "red is to stop as yellow is to _____," "pig is to pork as cow is to _____") which they were to begin solving immediately (this was used as a focusing activity). Monday through Thursday this focus activity was followed by two or three 1-minute Precision Teaching math timings (Beck, Conrad, & Anderson, 1995). The remainder of the period was devoted to one of the following academic programs: Morphographic Spelling (Dixon & Engelmann, 1979), Expressive Writing (Engelmann & Silbert, 1985), Reading Improvement (Engelmann et al., 1988), Social Skills Training (West & Young, 1994), and substance abuse prevention training (RESIST; Morgan, 1993). Note: Though scheduled teaching of social skills may have been only one class period per week, incidental teaching of social skills usage was done on a daily basis. After an initial eight social skills were taught (Appendix B), the RESIST curriculum was implemented for 6 weeks, followed by training of additional social skills.

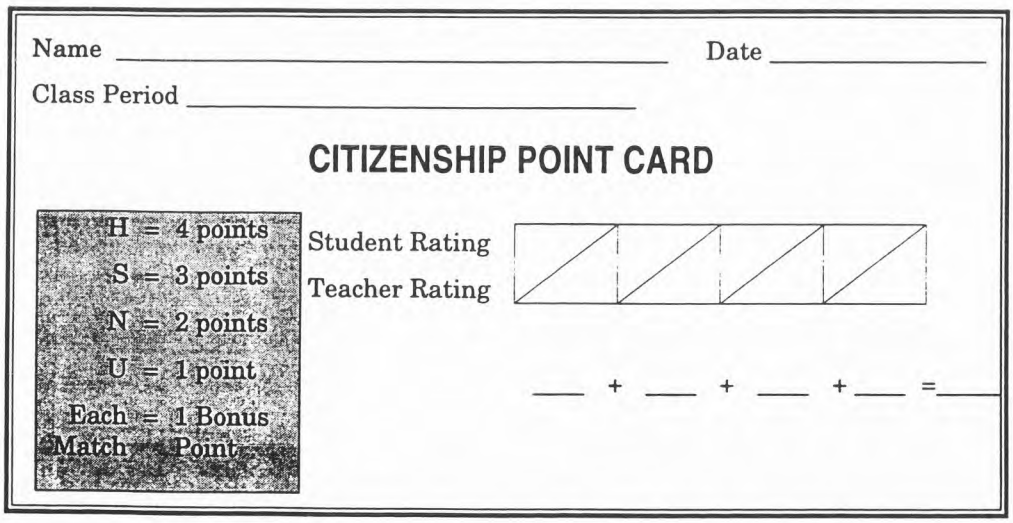
On Friday, following the focus activity, the students participated in a reinforcement time. This was when they were allowed to spend the points they earned throughout the week through the self-management reinforcement system (i.e., the student/teacher matching process). The students purchased materials (writing tablets, pens, pencils, paperback novels, etc.), game-time (chess, checkers, Connect Four, etc.), computer-time, and snacks (soda, chips, candy, etc.). The students then played games, used the computer, or participated in conversation. During this time the students were still self-monitoring their behavior and the student/teacher matching process was in effect.

The Self-Management Student/Teacher Matching Process

Initial self-management training occurred in the Prevention Plus class, along with instruction regarding teacher expectation for class behavior. The self-management process used the following self-rating scale: "H" if the student exhibited appropriate social behavior expected by the teacher, "S" for meeting all but one of the teacher expectations, "N" for meeting all but two, "U" for meeting all but three, and "Z" for physical and/or verbal abuse to self and/or others to such an extent that the student was required to leave the classroom. (This rating scale was selected because it is similar to the grades all students in the school receive for citizenship on their report cards, thus students were familiar with these markings. "H" = honorary, "S" = satisfactory, "N" = need improvement, "U" = undesirable.)

In the beginning of this self-management process, the student and teacher compared their rating of the student behavior four times (approximately every 12 minutes) per class period, as seen in Figure 1. Initially, ratings were done four times per class period, then faded to twice per period, and then once per period.

At the end of each rating comparison period, students handed the completed self-management form to the teacher and the teacher recorded her perception of each student's behavior. Points were awarded to students for the scores recorded on their self-management forms. Students received points for "perfect" matches with the teacher (both student and teacher record the same rating [i.e., H/H, S/S, N/N, U/U]) or for "next-door" matches (student and teacher rating differ by one [e.g., H/S, S/N, S/H, N/U]).


Name _____ Date _____

Class Period _____

CITIZENSHIP POINT CARD

H = 4 points
S = 3 points
N = 2 points
U = 1 point
Each = 1 Bonus Match Point

Student Rating
Teacher Rating

___ + ___ + ___ + ___ =____

Figure 1. Initial student self-management form. The student and teacher matching four times per class period.

When student ratings of "H" or "S" matched teacher ratings of "H" or "S" at 75% or more for 5 consecutive days in the Prevention Plus class (four times per day multiplied by 5 days equals 20 comparisons per week; the students must have a matched rating of "H" or "S" at least 15 of the 20 comparisons), the number of student/teacher comparisons was reduced to two times per class period, as seen in Figure 2 (approximately 24 minutes between each rating/comparison).

When student ratings of "H" or "S" matched teacher ratings of "H" or "S" at 80% (8 of 10 comparisons) over 5 consecutive days, the number of student/teacher comparisons was reduced to one time per class period (see Figure 3). When a student was comparing ratings with the teacher only once per class period, the student was taught through modeling and role-play to record additional behaviors (i.e., being on-time,

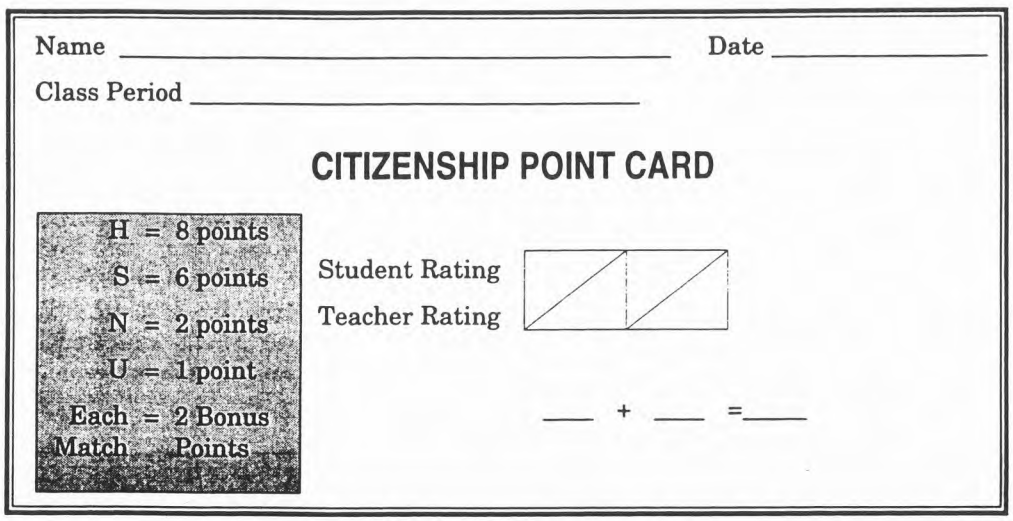


Figure 2. Student self-management form. The student and teacher matching two times per class period.

greeting the teacher, staying on-task, assignments current, following instructions, raising hand, accepting no for an answer, and accepting criticism/feedback). A new form was introduced at this time, as a similar format was used during the programmed generalization process (see Figure 3).

At the level of one comparison per class period, the possible points for matched ratings were, for example, H=18, S=16, N=2, U=1, Z=0, and 3 additional bonus points for a perfect match. In the following examples, students' ratings are listed to the left of the slash (/) with teachers' ratings to the right of the slash. For perfect matches, students received the appropriate rating points plus the bonus points for matching (e.g., H/H = 18 + 3 = 21 pts., S/S = 16 + 3 = 19 pts.). If students had a "next-door" match, the students received the points from the teacher's rating and no bonus points (e.g., H/S = 16 pts., S/H = 18 pts.). Students received no points if their rating and the teacher's rating

SELF-MANAGEMENT
CITIZENSHIP POINT CARD

Name:_____ **Date:**_____

Period _____ Please Mark (X) Answer

	yes | no	Points
On Time	_____	H = 9
Greeted Teacher	_____	S = 7
On-Task	_____	N = 2
Assign Current	_____	U = 1
Followed Instructions	_____	Match = 2
Raised Hand	_____	On-Time = 1
Accept "No"	_____	
Accept C/F	_____	

Student Rating _____

Teacher Rating _____ _____
Teacher's Initials

On-Time Rating Match Total

Score: ____ + ____ + ____ = _____

Figure 3. Student self-management form. The student and teacher matching one time per class period.

were more than one step removed from each other (e.g., H/N, S/U, N/H). Beginning at the level of one rating opportunity per class period, students received one additional bonus point for being on-time/in-seat at the beginning of class.

Regular Classrooms

The students' regular classrooms were staffed by one teacher. These teachers had not received the additional behavioral training that the Prevention Plus teacher and instructional assistant received. Prior to the beginning of the programmed generalization process, the regular classroom teachers were given instruction regarding what this process was trying to achieve, how it was to be done, and the teachers' role in this process (see discussion of independent variable). Regular education classes ranged in size from 24 to 34 students. Table 2 describes the 12 teachers in greater detail.

Independent Variable

The independent variables are part of a package. They include teacher preparation, student preparation, student carrying the self-management form to regular education classes, student recording self-ratings on the self-management form, teachers recording their ratings of student's behavior on the self-management form, opportunity for student to earn additional points as the self-management form is carried to more classes, student and teacher interaction at the end of each class, and a trip to a local amusement park if the student accomplishes generalization of the target skills in all classes and maintains high ratings. Each component is described below.

Table 2

Teacher Demographic Information

Teacher	Age	Sex	Years experience	Courses taught	Degree
A	23	F	<1	Science	Bachelor's
B	24	M	<1	Computer science/TLC	Bachelor's
C	23	F	1	Spanish	Bachelor's
D	24	F	1	Physical education	Bachelor's
E	25	F	1	English/reading	Bachelor's
F	24	F	2	Math	Bachelor's
G	30	M	5	Science	Bachelor's
H	39	F	13	Math/TLC	Bachelor's
I	43	F	20	English/reading	Master's
J	47	M	21	History	Bachelor's
K	52	M	26	History/math	Bachelor's
L	59	F	27	English/reading	Bachelor's

Teachers' Preparation (Regular Classes)

The regular classroom teachers were informed that this program was designed as an opportunity for self-appraisal and self-management by the students. As such, students were to do the majority of the recording work, not the teachers. At the end of each class period, the students were to record their rating of their behavior prior to presenting the self-management form to the teacher. Teachers then were to record their rating, reflecting their perception of the student's performance during that class. It was emphasized to the teachers that the teacher's rating of the student's behavior was only to reflect that one class period, not cumulative behavior. For example, if a student did not have his homework done on the day it was due, then that student did not meet the teacher's expectation for that day and should receive the appropriate rating on the self-management form (e.g., "S"). The following day is a new day, a fresh slate. If the student still did not complete the homework due the prior day, he has already suffered the consequences for that action and should not be put in double jeopardy for the same offense. Teachers were also informed of the process students were to use when they had questions regarding teachers' expectations and/or ratings (see Student Preparation below). The Prevention Plus teacher and I (the experimenter) conferred with the regular class teachers weekly and answered any questions they had regarding the programmed generalization process.

The teachers were only to mark the students' self-management form; they were not to give the points. The students recorded the points earned on the self-management form. Then, during the Prevention Plus class, the Prevention Plus teacher checked

students' forms for correct recording and calculation of points earned, thus minimizing the work required of regular class teachers.

Student Preparation

All students participating in the programmed generalization study received instruction in the Prevention Plus class regarding the use of social skills (Appendix B) and the self-management form. Prior to beginning the programmed generalization process, the students were given instructions pertaining to expectations that other teachers may have regarding student performance: how to present their self-management form to their teachers, record their daily scores on the Matching Teacher's Expectations tally form (Appendix C), file used forms, and pick up new forms.

Students were informed that each teacher has her own class expectations and these may differ somewhat from the Prevention Plus teacher's class expectations. It was up to the students to learn what these expectations were and meet each teacher's expectations. They were told that emitting the same behaviors focused on in the Prevention Plus class would probably account for the majority of these teachers' expectations.

The students role-played how to ask the teacher why their rating did not match the teacher's. This was accomplished through the adapted use of the learned social skill "How to disagree appropriately" (Appendix B). When student/teacher ratings did not match and the student was not sure why, students were instructed to accept the teacher's rating and not ask for an explanation at that time. The next day, the student was to approach the teacher prior to class and, using the steps of "How to disagree

appropriately," explain that he is concerned with the nonmatch and ask what teacher expectation he missed. Students were instructed that the teacher may not recall which expectation was missed, but the teacher may now be more aware that the student is trying to meet her class expectations; thus, the teacher may be more open to the student's requesting this information during that day's matching process. As stated above, the teachers were also informed of this process.

Programmed Generalization Process

When students were at one rating per day in the Prevention Plus class, they had to match scores of "H" on their self-management form with the Prevention Plus teacher for 5 consecutive days (matches of any other type, "S," "U," etc. were not acceptable) prior to beginning programmed generalization. After a student met this criterion, I selected a class, based on stability of baseline data, in which the programmed generalization process was to begin for that student. Students then began carrying the programmed generalization self-management form. This form had two boxes, one for rating behavior in the Prevention Plus class and one for the added class (see Figure 4).

With the addition of the new class, students were now matching their behavior ratings with teachers in two classes: one regular class and the Prevention Plus class. When a student's data reflected a positive change in trend, level, or variability and appeared to be stable in the added class, I selected an additional class in which the programmed generalization process was extended. This process continued until the students were using the generalization program in all their class periods (Appendix D).

SELF-MANAGEMENT
CITIZENSHIP POINT CARD

Name:_____ **Date:**_____

Period _____ Please Mark (X) Answer

	yes	no	Points
On Time			H = 9
Greeted Teacher			S = 7
On-Task			N = 2
Assign Current			U = 1
Followed Instructions			Match = 2
Raised Hand			On-Time = 1
Accept "No"			
Accept C/F			

Student Rating _____

Teacher Rating _____ _____
Teacher's Initials

On-Time Rating Match Total

Score: _____ + _____ + _____ = _____

Period _____ Please Mark (X) Answer

	yes	no	Points
On Time			H = 9
Greeted Teacher			S = 7
On-Task			N = 2
Assign Current			U = 1
Followed Instructions			Match = 2
Raised Hand			On-Time = 1
Accept "No"			
Accept C/F			

Student Rating _____

Teacher Rating _____ _____
Teacher's Initials

On-Time Rating Match Total

Score: _____ + _____ + _____ = _____

BE SURE TO TURN THIS POINT CARD IN AND PICK-UP YOUR NEW CARD

!CONGRATULATIONS!
On A Good Job Well Done

Figure 4. Student self-management form for matching with the Prevention Plus teacher and one additional teacher.

Students earned additional daily points as they added more classes to the programmed generalization process. As intervention commenced in each additional class, the total possible points the students could earn per class decreased, yet because they now had more classes where they were earning points, the total possible points per day increased (see Table 3). For example, when a student was recording self-rating with teacher matching in one class, the total possible points the student could earn for that class was 22 points (18 for a score of "H," 3 for matching with the teacher, and 1 for being on time), and the total possible points for the day was 22 (1 class x 22 points per class); however, when a student was recording self-rating with teacher matching in four classes, the total possible points the student could earn for each class was 7 points (4 for a

Table 3

Number of Possible Points Students Could Earn as They Add Classes in the Self-Management Program

	Score						
No. of classes	H	S	N	U	Match	On time	Total possible per day
1	18	16	2	1	3	1	22 x 1 = 22
2	9	7	2	1	2	1	12 x 2 = 24
3	6	5	2	1	2	1	9 x 3 = 27
4	4	2	1	0	2	1	7 x 4 = 28
5	3	2	1	0	2	1	6 x 5 = 30
6	2	1	0	0	2	1	5 x 6 = 30
7	2	1	0	0	2	1	5 x 7 = 35

score of "H," 2 for matching with the teacher, and 1 for being on time), and the total points for the day was 28 (4 classes x 7 points per class). Students used these points in the Prevention Plus class store mentioned in the "Setting" section above. The students tallied their daily points on a points earned form (Appendix E) and showed the total to the Prevention Plus teacher. The teacher checked the totals daily for accuracy. Students could spend or save as many of their points as they wished. Some items and prices are listed in Table 4. Students were encouraged to buy game/discussion time as this allowed them to practice their newly acquired social skills in a less structured environment.

As an additional reinforcer, students who met generalization criteria in all six classes within 14 weeks and maintained satisfactory behavior in the previous generalization classes participated in a field trip to a local amusement park.

