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USING DIRECT INSTRUCTION TO TEACH COMPLIANCE TO
SERIOUSLY NONCOMPLIANT STUDENTS

by

Hans M. Michielsen

Dissertation submitted in partial fulfillment
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Psychology

Approved:

UTAH STATE UNIVERSITY
Logan, Utah

1991

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Hans M. Michielsen

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ABSTRACT

Using Direct Instruction To Teach Compliance To
Seriously Noncompliant Students

by

Hans M. Michielsen, Doctor of Philosophy
Utah State University, 1991

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Department: Psychology

This research study investigated the effectiveness of a direct instruction program (Treatment 2) for increasing compliance with teachers' instructions in students for whom manipulation of conventional antecedent stimuli and consequences (Treatment 1) had not resulted in adequate compliance. Five students participated in this study. A multiple baseline design across participants was used to evaluate treatment effectiveness. Introduction of Treatment 2 was followed by an increase in compliance by