Table 4

Menu of Items Students Could Purchase from the Prevention Plus Store

Item	Cost in points	Item	Cost in points
Game time	10	Computer time	20
Soda	50	Small candies	15
Pencils	25	Pens	75
Writing pads	100-150	Folders	50
Large candies	60	Posters	300-500
T-shirts	700-900	Sports caps	500-600

Accuracy of Teacher Signatures

To detect possible forgery of teacher initials, I analyzed teacher initials on student self-management forms and conducted spot checks with the teachers. If the initials were found to be forged, the student lost all points for that day's class period and was retrained in the rating procedures. The Prevention Plus teacher and I conferred with the teachers on a weekly basis (or more frequently if needed) clarifying the rating criterion and, if student/teacher behavioral ratings did not match, querying the teachers regarding the student's use of the procedures for questioning or clarifying the reasons for the nonmatch.

Dependent Measures

Three types of observational measures were used: interval recording, event recording, and event recording per opportunity. The target behaviors measured are defined below and organized into the three types.

Interval Recording

On-Task

Student was facing either the teacher (when teacher was presenting information to student individually or the class as a whole), facing instructional material, or facing class activity. Student had to remain in seat and quiet.

Off-Task

The student was talking, waving arms, playing with an object, having feet on table or desk, moving chair or desk, moving body (other than briefly for physical comfort) without teacher permission, striking another person or furniture, or damaging or altering property other than his or her own (writing on walls, breaking fixtures, etc.). In-seat was defined as either buttock or knee touching the top of the seat. A brief transitional period moving from buttock to knee or vice versa was acceptable.

Event Recording Per Opportunity

Following Instructions—Opportunity

Students received group and/or individual instructions. Requests or commands by a school staff member called for a response or termination of a response by the student.

Following Instructions—Student Response

Student began instructed task within 5 seconds (through apparent movements, the student appears to be attempting to comply with the instructed task—the student did not have to complete the task within 5 seconds).

Accepting "No" for an Answer

Opportunity

The observed student, or any other student in the classroom, made a request (which involved the observed student) of a school staff member, and the staff member replied with "no" for an answer.

Response

The student looked at the person who said no, replied with an affirmative response, and asked why, using a pleasant voice tone (optional, but acceptable). The student did not argue, whine, or complain.

Accepting Criticism/Feedback

Opportunity

School staff member delivered criticism/feedback to student individually or the class as a whole (i.e., "Bobby [or class], you have used addition for all your math problems rather than subtraction. You will have to redo all the problems using subtraction.").

Response

The student looked at the person presenting the criticism and/or feedback, replied with an affirmative response. The student did not argue, whine, or complain.

Event Recording/Getting Teacher's Attention

The student raised his hand above his head. The student lifted either hand, but only one hand. After raising the hand above the head, the hand had to be lowered below the shoulder to designate the end of the hand raise episode. If the teacher was not facing the student and not attending to the class as a whole or the participant student in particular, the student raised one hand and (optional) said the teacher's name using a pleasant voice. The student looked at the person whose attention he was attempting to get (a brief look is adequate). After initiating the attempt, the student waited for acknowledgment by the teacher, remaining quiet with hand raised. When the initiation was done verbally, the student said the name only once. Quiet was defined as no noises emitting from the student and no shaking of the hand, waving arm, squirming in seat, and so forth.

Additional Measures

Data were collected on two additional measures that might be affected by the programmed generalization process (see Table 5).

Data Collection

The observational data were recorded by trained observers using 10-second interval recording (Appendix F). The recording instrument consisted of forty 10-second intervals totaling 6 minutes 40 seconds per page. Each student was observed for six

Table 5

Measurement of Teacher/School Records

Measure	Pretest measure	Schedule of collection	Metric
On time	Percentage on time from beginning of second semester to intervention	Weekly	Percentage on time pre- and postintervention per class
Academic grades	Class grades from the fall semester	Once per semester	Grade point average fall and spring semesters

pages (40 minutes) during three to four class periods per day and all seven classes at least twice per week. During an average week, consisting of five school days, each student was observed during 17 or 18 class periods. An observation schedule was used to ensure that all seven classes were observed equally.

On the recording form (Appendix F), on-task/off-task behaviors were recorded as a "/" when the student was on-task for the full interval or a "-" when the student was off-task for part of the interval. An opportunity to emit a target social skill (i.e., following instructions, accepting "no" for an answer, and accepting criticism/feedback) was recorded during the interval in which the opportunity was presented as a "-" for each opportunity, and a "+" if the student responded appropriately. Because these three behaviors were opportunity-bound, it was possible for more than one opportunity and response to be recorded for each interval. Getting Teacher's Attention was recorded as a "-" in each interval the behavior occurred inappropriately, and a "+" in each interval the behavior occurred appropriately and was terminated by the student during that interval, or

when the behavior occurred appropriately and was displayed throughout the remainder of that interval.

Data on the two additional measures were collected from teacher and school records. On-time and class grades are recorded by the teachers on their computers. These data were obtained by accessing the school database.

Observers

Observers were students from a local university. An advertisement was placed in the university paper and posted in the Education and Social Sciences Departments. The observers were selected based on their education regarding teaching and social sciences and any past experience they may have had with observational data collection.

Observers received training in the use of the observational procedure through direct instructional methods and practiced recording via videos of students in the Prevention Plus classroom; they also practiced observing students in classes that were not part of the experiment. I supplied the observers with definitions of each of the behaviors to be measured, explained each definition and why that definition was being used, and modeled each of the behaviors. I also described the recording form and the procedures used. I modeled the recording mechanics for the observers, then guided the observers through the recording procedures giving feedback as necessary. After this initial training, the observers viewed a video of students modeling the target behaviors. This training video consisted of 8 to 10 students prompted to engage in the different target behaviors in a regular class setting. The observers practiced recording from the video until they were

recording the behaviors with 100% accuracy. The video had a second part with the same 8 to 10 students participating in a class unaware that they were being videotaped. This portion of the video was used until the observers reached a percentage of agreement with me of 90%.

Following the video portion of the training, the observers were taught how to observe in a classroom. I described and modeled the method of observing. The observers were to stand in a location that was minimally intrusive (e.g., the back corner of the classrooms). This was done to help minimize the effect of their presence in the classrooms. If this location did not allow the observer a clear view of the selected student, the observers were instructed to move to a location from which they could better view that student. I also instructed and modeled the method of watching a particular student while minimizing the chance of the student being aware that he or she was the one being observed. After this training, the observers were paired, and then observed students in classes not participating in the experiment. These pairs were altered so that each observer was paired at least once with every other observer. During these observations, I monitored the observers and gave feedback as necessary.

During observations, each observer held a clipboard with the observation form on it and had a recorder clipped to his or her belt with the ear piece in her ear from which an audiotape signaled the beginning of each 10-second interval. Observers were instructed to reply to questions from students by stating that they were observing classrooms to see how they could become better teachers. In response to questions from the teachers, the observers were instructed to reply that they were working with me and nothing more. I

was known to both students and teachers and had received permission from the teachers for observers to collect data in their classrooms. Data were collected on students only, not teachers.

Two trained observers collected data together in approximately 20% of all observation sessions during each phase of the experiment. Twenty-six pairing combinations were used by the nine observers. If interobserver agreement was less than 80% per session more than twice in the same week, or less than 50% once, a review of the target behaviors and observation system was conducted for all observers. There were two instances in which a review was required. Both times it was due to less than 50% agreement of nonoccurrence of off-task behavior when the disagreement was for more than one interval.

Interobserver agreement was calculated using percentage of agreements for occurrence of behavior and percent of agreements for nonoccurrence of behavior. Measuring both occurrence and nonoccurrence produced a wide range of agreements from 0 to 100. As seen in Table 6, the range was typically high and measures of central tendency were all high. A typical example of a zero percentage agreement would be as follows: If observer AB recorded a participant as off-task in all 40 intervals and observer LT recorded the same participant as off-task in 39 of the 40 intervals, their agreement would be 98% for occurrence of off-task behavior and 0% for nonoccurrence of off-task behavior. A summary of the means and ranges for all of the 26 pairings of observers is listed in Table 5. Appendix G lists the agreements for each of the separate pairings.

Table 6

Interobserver Agreement Percentages

Behavior	Range	Median	Mode	Mean
Off-task				
Occurrence	60-100	97.5	96, 97, 98, 99	96
Nonoccurrence	71-100	97.5	98	98
Follow instructions				
Occurrence	86-100	100	100	97
Nonoccurrence	80-100	100	100	95
Accept "no"				
Occurrence	100	100	100	100
Nonoccurrence				
Accept feedback				
Occurrence	100	100	100	100
Nonoccurrence	100	100	100	100
Teacher attention				
Occurrence	88-100	100	100	96
Nonoccurrence	50-100	100	100	91

Social Validity

Prior to the beginning of the generalization process, all students completed a questionnaire regarding their perceptions of their teachers and the use of social skills. The students' teachers and parents completed similar questionnaires (see Figures 5, 6, and 7). At the completion of the generalization process, students, teachers, and parents again completed the questionnaire and I conducted oral interviews with each student and teacher, regarding their perceptions of the generalization process and outcomes.

Experimental Design

To investigate a possible functional relationship between student self-management and the target behaviors listed above, a multiple-baseline design across subjects was used (Tawney & Gast, 1984). A multiple-baseline design demonstrates the increased likelihood that the changes in dependent variables were due to the introduction of the independent variable (differences between projections based on baseline data and the treatment phase data) rather than some extraneous variables, thus showing a functional relationship. The multiple-baseline design also assists in counteracting the possible reactive effects of an extended baseline.

Though the across-subjects multiple-baseline design is the primary experimental design, a multiple-baseline design across settings was monitored for each subject. The differences between these two applications of the design are discussed in greater detail below. The following design description applies to both applications of the design (i.e.,

QUESTIONNAIRE

Please rate the above listed teacher as to the following behaviors. Circle the corresponding number that best reflects the related behavior.

This teacher...

	Never	Seldom	Sometimes	Often	Always
is polite	1	2	3	4	5
is willing to help me with my work	1	2	3	4	5
is friendly	1	2	3	4	5
answers my questions	1	2	3	4	5
seems to like me	1	2	3	4	5
has interesting assignments	1	2	3	4	5
has fair assignments	1	2	3	4	5
seems to consider my viewpoints	1	2	3	4	5
is someone I would like to have as a teacher again	1	2	3	4	5
Other	1	2	3	4	5

Figure 5. Student and parent questionnaire regarding teachers.

QUESTIONNAIRE

Please rate the above listed student as to the following behaviors displayed in your class. Circle the corresponding number that best reflects the related behavior as you have witnessed it.

This student...

	Never	Seldom	Sometimes	Often	Always
is polite	1	2	3	4	5
finishes assignments on time	1	2	3	4	5
appropriately participates in class discussions	1	2	3	4	5
is easy to work with	1	2	3	4	5
is a pleasure to have in the classroom	1	2	3	4	5
appears interested in learning	1	2	3	4	5
displays appropriate social skills	1	2	3	4	5
is someone I would like to have in my classroom again	1	2	3	4	5
Other	1	2	3	4	5

Figure 6. Teacher questionnaire regarding students.

QUESTIONNAIRE

Please rate the level of importance of proper use of the following social skills. Circle the corresponding number that best reflects the importance you place in students using the following social skills appropriately.

The student should:

	Never	Seldom	Sometimes	Often	Always
follow instructions appropriately	1	2	3	4	5
get adult's attention appropriately	1	2	3	4	5
accept consequence/criticism appropriately	1	2	3	4	5
make requests appropriately	1	2	3	4	5
accept "no" for an answer appropriately	1	2	3	4	5
disagree appropriately	1	2	3	4	5
apologize appropriately	1	2	3	4	5
give compliments appropriately	1	2	3	4	5

Figure 7. Student, teacher, and parent questionnaire regarding their opinion of the eight social skills emphasized in the Prevention Plus class.

across subjects and across settings). When the description applies to just one of the applications, it is noted by placing either across subjects or across settings in parenthesis after the passage.

The across-subjects and across-settings multiple-baseline designs consisted of measuring and recording each student's behavior (the primary dependent variable measures) in all seven classes a minimum of twice per week in each class for all students. The measurement continued at this rate throughout the experiment. Prior to beginning intervention with the first student (Angela), her behavior was recorded for at least three consecutive days in the class where the intervention began. This was done to reflect a pattern of Angela's behavior in the class immediately prior to intervention. After

intervention began, Angela's behavior was recorded daily until a stable pattern (trend, level, or variability) of behavior had been established (a minimum of 3 days). After stability was demonstrated, Angela's behavior continued to be measured in this first class on the measurement schedule. On the day the intervention began, Angela's behavior was measured in all of her classes. This was to help investigate if the intervention in one class had any effect on Angela's behavior in her other classes (across settings). During this initial intervention with Angela, all other students continued to have their behavior measured in their classes according to the measurement schedule. This helped to demonstrate that the various students' behaviors were independent of one another. After Angela demonstrated stable behavior, intervention began with another student (Robert) in one of his classes. The measuring sequence was the same for Robert as it had been for Angela. The above intervention process continued for each of the five students. Once the students began the generalization process in one class, other classes were added in the same manner as the first. As intervention was added to additional classes, the student's behavior in prior classes continued to be measured. This helped to determine if there was any spontaneous generalization occurring in nonintervention classes and if the behaviors were maintaining in the classes where intervention had already taken place.

Description of the Phases of This Experiment

Baseline

Baseline data were collected in each of the students' classes (including the Prevention Plus class) while the students were being taught the eight social skills and

modeling their use in the Prevention Plus class. When intervention began in one class, baseline measurement continued in all other classes.

Treatment

The treatment phase began for each student in each class after the student had reached the criteria for that move, as explained in the independent variable section. The only programmed changes at this time were for the student to begin carrying and marking the self-management form in the new class and that the regular class teacher would mark her rating on the student's form and possibly give the student unsolicited feedback. Also, if the student and teacher ratings did not match, the student discussed with the teacher his or her perception of why their ratings did not match, and the teacher gave feedback as per the technique described in the independent variable section.

Follow-up

Data continued to be recorded in the students' previously selected classes as they added new classes to the programmed generalization process. Students were instructed that they must maintain behaviors in these classes if they were to receive the points and trip to the amusement park.

RESULTS

Prior to beginning the programmed generalization intervention, each student had to successfully emit and maintain correct use of social skills within the 80 to 100% range and decrease off-task behavior within the range of 0 to 20% in the Prevention Plus class. Once this criterion was met, students commenced self-rating with teacher matching in one regular class, then added classes one at a time. Data for each student and each class where intervention occurred are displayed in a graphic format indicating each phase of the multiple baseline studies. Each student's behavior was analyzed by examining changes in trend, level, and variability during both the baseline and intervention phases for each class. Comparisons were calculated between subjects for each leg of the multiple baseline and within subjects for each intervention phase. Data were analyzed for any possible pattern of generalization occurring to other class settings prior to those classes being programmed for generalization. The mean, mode, median, and range are displayed in tables for each student and class where intervention occurred and are analyzed to detect any significant changes. Two of the five students generalized to all of their classes. Of the three students who did not generalize to all classes, data where generalization occurred are presented with graphs. Other classes are discussed in narrative form.

In an analysis of data from an across-subjects/across-settings multiple-baseline design, the baseline data are the basis on which to predict at what level the behavior would be in the future if an intervention did not occur. This predicted level of behavior is

compared to the level of behavior recorded after intervention. It is this difference that displays the effect of the intervention. The predicted level of behavior (for the intervention condition) and the actual level of behavior after intervention was implemented are compared.

Five Students

Figure 8 depicts a multiple baseline across students and shows the effect of the implementation of the generalization program (i.e., students carrying their self-management forms into the first class setting other than the Prevention Plus class). In Figure 8, as with the subsequent figures for each student, the data for the social skills (Following Instructions, Accepting "No" for an Answer, Accepting Criticism/Feedback, and Getting Teachers Attention) have been condensed into 1 data point for each day. Table 7 presents measures of central tendency and changes, along with ranges, for all five students during baseline and intervention. Each student displayed a change of level for both percentage of off-task behavior and percentage of correct social skills use after intervention began.

The mean, mode, and median scores for Angela, Robert, Joe, and Ken improved substantially for both off-task behavior and social skills use. Only Bill showed minimal gain. As with Bill's other classes where intervention occurred, he showed the least improvement of all the students (Figure 13, shown later). After the termination of this experiment, it came to my attention that on or about the 60th day, Bill began to be

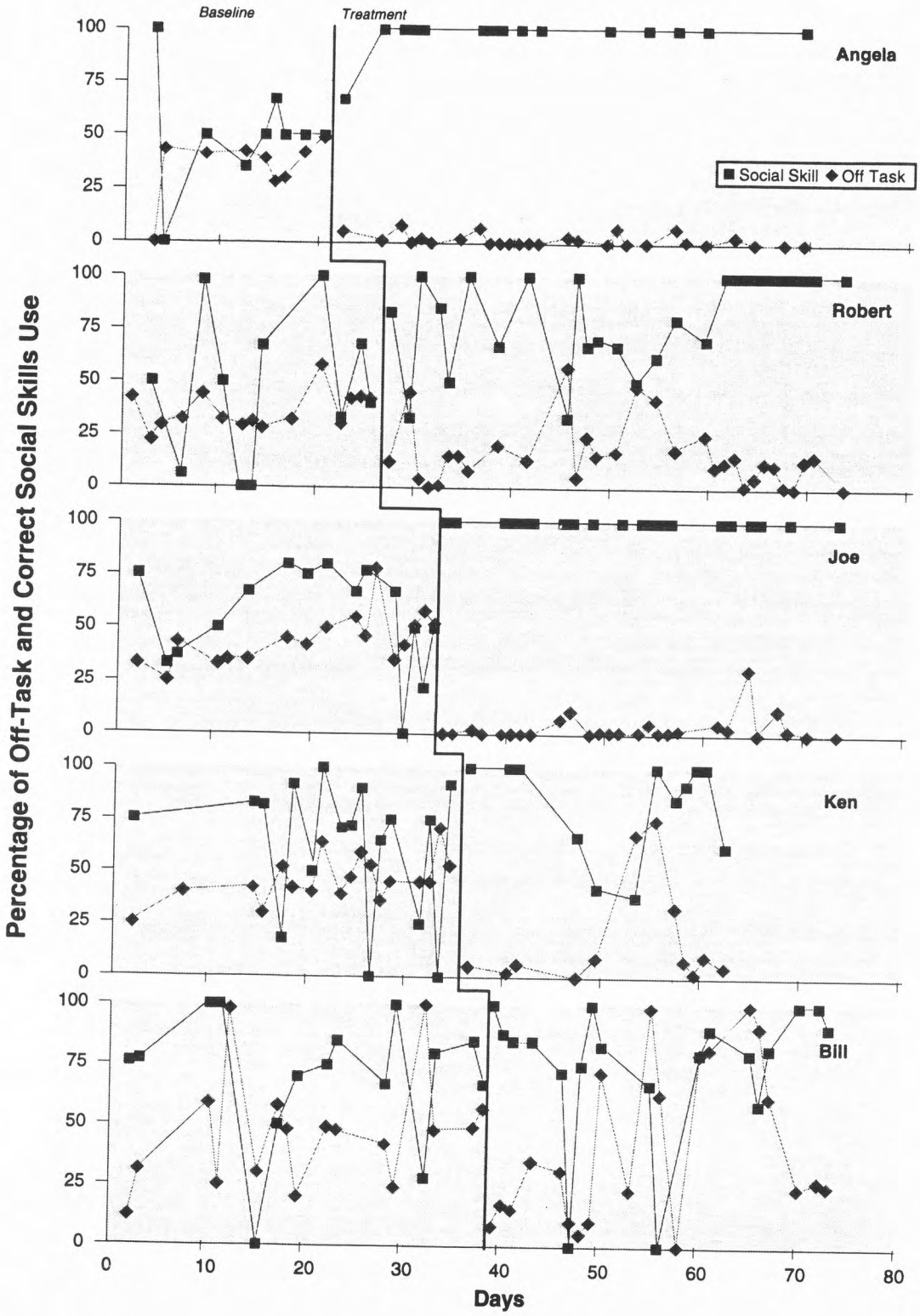


Figure 8. Percentage of off-task behavior and correct use of social skills in the first generalization class for all subjects.

Table 7

Comparison of Statistical Data for All Students

	Off-task				Social skills use			
Student	Mean	Mode	Median	Range	Mean	Mode	Median	Range
Angela								
Baseline	35	42	41	0-49	50	50	50	0-100
Intervention	2	0	0	0-8	98	100	100	67-100
Change	-33	-42	-41		+48	+50	+50	
Robert								
Baseline	35	43	33	12-58	51	0	50	0-100
Intervention	16	15	15	0-58	83	100	100	33-100
Change	-19	-28	-18		+30	+100	+50	
Joe								
Baseline	45	42	45	27-79	55	50	67	0-80
Intervention	4	0	2	0-22	100	100	100	--
Change	-41	-42	-43		+45	+50	+33	
Ken								
Baseline	46	45	45	25-71	63	75	75	0-100
Intervention	19	2	7	0-75	81	100	92	38-100
Change	-27	-43	-38		+18	+25	+17	
Bill								
Baseline	48	49	48	12-100	71	100	75	0-100
Intervention	43	35	35	0-100	76	100	83	0-100
Change	-5	-14	-13		+5	0	+8	

sexually molested by his sister. This abuse may have been a factor in Bill's poor performance after the 60th day.

While Angela, Robert, Joe, and Ken all displayed a substantial decrease in variability in social skills behavior, as illustrated by the difference in ranges across conditions, Angela and Joe also had a decrease of variability for off-task behavior. Though Robert, Ken, and Bill had a slight increase in variability for off-task behavior and the higher end of the range increased or remained the same, the lower end of the range was reduced to zero for each student. It should be remembered that zero off-task behavior was the ideal score.

Angela and Joe showed a dramatic change in level for both behaviors. Joe immediately improved to 100% correct social skills use and remained at 100% for the remainder of the experiment, and Angela had one day at 67% before improving to and remaining at 100% for the remainder of the experiment. Their level of off-task behavior reduced to near zero and, except for one overlapping data point of Joe's, remained at this reduced level for the remainder of the experiment.

Immediately after intervention, Robert showed an increasing trend for social skills for approximately 20 days, followed by a decreasing trend for approximately 10 days, after which he had a change in level to 100% correct social skills use that continued for the remainder of the experiment. His off-task behavior showed a decrease in level which, except for six overlapping data points, remained at that reduced level throughout the remainder of the experiment.

Much like Robert, Ken had a period of approximately 10 days in the middle of the intervention phase where his behaviors returned to a level similar to baseline. Immediately after intervention began, his behaviors changed to 100% social skills use and near zero off-task behavior. After the brief return to baseline-like behaviors, Ken once again experienced a level change similar to those shown immediately after intervention began. Though his last data point for social skills returned to near 70, his off-task behavior remained low. Ken moved to a new school prior to the completion of this experiment. At the point when he left, it appears that he may have been developing a pattern of fluctuating behavior. Given that a behavior pattern may have existed, he still showed an overall improvement from baseline; only three off-task data points overlapped, and the variability of social skills use was reduced.

Bill immediately showed a change in level and variability for both social skills use and off-task behavior. After the initial 4 days, his level of social skills use returned to near baseline levels, but the variability remained less after intervention than it had been during baseline conditions. Though the level of his off-task behavior showed an immediate decrease, after approximately the 12th day of intervention, his off-task behavior increased to rates higher than originally displayed during baseline conditions.

Figures 9 through 13 depict a multiple baseline across settings for each student and show the effect of the treatment implementation (students carrying their self-management form into different class settings). Angela had treatment intervention occur in all six of her class settings, Robert had treatment intervention occur in all five of his class settings, both Joe and Bill had treatment intervention occur in four of six class

settings, and Ken had treatment intervention occur in three of six class settings prior to his moving to a different school district. Given that these were challenging students with a history of many years of aberrant behavior and that they were failing in most classes prior to the study, the variability should not be surprising and the overall improvement is positive.

Angela

In each of Angela's six classes where intervention occurred, she displayed a change of level for both her percentage of correct social skills use and percentage of off-task behavior after treatment was implemented (see Figure 9). After intervention, when Angela was self-managing in her classes, her mean scores improved as much as 37% (math and history) for off-task behavior and had an improvement of up to 48% (English) for her correct use of social skills (Table 8).

The mean, mode, and median scores for all of Angela's classes improved substantially for both off-task behavior and social skills use. In English, history, reading, and physical education, Angela raised her level of correct use of social skills to 100% after intervention began and remained at that level throughout the experiment. Also, her off-task behavior lowered to near zero and remained at that level for the remainder of the experiment in each of these class settings. In math and science, Angela also displayed high levels of appropriate social skills, except one data point in both math and science that fell below the 100% level after she had reached that level and sustained it for some time. In both of these classes, the level of her use of social skills returned to 100% and

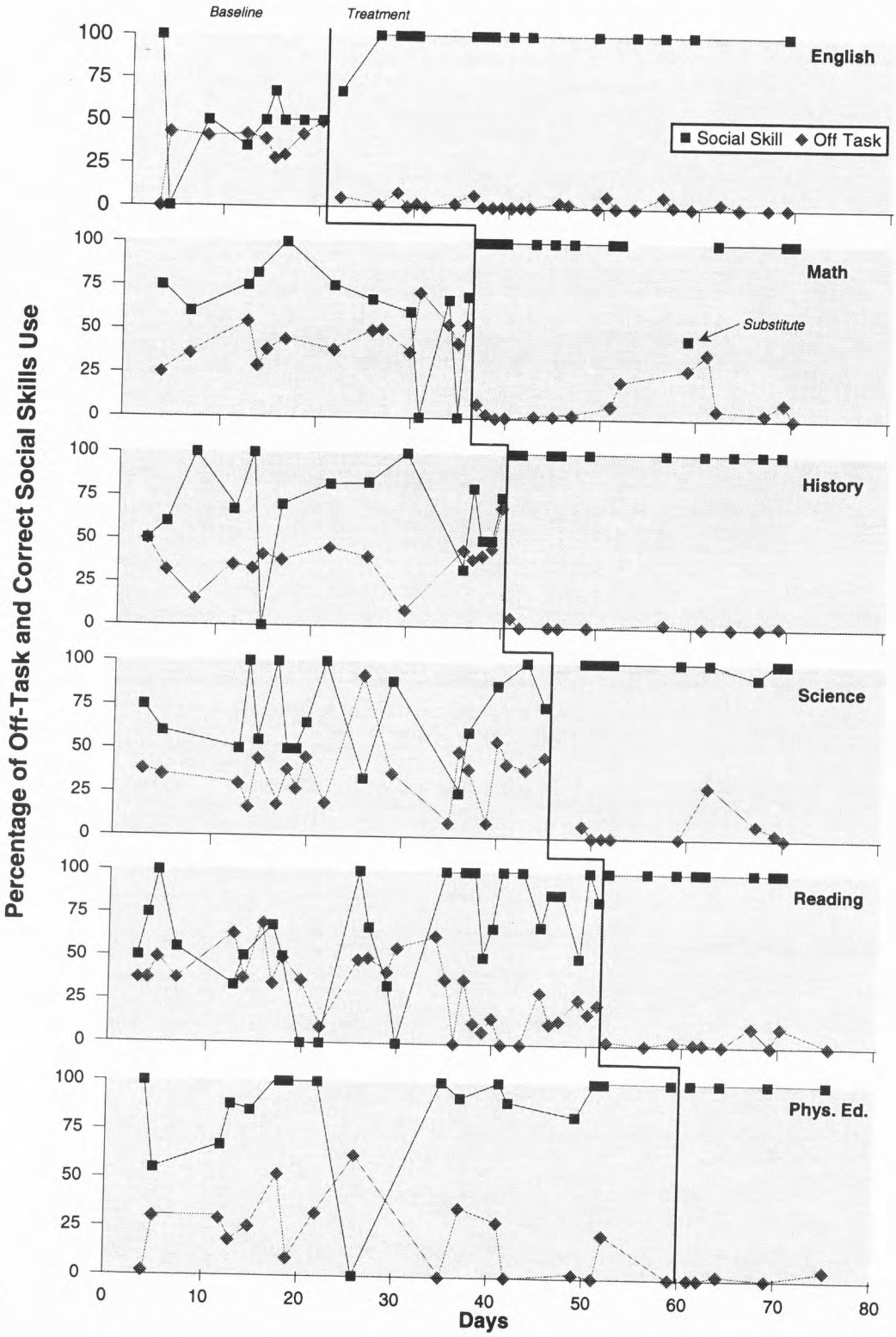


Figure 9. Percentage of off-task behavior and correct use of social skills displayed by Angela in all six of her classes.

Table 8

Comparison of Statistical Data for Angela's Classes

Class	Off-task				Social skills use			
	Mean	Mode	Median	Range	Mean	Mode	Median	Range
English								
Baseline	35	42	41	0-49	50	50	50	0-100
Intervention	2	0	0	0-8	98	100	100	67-100
Change	-33	-42	-41		+48	+50	+50	
Math								
Baseline	45	38	43	25-72	61	67	67	0-100
Intervention	8	2	2	0-37	96	100	100	45-100
Change	-37	-36	-41		+35	+33	+33	
History								
Baseline	38	42	42	9-69	68	100	71	0-100
Intervention	1	0	0	0-5	100	100	100	--
Change	-37	-42	-42		+32	0	+29	
Science								
Baseline	36	38	38	8-92	69	50	67	25-100
Intervention	5	0	1	0-5	99	100	100	92-100
Change	-31	-38	-37		+30	+50	+33	
Reading								
Baseline	32	38	37	0-69	66	100	67	0-100
Intervention	3	0	1	0-12	100	100	100	
Change	-29	-38	-36		+34	0	+33	--
Phys. ed.								
Baseline	20	0	22	0-62	86	100	100	0-100
Intervention	2	0	0	0-6	100	100	100	
Change	-18	0	-22		+14	0	0	--

remained at that level. The dramatic drop in her performance in math class occurred on the day when a substitute teacher was present.

Though Angela occasionally used appropriate social skills at a 100% level during baseline conditions in each of her six class settings, only after intervention did social skills use increase to a 100% level for each class and consistently remain there, virtually eliminating variability. Additionally, in reading and physical education, there appeared some natural generalization occurring prior to intervention, but after intervention variability was reduced to zero.

After intervention began, off-task behavior dropped to near zero and remained at that level throughout the experiment for all classes except math and science. In the math class, two data points were higher than 25%, and in science, one data point reached that level. Of the two high data points in math, one occurred during the day the substitute teacher was present. Both classes showed a return to near-zero levels and remained there for the rest of the experiment.

As with the use of social skills, there appeared to be some natural generalization occurring with a reduction of off-task behavior in reading and physical education. In both of these classes, prior to intervention, there appeared to be a downward trend developing for off-task behavior (see Figure 9). Though this downward trend was occurring during the extended baseline, it was only after intervention that the behaviors reduced to and consistently remained at or near zero.

Robert

Figure 10 displays Robert's data and Table 9 summarizes the data. Robert was limited to five class settings where intervention could occur. On day 38, Robert's math teacher stated that he would no longer allow Robert to attend math class. At that time, Robert had not begun treatment intervention in this math class. The data collected from this class prior to his removal indicated his social skills use had a mean of approximately 60% with a range of 33 to 100% and his off-task behavior had a mean of approximately 45% with a range of 30 to 59%. His behaviors in this class were within the range of behaviors he displayed in his other classes. Addressing the issue of Robert's expulsion from his math class, the school administrator placed Robert in a self-contained class for math beginning on day 42. As no previous observations had occurred in this self-contained classroom for any student, I decided not to measure Robert's behavior in this class, as it might alert him to the fact that he was being singled out for observation in this and other classes.

In each of Robert's five different class settings, the level of correct use of social skills behavior increased and eventually stabilized, and the level of off-task behavior decreased and eventually stabilized after treatment implementation (see Figure 10). After intervention, Robert's mean scores improved as much as 45% (TLC) for off-task behavior and had an improvement of up to 51% (history) for his correct use of social skills (Table 9). In each of Robert's five classes, the mean, mode, and median scores

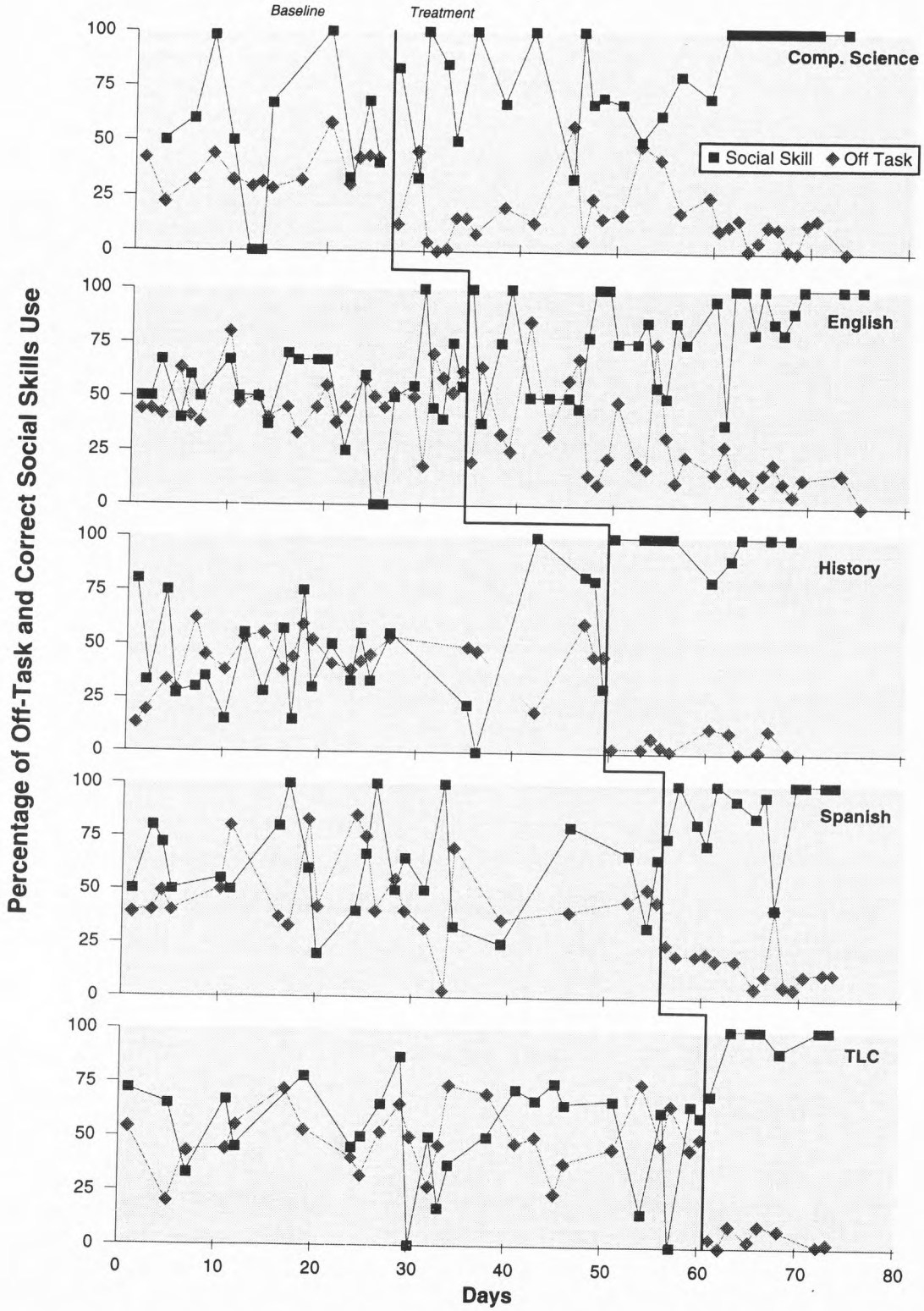


Figure 10. Percentage of off-task behavior and correct use of social skills displayed by Robert in all five of his classes.

Table 9

Comparison of Statistical Data for Robert's Classes

	Off-task				Social skills use			
Class	Mean	Mode	Median	Range	Mean	Mode	Median	Range
Comp. science								
Baseline	35	43	33	12-58	51	0	50	0-100
Intervention	16	15	15	0-58	83	100	100	33-100
Change	-19	-28	-18		+32	+100	+50	
English								
Baseline	48	45	46	18-80	52	50	50	0-100
Intervention	27	11	20	0-85	78	100	85	38-100
Change	-21	-34	-26		+26	+50	+35	
History								
Baseline	43	39	45	12-62	46	33	35	0-100
Intervention	4	1	1	0-12	97	100	100	80-100
Change	-39	-38	-44		+51	+67	+65	
Spanish								
Baseline	48	39	42	3-86	61	50	57	20-100
Intervention	16	20	16	3-41	88	100	98	42-100
Change	-32	-19	-26		+27	+50	+41	
TLC								
Baseline	50	45	48	20-75	53	67	67	0-87
Intervention	5	10	3	0-10	94	100	100	70-100
Change	-45	-35	-45		+41	+33	+33	

improved substantially for both off-task behavior and social skills use. Additionally, the range of variability was reduced for all behaviors in all classes.

In computer science, Robert's off-task behavior decreased following intervention and, except for six scattered overlapping data points, remained at that reduced level throughout the remainder of the experiment. After intervention, his social skills use remained somewhat variable, though with less of a bounce and more scores at a 100% level. There was an overall upward trend, which reached 100% on about day 60 and remained at that level for the remainder of the experiment.

After intervention in Robert's second class (English), his social skills use remained within the range of baseline scores for approximately 10 days, while during that same time off-task behavior increased in variability. After that initial 10 days, social skills use began an upward trend, eventually stabilizing in the 80 to 100% range, and the off-task behavior decreased in variability and level. Both behaviors remained at those levels throughout the remainder of the experiment.

Correct use of both social skills and off-task behavior made a dramatic change in level following intervention in history and TLC. Except for two data points in history and one in TLC, social skills use increased to a 100% level and remained there for the rest of the experiment. In both classes, off-task behavior reduced to zero or near zero and remained at that level throughout the experiment.

Robert's behavior in his Spanish class began an immediate upward trend for correct use of social skills and an immediate downward trend for off-task behavior after intervention began. Within approximately 10 days, the behaviors leveled out to 100% for

social skills use and near zero for off-task behavior. Each of these behaviors consistently remained at these new levels throughout the experiment.

Joe

In each of Joe's four classes, the level of correct use of social skills increased and eventually stabilized at the increased level, and the level of off-task behavior decreased and eventually stabilized at the decreased level after treatment was implemented (see Figure 11). After intervention, Joe's mean scores improved as much as 41% (English) for off-task behavior and had an improvement of up to 45% (English) for his correct use of social skills (Table 10). Except for history, the mean, mode, and median scores improved substantially for both off-task behavior and correct use of social skills, and the range of variability was reduced for all behaviors in all classes. Though the mode and median scores for off-task behavior in history changed little, the variability of off-task behavior and each of the scores for social skills use improved substantially.

In Joe's first class where intervention occurred (English), his behavior changed in level dramatically. His correct use of social skills immediately increased to a 100% level and never varied throughout the remainder of the experiment. Off-task behavior immediately decreased to zero and, except for two overlapping data points, remained at or near zero for the remainder of the experiment. In this class, Joe was the only one of all the students who showed an immediate change in behavior to levels never reached during baseline.

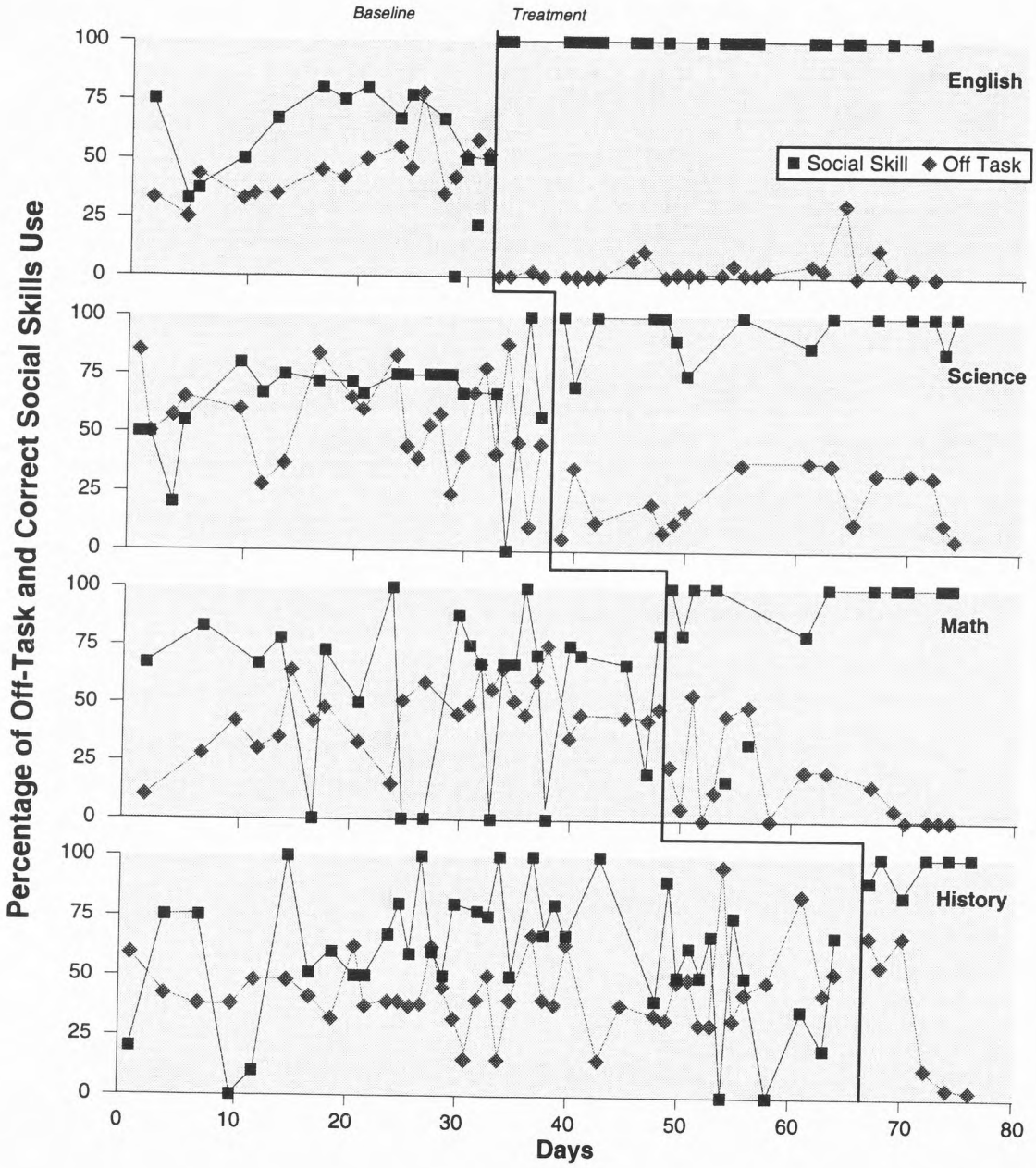


Figure 11. Percentage of off-task behavior and correct use of social skills displayed by Joe in all four of his classes.

Table 10

Comparison of Statistical Data for Joe's Classes

Class	Off-task				Social skills use			
	Mean	Mode	Median	Range	Mean	Mode	Median	Range
English								
Baseline	45	42	42	27-79	55	67	67	0-80
Intervention	4	0	2	0-22	100	100	100	--
Change	-41	-42	-40		+45	+33	+33	
Science								
Baseline	55	59	51	10-89	64	75	69	0-100
Intervention	22	5	19	5-39	94	100	100	71-100
Change	-33	-54	-21		+30	+25	+31	
Math								
Baseline	46	42	46	10-75	57	67	67	0-100
Intervention	16	0	10	0-55	85	100	100	18-100
Change	-30	-42	-36		+28	+33	+33	
History								
Baseline	43	38	40	15-96	61	50	67	0-100
Intervention	34	2	33	2-65	96	100	100	85-100
Change	-9	-36	-7		+35	+50	+33	

In science, there was an immediate change in level for correct use of social skills and off-task behavior after intervention began. Though correct use of social skills remained at this new level and relatively stable throughout the remainder of the experiment, after approximately 10 days, off-task behavior returned to baseline levels, culminating in a downward trend for the remainder of the experiment.

Joe's math class data were similar to those in science. An immediate level change in both correct use of social skills and off-task behavior was followed by a brief period of variability, which returned to a 100% level for correct use of social skills and a 0% level for off-task and remained at these levels for the remainder of the experiment.

In Joe's last class where intervention occurred (history), correct use of social skills increased in level immediately after intervention and remained there throughout the remainder of the experiment. Off-task behavior remained at baseline levels for 3 days before dramatically decreasing to and remaining at a level near zero.

Though Joe was ready to begin intervention into another class, due to the school semester ending, this never occurred. In his computer science class, he had numerous sessions when social skills use was at a 100% level, but almost as many when correct use of social skill was at a 0% level. This variability bounce continued throughout the experiment. On the other hand, his behavior in reading appeared to indicate some natural generalization occurring. On approximately day 50, he began a decreasing trend of off-task behavior which, by the end of the experiment, was hovering near zero. At the same time, his correct use of social skills increased slightly in level and variability was reduced significantly. The teacher of Joe's reading class was the same teacher that he had

for English. The English class was the first class where intervention occurred, and it was the class where Joe was showing the most consistent behavior change. Having the same teacher in reading as he had in his most successful intervention class may have had been an influencing factor in the apparent natural generalization.

Ken

Due to a move to a different school district during the experiment, Ken had limited time to begin intervention in his classes. Day 64 was the last day Ken attended school and participated in the experiment. Though he began intervention in three class settings, data were collected in only 2 days of his last class where intervention occurred. In each of Ken's first classes where intervention occurred, the level of correct use of social skills increased and eventually stabilized at that increased level, and the level of off-task behavior decreased and eventually stabilized at that decreased level after treatment implementation (see Figure 12). Of these two classes, after intervention, Ken's mean scores improved as much as 30% (English) for off-task behavior and had an improvement of up to 21% (English) for his correct use of social skills (Table 11). The mean, mode, and median scores improved substantially for both off-task behavior and correct use of social skills, and the range of variability was reduced for all behaviors in both classes.

Math was the first class where intervention occurred. Immediately after intervention, correct use of social skills increased to a 100% level and off-task behavior

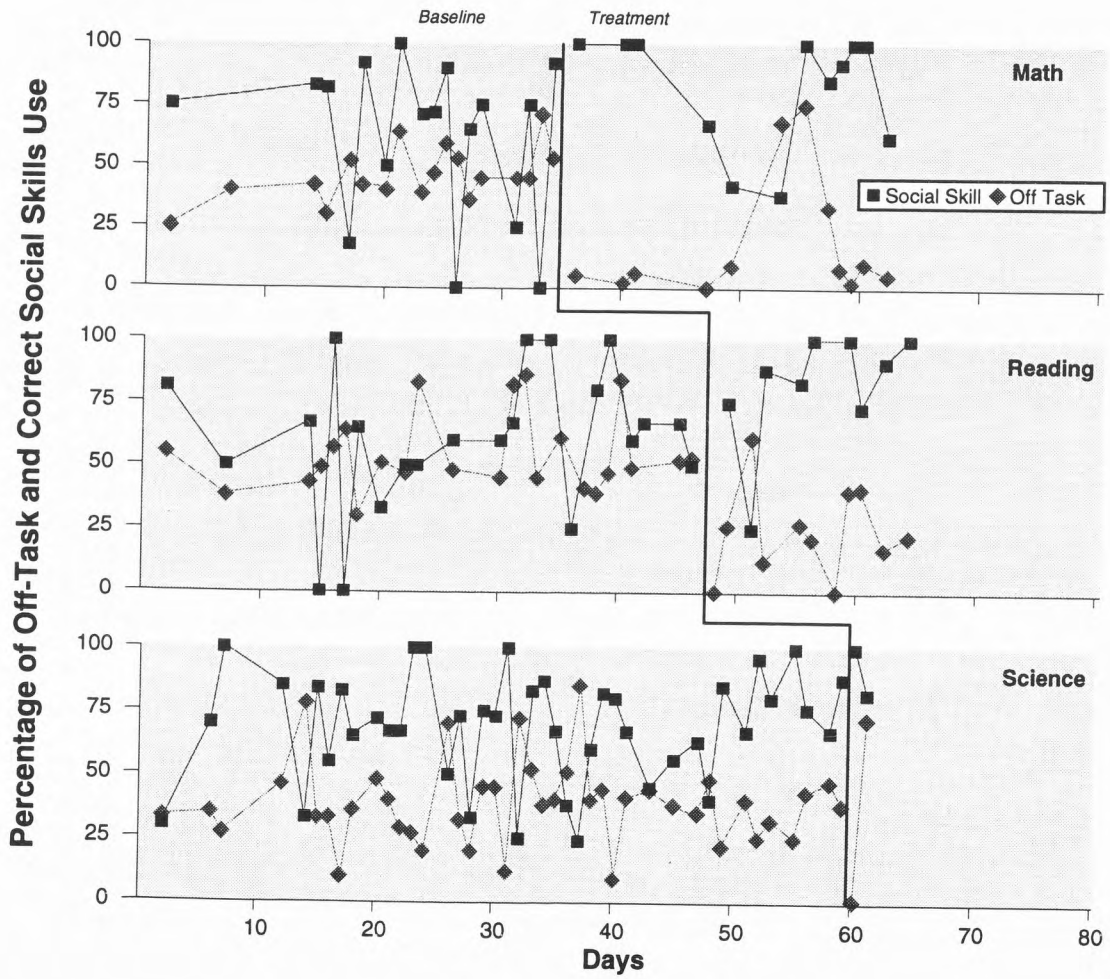


Figure 12. Percentage of off-task behavior and correct use of social skills displayed by Ken in all three of his classes.

Table 11

Comparison of Statistical Data for Ken's Classes

Class	Off-task				Social skills use			
	Mean	Mode	Median	Range	Mean	Mode	Median	Range
Math								
Baseline	46	45	45	25-65	63	75	75	0-100
Intervention	19	2	9	0-75	81	100	85	38-100
Change	-27	-43	-36		+18	+25	+10	
Reading								
Baseline	55	49	52	30-87	61	67	63	0-100
Intervention	25	0	22	0-61	82	100	88	25-100
Change	-30	-49	-30		+21	+33	+25	
Science								
Baseline	39	32	40	9-85	68	67	70	25-100
Intervention	36	--	--	0-72	91	--	--	82-100
Change	-3	--	--		+23	--	--	

decreased to a level near zero. After day 50, there was a period of approximately 8 days when behaviors returned to baseline levels. This was followed by a return to the high level of correct use of social skills and a low level of off-task behavior, both of which continued throughout the experiment.

In reading, there was an immediate change in level for off-task behavior and an increasing trend in correct use of social skills. Except for day 52, when correct use of social skills decreased sharply, the increasing trend continued throughout the reminder of the experiment. As with correct use of social skills, on day 52, off-task behavior increased sharply, then returned to a lower level. Other than day 52, only two data points overlapped with baseline data.

Of the remaining four classes, intervention was begun for only 2 days in science, prior to Ken's move from school, and no significant changes were noted. Behaviors in both English and Spanish were consistent throughout the entire experiment. English had an off-task mean of approximately 55% with a range of 25% to 90%, and correct use of social skills had a mean of approximately 67% with a range of 0% to 100%. Spanish had an off-task mean of approximately 45% with a range of 8% to 85%, and correct use of social skills had a mean of approximately 50% with a range of 0% to 100%.

On day 37, Ken began a new section of the TLC class with a different teacher. Prior to changing to this new section, his off-task behavior had a mean of approximately 50% with a range of 25% to 80%, and correct use of social skills had a mean of approximately 67% with a range of 20% to 100%. After this section change, his off-task behavior had a mean of approximately 20% with a range of 0% to 30% and correct use of social skills had a mean of approximately 98% with a range of 80% to 100%. These data tend to indicate that the relationship Ken had with this new teacher may have played a significant role in what appears to be generalization of skills.

Bill

Bill showed improvement in each of his four different classes after treatment implementation (see Figure 13). After intervention, Bill's mean scores improved as much as 47% (history) for off-task behavior and had an improvement of up to 44% (history) for his correct use of social skills (Table 12). Though he did not achieve gains

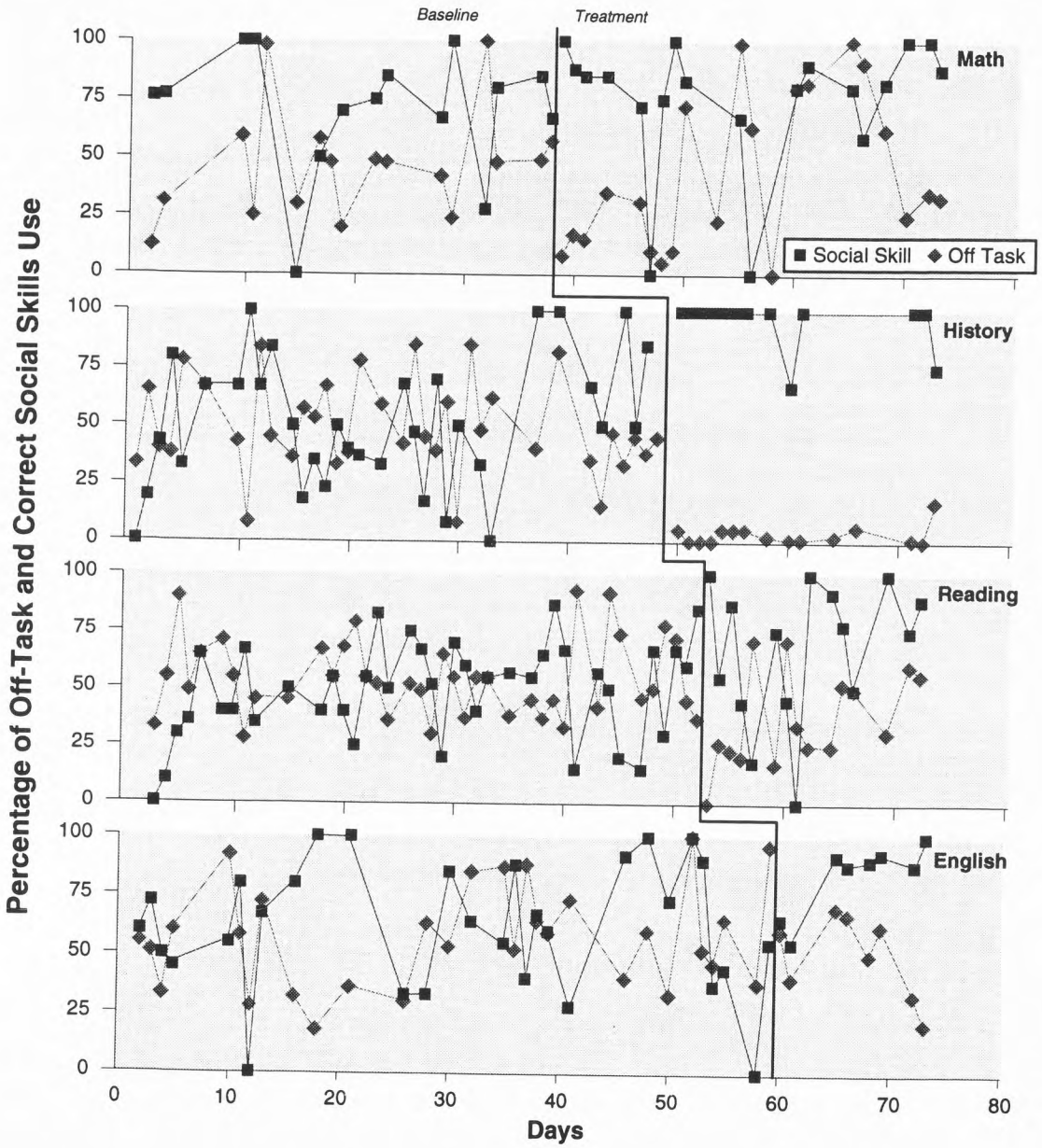


Figure 13. Percentage of off-task behavior and correct use of social skills displayed by Bill in all four of his classes.

Table 12

Comparison of Statistical Data for Bill's Classes

	Off-task				Social skills use			
Class	Mean	Mode	Median	Range	Mean	Mode	Median	Range
Math								
Baseline	48	49	49	12-	71	100	78	0-100
Intervention	43	5	33	100	76	100	85	0-100
Change	-5	-44	-16	0-100	+5	0	+7	
History								
Baseline	50	45	45	7-86	52	67	50	0-100
Intervention	3	0	1	0-17	96	100	100	67-100
Change	-47	-45	-44		+44	+33	+50	
Reading								
Baseline	53	55	52	29-90	49	67	53	0-90
Intervention	38	25	31	0-72	67	100	75	0-100
Change	-15	-30	-21		+18	+33	+22	
English								
Baseline	56	52	55	19-92	62	100	62	0-100
Intervention	38	25	31	0-72	67	100	75	0-100
Change	-18	-27	-24		+5	0	+13	

as great as those of the other four students, his gain in history was substantial and his gains in reading and English were large enough to note an improvement.

In math, Bill showed an increase in the level of correct use of social skills and a decrease in the level of off-task behavior immediately after intervention began. On approximately the 51st day, his correct use of social skills and off-task behavior increased in variability. After the 60th day, his correct use of social skills was reduced in variability and was at a fairly high level, and his off-task behavior increased dramatically. On the 71st day, his correct use of social skills use increased and remained in the 90 to 100% level and his off-task behavior decreased, became more stable, and remained at a 20 to 30% level. A similar pattern of behavior was displayed in four additional classes. As mentioned earlier, the situation at home between Bill and his sister may have been a factor in this erratic behavior. Bill was the only student who did not show a significant change in mean, mode, median, and range in the first class setting of intervention.

Bill's behavior showed a dramatic change in history after intervention began. Correct use of social skills increased to a 100% level and, except for two data points, remained at this level for the rest of the experiment. His off-task behavior decreased to a level of zero or near zero and only once rose above the 10% range. The mean, mode, and median scores showed substantial improvement, and the variability was reduced greatly.

Bill's off-task behavior decreased in his reading class immediately after intervention. Much like math, his off-task behavior began an increasing trend after day 50, but, unlike math, it never returned to the lower level. Though there was no level change or trend change of his correct use of social skills, the variability increased

substantially. His low-end scores remained about where they had been during baseline, but he reached 100% more often, which is reflected by the increase in bounce or variability.

Bill began intervention in his English class on day 60. No noticeable behavior change occurred until day 66. At that time, his social skills use increased to a 90 to 100% level and remained there for the rest of the experiment, and his off-task behavior began a downward trend. This downward trend continued throughout the remainder of the experiment.

Due to the semester ending, Bill did not have the opportunity for intervention in his remaining two classes. In his physical education class, Bill appeared to have some generalization occurring. The first 50 days, his behavior had a wide range of variability with an off-task mean of approximately 45% and range of 0 to 70%, and correct use of social skills had a mean of approximately 67% with a range of 0 to 100%. During the last 25 days of the experiment, Bill had an off-task mean of approximately 5% with a range of 0 to 35%, and correct use of social skills had a mean of approximately 98% with a range of 60 to 100%.

Similar to Ken, Bill began a new section of the TLC class with a different teacher. Bill began in this new section on day 47. As with Ken, Bill's behavior also showed a marked improvement in both correct use of social skills and off-task behavior after beginning in this new section. Prior to Bill changing to this new section, his off-task behavior had a mean of approximately 45% with a range of 30 to 70%, and correct use of social skills had a mean of approximately 50% with a range of 0 to 100%. After

changing to this section, his off-task behavior had a mean of approximately 20% with a range of 0 to 50%, and correct use of social skills had a mean of approximately 95% with a range of 50 to 100%. These data tend to indicate that the relationship Bill had with this new teacher may have played a significant role in what appears to be generalization of skills.

On Time for Class/Grade Point Averages

Results of additional measures included percentage of being on time for class and grade point averages for each student. Data for Ken were not obtained, as his records were inadvertently removed from the school's database after he withdrew from school. Being on time for class was not a problem behavior for Robert and Joe. Prior to beginning intervention, they were at a 90 to 100% level, and after intervention, they remained at that level. Angela had two classes in which, prior to intervention, she was below a 90 to 100% level (70% and 80%). After intervention, her on-time behavior improved to a 90 to 100% level in both these classes. Bill also had two classes in which, prior to intervention, he was below a 90 to 100% level (89% and 89%). After intervention, his on-time behavior improved to a 100% level in both these classes.

Student academic improvement was not directly addressed by the intervention, but it seemed worth noting changes that occurred. The grade point averages (GPAs) remained the same for Angela, while the other three students all showed some improvement: Robert's GPA increased by 1.14, Joe's GPA increased by 0.75, and Bill's GPA increased by 0.25.

Social Validity Ratings

Tables 13 through 16 show the pre- and postscores of students rating teachers, teachers rating students, parents rating teachers, and all of the above rating the eight social skills that were taught in the Prevention Plus class. All student and parent ratings of teachers showed improvement between pre- and postmeasures. Teachers' ratings of students increased for all students except Joe, who had received the highest teacher rating in the preintervention measure. The postmeasures of the importance of the social skills usage were rated at the highest level by all students, teachers, and parents.

Table 13

Average Pre- and Postratings of Teachers by Students

	Student			
This teacher:	Angela Pre-Post	Robert Pre-Post	Joe Pre-Post	Bill Pre-Post
is polite	4.7-4.9	5.0-5.0	5.0-5.0	4.0-4.3
is willing to help me with my work	4.7-4.9	4.9-5.0	5.0-5.0	4.2-4.8
is friendly	4.9-5.0	5.0-5.0	5.0-5.0	4.0-4.5
answers my questions	5.0-5.0	4.9-5.0	5.0-5.0	4.0-4.5
seems to like me	4.7-5.0	4.7-5.0	5.0-5.0	3.5-4.5
has interesting assignments	4.4-4.7	5.0-5.0	5.0-5.0	3.7-4.3
has fair assignments	4.1-4.7	5.0-5.0	4.8-5.0	4.0-4.5
seems to consider my view points	4.4-4.9	4.9-5.0	5.0-5.0	4.2-4.3
is someone I would like to have as a teacher again	4.7-5.0	4.9-5.0	5.0-5.0	4.2-4.5
Total	4.6-4.9	4.9-5.0	4.9-5.0	4.00-4.9

Table 14

Average Pre- and Postratings of Students by Teachers

	Student			
This student:	Angela Pre-Post	Robert Pre-Post	Joe Pre-Post	Bill Pre-Post
is polite	4.0-4.7	3.3-3.8	3.8-4.0	3.1-3.6
finishes assignments on time	2.2-3.3	3.2-3.5	3.0-2.3	2.8-3.2
appropriately participates in class discussions	2.5-2.7	3.3-3.8	3.0-3.3	2.9-3.2
is easy to work with	3.3-4.2	3.0-3.8	4.0-3.8	2.6-3.4
is a pleasure to have in the classroom	3.7-4.5	3.2-4.1	3.8-3.5	2.6-3.2
appears interested in learning	2.3-2.8	3.0-3.3	3.0-2.3	3.0-3.2
displays appropriate social skills	3.7-4.2	2.9-3.9	3.6-3.8	2.8-2.8
is someone I would like to have in my classroom again	3.2-4.2	3.0-4.5	4.0-3.8	2.6-3.8
Total	3.1-3.8	3.1-3.8	3.5-3.3	2.8-3.3

Table 15

Pre- and Postratings of Faculty and Staff by Parents

	Parent of Student			
The faculty & staff members:	Angela Pre-Post	Robert Pre-Post	Joe Pre-Post	Bill Pre-Post
are polite	4.0 - 4.0	4.0 - 4.0	4.0 - 4.0	3.0 - 4.0
are willing to help my child	4.0 - 4.0	4.0 - 4.0	4.0 - 4.0	3.0 - 3.0
have said good things about my child	3.0 - 4.0	2.0 - 3.0	3.0 - 4.0	2.0 - 4.0
seem to understand my child's needs	4.0 - 4.0	3.0 - 4.0	3.0 - 3.0	2.0 - 4.0
have helped to increase my child's knowledge	4.0 - 4.0	4.0 - 4.0	4.0 - 4.0	3.0 - 4.0
are available to discuss my child's education	4.0 - 4.0	3.0 - 4.0	4.0 - 5.0	3.0 - 4.0
I would recommend this faculty/staff to others	4.0 - 4.0	3.0 - 4.0	3.0 - 4.0	2.0 - 4.0
Total	3.9-4.0	3.3-3.9	3.6-4.0	2.6-3.9

Table 16

Average Pre- and Postratings of Social Skills by Students, Teachers, and Parents

The student should:	Students Pre-Post	Teachers Pre-Post	Parents Pre-Post
Follow Instructions "appropriately"	5.0-5.0	4.8-5.0	5.0-5.0
Get Adult's Attention "appropriately"	4.8-5.0	4.4-5.0	5.0-5.0
Accept Consequence/Criticism "appropriately"	5.0-5.0	4.4-5.0	4.8-5.0
Make Requests "appropriately"	5.0-5.0	4.5-5.0	5.0-5.0
Accept "No" For An Answer "appropriately"	4.8-5.0	4.5-5.0	4.5-5.0
Disagree Appropriately "appropriately"	5.0-5.0	4.6-5.0	4.2-5.0
Apologize "appropriately"	5.0-5.0	4.6-5.0	5.0-5.0
Give Compliments "appropriately"	4.8-5.0	4.4-5.0	5.0-5.0
Total	4.9-5.0	4.5-5.0	4.8-5.0

DISCUSSION

This experiment analyzed the effects of a programmed generalization strategy using a student self-management procedure involving self-rating with teacher matching across subjects and across class settings for middle school (seventh and eighth grade) students. The across-subjects data indicate each student's correct use of social skills increased and off-task behavior decreased after the intervention was implemented. The fact that these behavior changes occurred only after the programmed generalization strategy was introduced suggests that other unknown factors were not responsible for the increase in correct use of social skill and decrease of off-task behavior. The across-settings findings indicate that, while generalization appeared to have occurred prior to intervention in some settings, generalization of the targeted behaviors occurred more consistently and more completely only after the self-rating/teacher matching intervention was introduced into the generalization classes. In addition, even when generalization did occur prior to intervention, it only occurred after intervention had been applied in a number of other settings first, indicating a possibility of some transfer of learning prior to intervention (this is discussed in more detail below). These results suggest that self-rating/teacher matching is an effective strategy to produce programmed generalization of learned social skills and to decrease off-task behavior.

These results support previous studies regarding the effectiveness of modeling, role-playing, behavioral rehearsal, performance feedback, and use of a token reinforcement program in helping students acquire classroom social skills and appropriate

on-task behavior during initial training (Clees, 1994; Lonnecker et al., 1994; Mathur & Rutherford, 1994; Rhode et al., 1983a; Sasso et al., 1990; Smith et al., 1992). In addition, these results support previous findings of the effectiveness of self-management and self-recording with matching by another person (teacher, peer) to facilitate generalization (Clees, 1994; Hoff & DuPaul, 1998; Rhode et al., 1983a; Smith et al., 1992).

This research also adds to prior findings in the self-management literature by focusing on students in secondary schools and extending the programmed generalization strategy in up to six different class settings with different teachers and classmates in each setting. Other studies addressed generalization measurement effects in only one or two additional settings at the elementary level where, in most cases, the same teacher was present in each generalization setting (Hoff & DuPaul, 1998; Lonnecker et al., 1994; Rhode et al., 1983a; Sasso et al., 1990). For example, Rhode et al. (1983a) examined the effectiveness of self-monitoring and teacher matching in a generalization setting consisting of four class periods per day. The difference between the Rhode study and the present study is that the Rhode study was done with elementary students and this study was done with middle school students. Also, in the Rhode study, the same teacher and classmates were present for all four classes and student behavior was measured in only one 60-minute period, rather than having a different teacher and classmates for each class period and measuring the students' behavior in all four classes.

For studies with secondary students, the generalization process was also extended to only one or two additional settings for each student (Clees, 1994; Mathur & Rutherford, 1994; Sasso et al., 1990; Smith et al., 1992). For example, though Smith et

al. (1992) used a very similar methodology as in this present study (a self-monitoring form with matching by a peer) for secondary students, the generalization strategy was carried out in only one additional setting. Clees, on the other hand, implemented the programmed generalization strategy to four additional class periods, but took data in only two settings, whereas in this experiment, the programmed generalization strategy was implemented in up to six different class settings and data were collected in all classes.

A multiple-baseline design cannot simultaneously be used to show both experimental effects and spontaneous generalization. Because of this, I used a multiple-baseline design across subjects to examine the functional relationship between student behavior and self-management. The multiple-baseline design across subjects was selected because baselines would likely be independent and show experimental effects. I used a multiple-baseline design across settings to see if any generalization would occur as a function of repeated use of the strategies, as opposed to needing the intervention. Though all the students were displaying high levels of social skills use and low levels of off-task behavior in the Prevention Plus class, there was a lack of generalization occurring in their other classes prior to the beginning of the programmed generalization intervention. For the most part, after the programmed generalization intervention began, generalization did not consistently occur in other classes without the self-rating intervention. However, some generalization occurred, which may be due to repeated use of the intervention in other classes. Without experimental controls and consistent data, no clear effects were substantiated.

Other Possible Effects

Other questions analyzed in this experiment were, Did the programmed generalization strategy affect students' academic grades or the percentage of classes that the student arrived on time? Additionally, the questions of students' rating of teachers, teachers' rating of students, parents' rating of faculty and staff, and each of the above individuals' ratings of the importance of the eight social skills were examined.

The grade point averages (GPAs) improved for three of the four students (Angela's GPA remained unchanged) during the second semester while the interventions were being implemented. These increases are worth noting, but the improvements were not large enough to claim them as an effect of the intervention. Though the change was minimal, several teachers commented that students were completing more assignments; however, data were not collected on assignment completion. If that were the case, perhaps improved grades might be a function of more completed assignments.

The students who were below 90% on time prior to intervention increased to the 90 to 100% range after intervention. This change may be credited to the extra point the students received on their self-management form for being on time. As students added more class settings through the programmed generalization strategy, the on-time points became a larger percentage of their daily total (e.g., at two classes of self-management, the on-time points were worth 8% of the possible total points, whereas at six class periods the on-time points were worth 20% percent of the possible total points). However, since

the students' on-time percentage was high during baseline, no experimental effects are claimed.

On the postintervention social validity questionnaires, all the respondents rated the importance of the social skills use at the highest rating (5) for each social skill, which is an average increase of 0.4 from the preintervention ratings. In the categories in which the students had rated their teachers at the highest rating of 5 in the premeasure, the rating remained at 5 in the postmeasure. In all other categories, the students rated their teachers higher on the postmeasure. The average increase in rating for those students was 0.4. As with the students, where the parents had rated the teachers at 5 in the premeasure, the rating remained at 5 in the postmeasure. In all other categories, the parents rated the teachers higher in the postmeasure, with an average increase of 1.2. I spoke with the students and parents at the end of the experiment, and in every case, they spoke highly of the teachers and staff and were pleased with the improvement in their own behavior (student) or their child's behavior (parent) both at school and at home. The higher rating, coupled with the students' and parents' positive comments, lend credence to the overall social validity of the procedures and outcomes.

The teachers rated Angela, Robert, and Bill as improving in each of the categories with an average improvement of a half point or better; however, the teachers rated Joe lower in almost every category. During interviews with the teachers, they spoke highly of all four students and had observed an improvement in student behavior. Yet, three of the four teachers who completed both the pre- and postquestionnaires gave Joe lower ratings on the postquestionnaire. When those three teachers were asked about this, they

stated they were not aware that they had rated Joe lower on the postquestionnaire than the prequestionnaire. It is not clear why this anomaly occurred. Joe had received by far the highest average prescore of the four students. Perhaps in rating Joe high in the beginning, the teachers may have unknowingly had higher expectations for Joe than for the others.

Strengths and Implications

This experiment was conducted with students whose behaviors were considered too severe for acceptance into the Prevention Plus program. These students were not originally selected to participate in the Prevention Plus program because their behaviors were deemed to be more at an intervention level rather than the prevention level. However, future studies might attempt to determine how this programmed generalization strategy affects students of different behavioral levels. Also, in trying to determine the practicality of this strategy, the teachers were purposely not given any additional training other than how to mark the self-management forms, and time requirements of the teachers were kept to a minimum.

This intervention required minimal time and effort on the part of the teachers; in addition, relatively little monitoring and follow-up were required. The procedure was used with 12 teachers across five students; the teachers taught nine content areas, had different backgrounds in terms of training and philosophy, different approaches to discipline, and different attitudes about at-risk students, and still the self-rating with teacher matching yielded meaningful improvement in 22 classes. This suggests that the programmed generalization process may be teacher-proof. The students, with the aid of

the Prevention Plus teacher, were the ones responsible for the maintenance of the process, not regular class teachers. Future research might study the effects on the students' behaviors that may occur if the regular teachers practiced the same type of teaching/intervention strategies that were used in this experiment by the Prevention Plus teacher and teacher's aide.

All in all, it appears that self-rating with teacher matching may be a very robust procedure. Peterson, Young, West, and Peterson (1998) reported that in a study of 29 middle school students (seventh and eighth grade), 83% of the students completed the process of programmed generalization into all of their classes and maintained their behavior change. In addition, the goal was to have these 29 students behave according to the teacher's expectations in all of their classes (203 as a group). Collectively, student behavior reached expectation in 194 classes, or 96%.

Limitations and Implications

Although generally positive results were obtained, several limitations need to be noted. The school year ending was a large factor in limiting all the students from adding all their class settings to the programmed generalization process. Though Joe was making fair progress, he and Bill only met the criterion necessary for implementation of the intervention in four settings prior to the end of the school year. Ken implemented the intervention in three settings before he was withdrawn from school. Only Angela and Robert met the criterion for implementing the intervention in all their classes. A possible component of future studies might be to begin intervention earlier in the school year or

start the intervention in more than one class at a time. This would not only give the students more of an opportunity to achieve intervention in all their class settings, but would also allow a greater opportunity to address other time limitations as stated below.

Additional limitations to this present study that resulted from time restriction were not thinning reinforcement (points) and examining maintenance effects and not allowing enough time to fade out components of the strategy (similar to Hoff & DuPaul, 1998; Rhode et al., 1983a; Smith et al., 1992). Future experiments could address these issues. The fading of generalization components could be done by using a variable response ratio of the matching by the teachers. An additional goal could be to attempt to have the students fade the matching process in addition to the self-recording process to the extent where they were not carrying the self-management form in any of their classes. This entire strategy could also be implemented for, and examined in, other non-school settings (home, work, etc.).

Future Research

In addition to the implications for future research discussed above, there are other topics that would be interesting to examine. Though data were collected in this experiment in the students' classes prior to and after intervention, data were not collected in their classes prior to the students beginning the Prevention Plus program. The current experiment's data indicated no generalization occurring before the programmed intervention began; however, even though the behaviors improved substantially after the programmed generalization was implemented, they may have already improved to some

extent prior to the beginning of data collection. Measuring the students' behaviors in their classes prior to their beginning in the Prevention Plus class would help to examine this possibility.

Future research may also study possible behavioral changes in teacher behavior after intervention (i.e., the teacher/student interaction during the matching process). The effects of adding intervention to two or three classes each time rather than just one class could also be studied. This would not only be interesting in itself, but would also add to the possibility of having enough time to examine maintenance effects. As part of the possible maintenance effects, future research might investigate carryover of the improved behaviors into the next year of school and the effort necessary to restore losses in improvement. There are some data that support that carryover may occur, not only to a new year in the same school, but also to a new year as the students move to the high school setting (Peterson et al., 1998). However, more research needs to be done in this area.

Conclusion

The purpose of the experiment was to examine the effectiveness of self-management strategies to facilitate generalization. The purpose of the experiment was to examine the effectiveness of self-management strategies to facilitate generalization. The positive outcomes of increased social skills use and decreased off-task behavior in many different settings, in addition to low teacher time requirements and high social validity ratings by students, parents, and teachers, support this self-monitoring/teacher matching

process as a viable, practical means by which to assist generalization of social skills and on-task behavior into all regular education classes.

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APPENDIXES

Appendix A. Student Screening Instrument

SAFE Project: Student Screening Instrument (SSI)

Name _____ Position _____ School _____

Instructions: 1. *List the names of up to ten students who you feel may be at high risk for antisocial behavior.*
2. *Review the risk factor descriptions on the reverse side of this form and then rate each student on each of the ten risk factors as follows:*

NA = Not enough information
0 = This factor is **not a problem**
1 = This factor is a **minor problem**
2 = This factor is a **moderate problem**
3 = This factor is a **major problem**

Remember, your ratings are only estimates of what you believe is the student's current level of risk. If you are not sure of a student's level of risk for any particular factor, it is suggested that you make your best guess, based on your professional judgment; however, if you are uncomfortable rating a particular item, or are concerned about confidentiality, leave that item blank and contact Project SAFE *staff.*

NAME	GRADE	Absent or poorly developed social skills	Inadequate academic or academic-related skills	Problems in family interactions and relation-ships	Inadequate motivation and self-management skills	Insufficient or inaccurate drug knowledge; tolerant drug-use attitudes	History of prior substance abuse	Poor school/ class attendance	Feelings of alienation at school or with peers	Aggressive, violent, intimidating or disruptive behavior	Non-participation in extracurricular school or community activities	TOTAL SCORE

Appendix B. The Initial Eight Social Skills

THE INITIAL EIGHT SOCIAL SKILLS
TAUGHT IN THE PREVENTION PLUS CLASSROOM

How to follow instructions

1. Look at the person.
2. Say "ok."
3. Begin the task immediately.
4. Check back for clarification or when done (if appropriate)

How to get the teacher's attention

1. Look at the teacher.
2. Raise your hand.
3. Wait for acknowledgment.
4. Ask your question in a quiet voice tone.

How to accept consequences/criticism

1. Look at the person.
2. Say "ok."
3. No arguing.

How to greet someone

1. Look at the person.
2. Smile.
3. Use a pleasant voice tone.
4. Make a verbal greeting.

How to accept "no" for an answer

1. Look at the person.
2. Say "ok."
3. No arguing, whining, or pouting.
4. If you don't understand why, ask calmly for a reason.
5. If you disagree or have a complaint, talk about it later.

How to make a request

1. Look at the person.
2. Use a pleasant voice tone.
3. State the request specifically.
4. Say "Please."
5. Say "Thank you," after the request is granted

How to apologize

1. Choose a good time and place to apologize
2. Look at the person.
3. Use a pleasant voice tone.
4. State specifically why you are sorry for what you did.
5. Tell the person how you will avoid doing this in future.
6. Ask the person to accept your apology.

How to disagree appropriately

1. Look at the person.
2. Use a pleasant voice tone.
3. Make a concern/empathy statement.
4. State disagreement specifically.
5. Give a rationale.
6. Say "Thank you."

Appendix C. Matching Teacher's Expectations Tally Form

MATCHING TEACHERS EXPECTATIONS
Generalization Of Skills Displayed In The Prevention Plus Classroom

Student Name _____

Begin Date	Teacher's Name	Class & Period	Record your daily self-management score in the box below. If your score matched your teacher's score, circle it. If you forgot to mark your form today, place a " - " in the box. Thank you DATE
			DATE

When you have five matches in a row, (all H's or 4 H's and 1 S)
inform your teacher that you are ready to add another class for generalization.

Appendix D. Self-Management Forms

SELF-MANAGEMENT
CITIZENSHIP POINT CARD

Name:______________________________ Date:__________________

Period _________ Please Mark (X) Answer
yes | no
On Time.................._________
Greeted Teacher......_________
On-Task.................._________
Assign Current.........._________
Followed Instructions_________
Raised Hand..........._________
Accept "No" ...._________
Accept C/F ...._________

Points
H = 6
S = 5
N = 2
U = 1
Match = 2
On-Time = 1

Student Rating _______
Teacher Rating _______
____
Teacher's Initials

On-Time Rating Match Total
Score: _____ + _____ + _____ =

Period _________ Please Mark (X) Answer
yes | no
On Time.................._________
Greeted Teacher......_________
On-Task.................._________
Assign Current.........._________
Followed Instructions_________
Raised Hand..........._________
Accept "No" ...._________
Accept C/F ...._________

Points
H = 6
S = 5
N = 2
U = 1
Match = 2
On-Time = 1

Student Rating _______
Teacher Rating _______
____
Teacher's Initials

On-Time Rating Match Total
Score: _____ + _____ + _____ =

Period _________ Please Mark (X) Answer
yes | no
On Time.................._________
Greeted Teacher......_________
On-Task.................._________
Assign Current.........._________
Followed Instructions_________
Raised Hand..........._________
Accept "No" ...._________
Accept C/F ...._________

Points
H = 6
S = 5
N = 2
U = 1
Match = 2
On-Time = 1

Student Rating _______
Teacher Rating _______
____
Teacher's Initials

On-Time Rating Match Total
Score: _____ + _____ + _____ =

BE SURE TO TURN THIS POINT CARD IN AND PICK-UP YOUR NEW CARD

!CONGRATULATIONS!
On A Good Job Well Done

SELF-MANAGEMENT
CITIZENSHIP POINT CARD

Name:______________________________ Date:__________________

Period ________ Please Mark (X) Answer
yes | no
On Time.................. __________
Greeted Teacher...... __________
On-Task.................. __________
Assign Current.......... __________
Followed Instructions__________
Raised Hand........... __________
Accept "No" .... __________
Accept C/F .... __________

Points
H = 4
S = 2
N = 1
U = 0
Match = 2
On-Time = 1

Student Rating ______
Teacher Rating ______

____
Teacher's Initials

On-Time Rating Match Total
Score: _____ + _____ + _____ =

Period ________ Please Mark (X) Answer
yes | no
On Time.................. __________
Greeted Teacher...... __________
On-Task.................. __________
Assign Current.......... __________
Followed Instructions__________
Raised Hand........... __________
Accept "No" .... __________
Accept C/F .... __________

Points
H = 4
S = 2
N = 1
U = 0
Match = 2
On-Time = 1

Student Rating ______
Teacher Rating ______

____
Teacher's Initials

On-Time Rating Match Total
Score: _____ + _____ + _____ =

Period ________ Please Mark (X) Answer
yes | no
On Time.................. __________
Greeted Teacher...... __________
On-Task.................. __________
Assign Current.......... __________
Followed Instructions__________
Raised Hand........... __________
Accept "No" .... __________
Accept C/F .... __________

Points
H = 4
S = 2
N = 1
U = 0
Match = 2
On-Time = 1

Student Rating ______
Teacher Rating ______

____
Teacher's Initials

On-Time Rating Match Total
Score: _____ + _____ + _____ =

Period ________ Please Mark (X) Answer
yes | no
On Time.................. __________
Greeted Teacher...... __________
On-Task.................. __________
Assign Current.......... __________
Followed Instructions__________
Raised Hand........... __________
Accept "No" .... __________
Accept C/F .... __________

Points
H = 4
S = 2
N = 1
U = 0
Match = 2
On-Time = 1

Student Rating ______
Teacher Rating ______

____
Teacher's Initials

On-Time Rating Match Total
Score: _____ + _____ + _____ =

BE SURE TO TURN THIS POINT CARD IN AND PICK-UP YOUR NEW CARD

!CONGRATULATIONS!
On A Good Job Well Done

SELF-MANAGEMENT
CITIZENSHIP POINT CARD

Name:______________________________ Date:__________________

Period _________ Please Mark (X) Answer
yes | no
On Time..................__________
Greeted Teacher......__________
On-Task..................__________
Assign Current..........__________
Followed Instructions__________
Raised Hand...........__________
Accept "No" ....__________
Accept C/F ....__________

Points
H = 3
S = 2
N = 1
U = 0
Match = 2
On-Time = 1

Student Rating _______
Teacher Rating ______
____
Teacher's Initials

On-Time Rating Match Total
Score: _____ + _____ + _____ =

Period _________ Please Mark (X) Answer
yes | no
On Time..................__________
Greeted Teacher......__________
On-Task..................__________
Assign Current..........__________
Followed Instructions__________
Raised Hand...........__________
Accept "No" ....__________
Accept C/F ....__________

Points
H = 3
S = 2
N = 1
U = 0
Match = 2
On-Time = 1

Student Rating _______
Teacher Rating ______
____
Teacher's Initials

On-Time Rating Match Total
Score: _____ + _____ + _____ =

Period _________ Please Mark (X) Answer
yes | no
On Time..................__________
Greeted Teacher......__________
On-Task..................__________
Assign Current..........__________
Followed Instructions__________
Raised Hand...........__________
Accept "No" ....__________
Accept C/F ....__________

Points
H = 3
S = 2
N = 1
U = 0
Match = 2
On-Time = 1

Student Rating _______
Teacher Rating ______
____
Teacher's Initials

On-Time Rating Match Total
Score: _____ + _____ + _____ =

Period _________ Please Mark (X) Answer
yes | no
On Time..................__________
Greeted Teacher......__________
On-Task..................__________
Assign Current..........__________
Followed Instructions__________
Raised Hand...........__________
Accept "No" ....__________
Accept C/F ....__________

Points
H = 3
S = 2
N = 1
U = 0
Match = 2
On-Time = 1

Student Rating _______
Teacher Rating ______
____
Teacher's Initials

On-Time Rating Match Total
Score: _____ + _____ + _____ =

SELF-MANAGEMENT POINT CARD CONT.

Period _____ Please Mark (X) Answer yes | no

		Points			
On Time.....	_____	H = 3	Student Rating _____		
Greeted Teacher.....	_____	S = 2			
On-Task.....	_____	N = 1	Teacher Rating _____		_____
Assign Current.....	_____	U = 0			Teacher's Initials
Followed Instructions	_____	Match = 2			
Raised Hand.....	_____	On-Time = 1	On-Time	Rating	Match	Total
Accept "No"	_____					
Accept C/F	_____		Score: _____ + _____ + _____ =			

BE SURE TO TURN THIS POINT CARD IN AND PICK-UP YOUR NEW CARD

!CONGRATULATIONS!
On A Good Job Well Done

SELF-MANAGEMENT
CITIZENSHIP POINT CARD

Name:_______________________________ **Date:**__________________

Period _________ Please Mark (X) Answer
yes | no
On Time..................__________
Greeted Teacher......__________
On-Task..................__________
Assign Current..........__________
Followed Instructions__________
Raised Hand............__________
Accept "No" ....__________
Accept C/F ....__________

Points
H = 2
S = 1
N = 0
U = 0
Match = 2
On-Time = 1

Student Rating _______
Teacher Rating _______
__________ Teacher's Initials

On-Time Rating Match Total
Score: _____ + _____ + _____ =

Period _________ Please Mark (X) Answer
yes | no
On Time..................__________
Greeted Teacher......__________
On-Task..................__________
Assign Current..........__________
Followed Instructions__________
Raised Hand............__________
Accept "No" ....__________
Accept C/F ....__________

Points
H = 2
S = 1
N = 0
U = 0
Match = 2
On-Time = 1

Student Rating _______
Teacher Rating _______
__________ Teacher's Initials

On-Time Rating Match Total
Score: _____ + _____ + _____ =

Period _________ Please Mark (X) Answer
yes | no
On Time..................__________
Greeted Teacher......__________
On-Task..................__________
Assign Current..........__________
Followed Instructions__________
Raised Hand............__________
Accept "No" ....__________
Accept C/F ....__________

Points
H = 2
S = 1
N = 0
U = 0
Match = 2
On-Time = 1

Student Rating _______
Teacher Rating _______
__________ Teacher's Initials

On-Time Rating Match Total
Score: _____ + _____ + _____ =

Period _________ Please Mark (X) Answer
yes | no
On Time..................__________
Greeted Teacher......__________
On-Task..................__________
Assign Current..........__________
Followed Instructions__________
Raised Hand............__________
Accept "No" ....__________
Accept C/F ....__________

Points
H = 2
S = 1
N = 0
U = 0
Match = 2
On-Time = 1

Student Rating _______
Teacher Rating _______
__________ Teacher's Initials

On-Time Rating Match Total
Score: _____ + _____ + _____ =

SELF-MANAGEMENT POINT CARD CONT.

Period _____ Please Mark (X) Answer yes I no

		Points		
On Time.....	_____	H = 2	Student Rating _____	
Greeted Teacher.....	_____	S = 1		
On-Task.....	_____	N = 0	Teacher Rating _____	_____
Assign Current.....	_____	U = 0		Teacher's Initials
Followed Instructions	_____	Match = 2		
Raised Hand.....	_____	On-Time = 1	On-Time Rating Match	Total
Accept "No"	_____			
Accept C/F	_____		Score: _____ + _____ + _____ =	

Period _____ Please Mark (X) Answer yes I no

		Points		
On Time.....	_____	H = 2	Student Rating _____	
Greeted Teacher.....	_____	S = 1		
On-Task.....	_____	N = 0	Teacher Rating _____	_____
Assign Current.....	_____	U = 0		Teacher's Initials
Followed Instructions	_____	Match = 2		
Raised Hand.....	_____	On-Time = 1	On-Time Rating Match	Total
Accept "No"	_____			
Accept C/F	_____		Score: _____ + _____ + _____ =	

BE SURE TO TURN THIS POINT CARD IN AND PICK-UP YOUR NEW CARD

!CONGRATULATIONS!

On A Good Job Well Done

SELF-MANAGEMENT
CITIZENSHIP POINT CARD

Name:________________________________ **Date:**____________________

Period ________ Please Mark (X) Answer
yes | no Points
On Time..................________ H = 2 Student Rating ______
Greeted Teacher......________ S = 1
On-Task..................________ N = 0 Teacher Rating ______ ________
Assign Current..........________ U = 0 Teacher's Initials
Followed Instructions________ Match = 2
Raised Hand...........________ On-Time = 1 On-Time Rating Match Total
Accept "No" ....________
Accept C/F ....________ Score: _____ + _____ + _____ =

Period ________ Please Mark (X) Answer
yes | no Points
On Time..................________ H = 2 Student Rating ______
Greeted Teacher......________ S = 1
On-Task..................________ N = 0 Teacher Rating ______ ________
Assign Current..........________ U = 0 Teacher's Initials
Followed Instructions________ Match = 2
Raised Hand...........________ On-Time = 1 On-Time Rating Match Total
Accept "No" ....________
Accept C/F ....________ Score: _____ + _____ + _____ =

Period ________ Please Mark (X) Answer
yes | no Points
On Time..................________ H = 2 Student Rating ______
Greeted Teacher......________ S = 1
On-Task..................________ N = 0 Teacher Rating ______ ________
Assign Current..........________ U = 0 Teacher's Initials
Followed Instructions________ Match = 2
Raised Hand...........________ On-Time = 1 On-Time Rating Match Total
Accept "No" ....________
Accept C/F ....________ Score: _____ + _____ + _____ =

Period ________ Please Mark (X) Answer
yes | no Points
On Time..................________ H = 2 Student Rating ______
Greeted Teacher......________ S = 1
On-Task..................________ N = 0 Teacher Rating ______ ________
Assign Current..........________ U = 0 Teacher's Initials
Followed Instructions________ Match = 2
Raised Hand...........________ On-Time = 1 On-Time Rating Match Total
Accept "No" ....________
Accept C/F ....________ Score: _____ + _____ + _____ =

SELF-MANAGEMENT POINT CARD CONT.

Period _________ Please Mark (X) Answer
yes | no
On Time..................__________
Greeted Teacher......__________
On-Task..................__________
Assign Current..........__________
Followed Instructions__________
Raised Hand...........__________
Accept "No" ....__________
Accept C/F ....__________

Points
H = 2
S = 1
N = 0
U = 0
Match = 2
On-Time = 1

Student Rating _______
Teacher Rating _______
_______ Teacher's Initials

On-Time Rating Match Total
Score: _____ + _____ + _____ =

Period _________ Please Mark (X) Answer
yes | no
On Time..................__________
Greeted Teacher......__________
On-Task..................__________
Assign Current..........__________
Followed Instructions__________
Raised Hand...........__________
Accept "No" ....__________
Accept C/F ....__________

Points
H = 2
S = 1
N = 0
U = 0
Match = 2
On-Time = 1

Student Rating _______
Teacher Rating _______
_______ Teacher's Initials

On-Time Rating Match Total
Score: _____ + _____ + _____ =

Period _________ Please Mark (X) Answer
yes | no
On Time..................__________
Greeted Teacher......__________
On-Task..................__________
Assign Current..........__________
Followed Instructions__________
Raised Hand...........__________
Accept "No" ....__________
Accept C/F ....__________

Points
H = 2
S = 1
N = 0
U = 0
Match = 2
On-Time = 1

Student Rating _______
Teacher Rating _______
_______ Teacher's Initials

On-Time Rating Match Total
Score: _____ + _____ + _____ =

BE SURE TO TURN THIS POINT CARD IN AND PICK-UP YOUR NEW CARD

!CONGRATULATIONS!
On A Good Job Well Done

Appendix E. Student Point Balance Form

Ten Second Partial Interval Recording Of Student Behavior

Student _____ Observer _____

School	Location	Time Begin	Time End	Date

Interval	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
On/Off-Task																				
Place a check (—) in the interval box when behavior has occurred.																				
Follow Inst.																				
Teacher Attn.																				
Accept No																				
Accept C/F																				

Place a check (—) in the interval box for opportunity

Place a check (+) in the interval box when behavior has occurred

Interval	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
On/Off-Task																				
Place a check (—) in the interval box when behavior has occurred.																				
Follow Instr.																				
Teacher Atnn.																				
Accept No																				
Accept C/F																				

Place a check (—) in the interval box for opportunity

Place a check (+) in the interval box when behavior has occurred

Follow Instr.	Beh. Occurred		Opportunity For Beh.		Percentage of Opps. Beh. Occurred	
Accept No	Beh. Occurred		Opportunity For Beh.		Percentage of Opps. Beh. Occurred	
Accept C/F	Beh. Occurred		Opportunity For Beh.		Percentage of Opps. Beh. Occurred	
Teacher Attn.	Beh. Occurred		Opportunity For Beh.		Percentage of Opps. Beh. Occurred	
Off-Task	Intervals Beh. Occurred		Total Intervals		Percentage of Intervals Beh. Occurred	
On-Task	Intervals Beh. Occurred		Total Intervals		Percentage of Intervals Beh. Occurred	

Appendix F. Behavior Recording Form

Student Point Balance Form

Name:

Date	Points Earned	Spent	Balance	Cumulative Total

Appendix G. Interobserver Agreement

In the following appendix, the interobserver reliability is compared for each of the 26 pairings of observers. Percentages are listed for both occurrence and nonoccurrence of the target behaviors. In the tables, the "A" represents the number of intervals the observers agreed and the "M" represents the number of total intervals marked by the observers.

OBSERVERS -- ALL

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
			98			97			100																					
			92			96			100			100									100									83
			97			98			100			88									100						97			100
			97			98			100			100																		
			96			97			100			100											100				100			100
			98			99			86			100																		
			97			97																						100		
			99			100			100			100			100												100			100
			87			90			100																					86
			98			98			100			100															100			100
			100																											
			89			92																								
			99			96			100			100											100							
			99			100			100						100						100		100			100			100		100
			96			98			100			100																		
			96			98			100			100									100					100				
			60			71															100									50
			99			99			100			100														100			100
			97			99			100			100																		
			100			100			100																	92				
			100			100			100																					
			98			99			100			100			100						100		100			100			100	
			96			98			94			92											100						100	
			95			97			89			92			100						100					88			75	
			90			96			89			80									100					100			100	
			94			97			100			100														100			100	
Total			96			98			97			95			100						100		100			96			91	

OBSERVERS – EK & BE

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
	40	40	100	14	14	100	5	5	100																					
	8	9	89	31	32	97	2	2	100																					
	26	28	93	12	14	86																								
	28	28	100	12	12	100																								
	14	14	100	26	26	100																								
	21	21	100	19	19	100																								
	10	11	91	30	31	97																								
	26	26	100																											
Total			98			97			100																					

OBSERVERS -- EK &LT

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
	13	14	93	26	27	96	1	1	100	1	1	100							1	1	100							5	6	83
	31	35	89	5	9	56	1	1	100	2	2	100																		
	11	11	100	29	29	100																								
				40	40	100																								
	22	22	100	18	18	100																								
	6	8	75	32	34	94																								
Total			92			96			100			100									100									83

OBSERVERS -- EK & CB

Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
28	28	100	12	12	100	2	2	100	1	1	100							1	1	100				1	1	100	2	2	100
			40	40	100	1	1	100	1	1	100							1	1	100				3	3	100	1	1	100
			40	40	100	1	1	100	2	2	100							1	1	100				3	3	100	1	1	100
4	4	100	36	36	100	1	1	100	2	2	100							1	1	100				12	12	100			
11	11	100	29	29	100	2	2	100	1	1	100													9	9	100			
3	3	100	37	37	100	1	1	100	0	1	0													1	1	100			
			40	40	100	2	2	100																0	1	0			
8	9	89	31	32	97	1	1	100																					
8	9	89	31	32	97	2	2	100																					
38	38	100	2	2	100	1	1	100																					
12	12	100	8	8	100	1	1	100																					
19	19	100	21	21	100	1	1	100																					
			40	40	100	2	2	100																					
14	14	100	26	26	100	1	1	100																					
10	11	91	29	30	97	1	1	100																					
40	40	100				2	2	100																					
28	30	93	10	12	83																								
28	30	93	10	12	83																								
19	19	100	21	21	100																								
11	11	100	29	29	100																								
4	4	100	36	36	100																								
38	40	95	0	2	0																								
24	24	100	16	16	100																								
37	37	100																											
14	18	78	22	26	85																								

OBSERVERS -- EK & CB cont.

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
	5	5	100	15	15	100																								
	19	20	95	20	21	95																								
	1	1	100	39	39	100																								
Total			97			98			100			88									100						97			100

OBSERVERS -- EK & TR

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
				40	40	100	2	2	100	1	1	100																		
	2	2	100	38	38	100	2	2	100	1	1	100																		
	12	12	100	28	28	100	2	2	100	1	1	100																		
	18	20	90	20	22	91																								
	12	13	92	7	8	88																								
	40	40	100																											
	17	17	100	23	23	100																								
Total			97			98			100			100																		

OBSERVERS -- EK & AB

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
	2	2	100	38	38	100	1	1	100	1	1	100										1	1	100	1	1	100	1	1	100
	15	17	88	23	25	92	1	1	100	1	1	100													1	1	100	1	1	100
				40	40	100	1	1	100	1	1	100													1	1	100			
				40	40	100	2	2	100	1	1	100																		
				40	40	100	1	1	100	1	1	100																		
	19	20	95	20	21	95	2	2	100	1	1	100																		
	20	20	100	20	20	100	2	2	100																					
	17	17	100	23	23	100	1	1	100																					
	39	40	98	0	1	0	2	2	100																					
	29	29	100	6	6	100	1	1	100																					
	31	31	100	9	9	100																								
	31	36	86	4	9	44																								
	16	18	89	22	24	92																								
	4	4	100	36	36	100																								
	17	18	94	22	23	96																								
	14	15	93	25	26	96																								
	9	9	100	31	31	100																								
	15	15	100																											
	11	11	100	29	29	100																								
	33	33	100																											
	17	18	94	22	23	96																								
	34	34	100	6	6	100																								
	16	19	84	21	24	88																								
	13	14	93	26	27	96																								
	16	16	100	15	15	100																								
Total			96			97			100			100												100			100			100

OBSERVERS -- EK & TS2

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
	3	3	100	37	37	100	4	4	100	1	1	100																		
	11	11	100	29	29	100	2	3	67																					
	12	14	86	26	28	93																								
	34	34	100	6	6	100																								
	3	3	100	37	37	100																								
	21	21	100	19	19	100																								
	18	18	100	22	22	100																								
				40	40	100																								
	19	19	100	21	21	100																								
Total			98			99			86			100																		

OBSERVERS -- EK & TS1

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
	14	14	100	26	26	100																			3	3	100			
	22	22	100	7	7	100																								
	7	8	88	32	33	97																								
	34	35	97	5	6	83																								
	13	14	93	26	27	96																								
Total			97			97																					100			

OBSERVERS -- TS1 & LT

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
	26	27	96	13	14	93	1	1	100	1	1	100	1	1	100										1	1	100	3	3	100
	10	10	100	30	30	100	3	3	100	1	1	100													1	1	100			
	2	2	100	38	38	100																								
	9	9	100	31	31	100																								
	36	36	100	4	4	100																								
				40	40	100																								
	1	1	100	39	39	100																								
				40	40	100																								
	40	40	100																											
Total			99			100			100			100			100											100			100	

OBSERVERS -- TS1 & AB

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
	16	18	89	22	24	92	3	3	100																			1	1	100
	16	21	76	19	24	79	2	2	100																			5	6	83
	13	14	93	10	11	91	1	1	100																					
	14	14	100	26	26	100	1	1	100																					
	14	17	82	23	26	88																								
Total			87			90			100																					86

OBSERVERS -- TS1 & CB

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
	22	22	100	18	18	100	2	2	100	1	1	100													2	2	100	1	1	100
	19	19	100	21	21	100	1	1	100	1	1	100													1	1	100			
	24	25	96	15	16	94	1	1	100	1	1	100																		
	17	18	94	22	23	96	2	2	100																					
	4	5	80	35	36	97	1	1	100																					
	39	40	98	0	1	0																								
	10	10	100	30	30	100																								
				40	40	100																								
	34	34	100	6	6	100																								
	40	40	100																											
	39	39	100	1	1	100																								
Total			98			98			100			100															100			100

OBSERVERS -- TS1 & TR

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
	7	7	100																											
Total			100																											

OBSERVERS -- TS1 & AG

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
	16	18	89	22	24	92																								
Total			89			92																								

OBSERVERS -- TS1 & TS2

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
	28	28	100	12	21	57	1	1	100	1	1	100										1	1	100						
	6	6	100	34	34	100	1	1	100													1	1	100						
	34	34	100	6	6	100	1	1	100																					
	13	13	100	27	27	100	1	1	100																					
				40	40	100	1	1	100																					
	13	13	100	27	27	100																								
	5	5	100	35	35	100																								
	14	16	88	13	15	87																								
	12	12	100	28	28	100																								
	11	11	100	29	29	100																								
Total			99			96			100			100												100						

OBSERVERS -- TS2 & CB

Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
26	26	100	14	14	100	1	1	100	1	1	100	1	1	100				1	1	100	3	3	100	1	1	100	1	1	100
			40	40	100	1	1	100	1	1	100							2	2	100	1	1	100	1	1	100	2	2	100
2	2	100	38	38	100	1	1	100	14	14	100							1	1	100				2	2	100	3	3	100
2	2	100	38	38	100	1	1	100	5	5	100													1	1	100	1	1	100
9	9	100	31	31	100	1	1	100	1	1	100													3	3	100	1	1	100
24	25	96	15	16	94	1	1	100	1	1	100																		
16	16	100	24	24	100	1	1	100	2	2	100																		
29	29	100	11	11	100	1	1	100	1	1	100																		
1	1	100	39	39	100	3	3	100	1	1	100																		
3	3	100	37	37	100	3	3	100																					
6	6	100	34	34	100	1	1	100																					
5	5	100	35	35	100	1	1	100																					
			40	40	100	2	2	100																					
15	15	100	25	25	100	1	1	100																					
36	36	100	4	4	100	1	1	100																					
6	6	100	34	34	100																								
40	40	100																											
27	27	100	13	13	100																								
29	29	100	11	11	100																								
			40	40	100																								
4	4	100	35	35	100																								
			20	20	100																								
39	39	100	1	1	100																								
40	40	100																											
37	37	100	3	3	100																								
13	13	100	7	7	100																								
10	10	100	30	30	100																								
17	17	100	23	23	100																								

OBSERVERS -- TS2 & CB cont.

	Off-Task						Follow Instructions						Accept No				Accept Feedback				Teacher Attention			
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur	Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A M %	A	M	%	A	M	%	A	M	%	A	M	%
	30	31	97	9	10	90																						
	17	18	94	22	23	96																						
	12	12	100	28	28	100																						
	2	2	100	13	13	100																						
	11	11	100	29	29	100																						
Total			99			100			100						100				100			100			100		

OBSERVERS -- TS2 & BE

	Off-Task						Follow Instructions						Accept No				Accept Feedback				Teacher Attention			
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur	Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A M %	A	M	%	A	M	%	A	M	%	A	M	%
	8	8	100	32	32	100	1	1	100	2	2	100																
	8	8	100	32	32	100	1	1	100																			
	10	12	83	28	30	93																						
	4	4	100	36	36	100																						
	6	6	100	34	34	100																						
	32	33	97	7	8	88																						
Total			96			98			100			100																

OBSERVERS -- TS2 & AB

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
	5	5	100	35	35	100	1	1	100	1	1	100							1	1	100				1	1	100			
	4	5	80	18	19	95	1	1	100	1	1	100													2	2	100			
	17	17	100	23	23	100	1	1	100																					
	4	5	80	35	36	97																								
	18	21	86	19	22	86																								
	3	3	100	37	37	100																								
				40	40	100																								
				40	40	100																								
	25	25	100	4	4	100																								
	29	29	100	11	11	100																								
	39	40	98	0	1	0																								
	2	2	100	16	16	100																								
Total			96			98			100			100									100						100			

OBSERVERS -- TS2 & AG

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
	12	20	60	20	28	71													1	1	100							1	2	50
Total			60			71															100									50

OBSERVERS -- TS2 & LT

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
				40	40	100	4	4	100	1	1	100													1	1	100	1	1	100
	3	4	75	36	37	97	1	1	100	1	1	100																		
	20	20	100	20	20	100	1	1	100																					
	40	40	100																											
	9	9	100	31	31	100																								
	25	25	100	15	15	100																								
	31	32	97	8	9	89																								
	14	14	100	26	26	100																								
Total			99			99			100			100															100			100

OBSERVERS -- TS2 & TR

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
				40	40	100	1	1	100	2	2	100																		
	11	11	100	29	29	100	2	2	100																					
	5	6	83	34	35	97																								
	17	17	100	23	23	100																								
				40	40	100																								
	15	15	100	25	25	100																								
	16	17	94	23	24	96																								
Total			97			99			100			100																		

OBSERVERS -- TR & BE

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
				40	40	100	2	2	100																10	10	100			
				40	40	100	3	3	100																1	2	50			
				40	40	100																								
				40	40	100																								
				40	40	100																								
	3	3	100	37	37	100																								
	2	2	100	38	38	100																								
Total			100			100			100																		92			

OBSERVERS -- TR & CB

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
	3	3	100	37	37	100	2	2	100																					
	11	11	100	29	29	100																								
	10	10	100	30	30	100																								
	5	5	100	35	35	100																								
	21	21	100	19	19	100																								
	5	5	100	35	35	100																								
	3	3	100	37	37	100																								
				40	40	100																								
Total			100			100			100																					

OBSERVERS -- CB & BE

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
	12	13	92	27	28	96	2	2	100	2	2	100	2	2	100				1	1	100	1	1	100	1	1	100	1	1	100
	12	13	92	27	28	96	3	3	100	1	1	100							1	1	100	1	1	100	2	2	100	1	1	100
				40	40	100	1	1	100	1	1	100							1	1	100	1	1	100	5	5	100	1	1	100
				40	40	100	1	1	100	1	1	100							1	1	100				4	4	100	2	2	100
				40	40	100	3	3	100	11	11	100							2	2	100				1	1	100			
	11	11	100	20	20	100	2	2	100																1	1	100			
				40	40	100	2	2	100																4	4	100			
	40	40	100				1	1	100																3	3	100			
	8	8	100	32	32	100	1	1	100																					
				40	40	100	1	1	100																					
	1	1	100	29	29	100	1	1	100																					
	16	16	100	24	24	100	3	3	100																					
	16	18	89	22	24	92	1	1	100																					
	13	13	100	27	27	100																								
	34	35	97	5	6	83																								
	12	13	92	27	28	96																								
	27	27	100	13	13	100																								
	31	31	100	9	9	100																								
	15	15	100	25	25	100																								
	40	40	100																											
	20	20	100	8	8	100																								
	1	1	100	39	39	100																								
Total			98			99			100			100			100						100			100			100			100

OBSERVERS -- CB & LT

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
	20	21	95	19	20	95	1	1	100	1	1	100										1	1	100				1	1	100
	19	19	100	21	21	100	1	1	100	1	1	100																1	1	100
	21	21	100	19	19	100	1	1	100	5	5	100																2	2	100
	4	4	100	36	36	100	2	2	100	2	2	100																1	1	100
	4	4	100	36	36	100	3	3	100	1	1	100																		
	3	3	100	37	37	100	2	2	100	1	1	100																		
				40	40	100	3	4	75	0	1	0																		
	3	3	100	37	37	100	1	1	100																					
	14	15	93	4	5	80	1	1	100																					
	37	37	100	3	3	100																								
	39	39	100	1	1	100																								
	10	10	100	30	30	100																								
	12	13	92	27	28	96																								
	23	26	88	14	17	82																								
	20	24	83	16	20	80																								
	23	25	92	15	17	88																								
	19	21	90	19	21	90																								
				40	40	100																								
				40	40	100																								
				40	40	100																								
	7	7	100	33	33	100																								
	5	5	100	35	35	100																								
	22	22	100	18	18	100																								
	14	15	93	25	26	96																								
	25	25	100	11	11	100																								
Total			96			98			94			92												100						100

OBSERVERS -- CB & AB

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
	5	5	100	35	35	100	2	2	100	1	1	100	1	1	100				4	4	100				1	1	100	1	2	50
	16	17	94	23	24	96	1	1	100	1	1	100							1	1	100				2	2	100	3	4	75
	0	1	0	39	40	98	1	1	100	1	1	100													6	7	86	2	2	100
	32	34	94	6	8	75	1	1	100	1	1	100													2	3	67			
				40	40	100	1	1	100	2	2	100													4	4	100			
	12	13	92	27	28	96	2	2	100	1	1	100																		
	21	22	95	12	13	92	2	2	100	1	1	100																		
	30	34	88	6	10	60	2	2	100	1	2	50																		
	22	22	100	18	18	100	2	2	100	2	2	100																		
	33	33	100				0	1	0																					
	1	1	100	32	32	100	1	2	50																					
	3	3	100	37	37	100	1	1	100																					
	11	11	100	29	29	100	1	1	100																					
	13	13	100	27	27	100																								
	5	5	100	32	32	100																								
	27	29	93	6	8	75																								
	36	39	92	1	4	25																								
	30	31	97	9	10	90																								
	4	4	100	36	36	100																								
	14	14	100	26	26	100																								
	5	5	100	23	23	100																								
Total			95			97			89			92			100						100						88			75

OBSERVERS -- AB & BE

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
				28	28	100	1	1	100	1	1	100							1	1	100				2	2	100	1	1	100
	15	16	94	24	25	96	2	2	100	1	2	50							1	1	100				1	1	100	2	2	100
	13	13	100	12	12	100	1	1	100	1	1	100													2	2	100			
	22	22	100	18	18	100	1	1	100	1	1	100													1	1	100			
				40	40	100	1	1	100																					
				40	40	100	3	4	75																					
				40	40	100	1	1	100																					
	19	31	61	6	18	33	1	1	100																					
	5	7	71	33	35	94	0	1	0																					
	2	2	100	32	32	100	1	1	100																					
	14	14	100	26	26	100	4	4	100																					
	18	18	100	22	22	100																								
	20	20	100	20	20	100																								
	1	1	100	39	39	100																								
	18	18	100																											
	1	1	100	39	39	100																								
	11	12	92	27	28	96																								
	13	16	81	3	6	50																								
	10	11	91	29	30	97																								
	8	10	80	30	32	94																								
	4	4	100	36	36	100																								
Total			90			96			89			80									100						100			100

OBSERVERS -- AB & LT

	Off-Task						Follow Instructions						Accept No						Accept Feedback						Teacher Attention					
	Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur			Occur			Non-Occur		
	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%	A	M	%
	19	19	100	21	21	100	1	1	100	1	1	100													1	1	100	1	1	100
	4	5	80	25	26	96																								
	8	9	89	31	32	97																								
Total			94			97			100			100															100			100

VITA

Lloyd D. Peterson

Education

Ed.D, Spring 1999. Interdisciplinary Education with an emphasis in Special Education (Emotional and Behavioral Disorders/Teacher Training), Utah State University, Logan.

School Administration Certification, Winter 1998. Utah State University, Logan.

M.S., August 1994. Special Education (Emotionally Disturbed/Autism), Developmental Education minor. Southwest Texas State University, San Marcos.

B.S., December 1984. Business Administration (Accounting). University of Akron, Akron, OH.

Professional

Project coordinator. Family Enhancement and Preservation (FEAP), a three-year interagency project (state, county, city, and school districts) that provides information, training, education, and mentorship for youth and families in three categories or levels of risk. July 1998 - July 2001.

Educational consultant. Consultant with the San Juan School District, Whitehorse High School, Montezuma Creek, Utah. Implementation of a schoolwide (students, teachers, and staff) program addressing the unique needs of children of the Navajo Nation. September 1998 - May 1999.

Doctoral assistant. Generalization director of Schools and Families Empowerment (SAFE) project, Ogden School District, and coordinator of SAFE project for Mound Fort Middle School, Ogden, Utah. August 1996 - June 1998.

Doctoral assistant. Coordinator of Prevention Plus program, a collaboration of Ogden City School District, Ogden, Utah, and the Institute for the Study of Children, Youth, and Families At Risk (SCYFAR), Utah State University Foundation. A program designed to assist with the prevention of substance abuse (alcohol, tobacco, drugs) by adolescents. August 1994 - June 1996.

Adjunct school administrator. Mound Ford Middle School, Ogden, Utah. Assisted with all activities of middle school operation. January 1995 - June 1998.

Special education teacher. Dripping Springs Independent School District, Dripping Springs, Texas. Founding teacher of a classroom located within a therapeutic treatment facility. Designed and implemented curriculum to address the needs of severely emotionally disturbed adolescent boys. August 1992 - August 1994.

Counselor. Oconomowoc Developmental Training Center, Oconomowoc, Wisconsin. A unisex residential treatment facility for mentally retarded, emotionally disturbed children, ages 6-18. 1976 - 1977.

Systems analyst/accountant. Chevon USA/Gulf Oil, Concord, California/Houston, Texas. April 1985 - November 1991.

Publications

Peterson, L. D., Young, K. R., West, R. P., & Peterson, M. H. (1998). Effects of student self-management on generalization of student performance to regular classrooms. Manuscript submitted for publication.

Peterson, L. D., Young, K. R., & West, R. P. (1998). Improving generalized school performance of at-risk students via self-monitoring. Manuscript submitted for publication.

Young, K. R., West, R. P., Li, L., & Peterson, L. D. (1997). Teaching students self-management and personal responsibility. Reclaiming Children and Youth, 6, 90-96.

Courses Taught

Special Education 629 (Fall 1997). Remediating Behavior Problems and Social Deficits. A graduate course for teachers from Ogden School District, Ogden, Utah. Utah State University, Logan.

Special Education 650 (Fall 1996). Proven Practices in Education. A graduate course for elementary and secondary teachers taught at Montpelier, Idaho. Utah State University, Logan.

Co-taught Special Education 508 (Spring 1996). Remediating BeahviorProblems and Social Deficits. An undergraduate/graduate course. Utah State University, Logan.

Co-taught Special Education 301 (Winter 1996). Introduction to Special Education. Utah State University, Logan.

Co-taught Special Education 503 (Fall 1995). Introduction to Transition and Vocational Education. Utah State University, Logan.

De-Escalation Intervention for Aggression Behavior (DEIFAB) (Spring 1995). A training seminar for instruction in de-escalation of physical aggression using both verbal and physical responses.

Presentations

Effects of student self-management on generalization of student performance to regular classrooms. (1998, November). Paper presented at the 22nd Annual Teacher Educators for Children with Behavioral Disorders Conference (Severe Behavior Disorders of Children and Youth), Scottsdale, Arizona.

Effects of student self-management on generalization of student performance to regular classrooms. (1998, June). Paper presented at the 21st Annual Conference on Interventions for At-Risk Children and Youth, Logan, Utah.

Preventing antisocial behavior in secondary schools: Early intervention and generalization. (1996, October). Paper presented at the International Adolescent Conference VIII, Aspen, Colorado.

Social skills and self-evaluation strategies: A case study application. (1996, June). Paper presented at the 19th Annual Conference on Interventions for At-Risk Children and Youth, Logan, Utah.

Matching teacher's expectations: Generalized use of classroom social skills across all class periods. (1996, June). Paper presented at the 19th Annual Conference on Interventions for At-Risk Children and Youth, Logan, Utah.

Prevention Plus in the middle schools: Intensive programming for high-risk youth and families. (1996, May). Paper presented at the Utah Council for Children with Behavioral Disorders (CCBD) Annual Conference, Provo, Utah.

Professional Association Memberships

Association for Behavior Analysis
Council for Exceptional Children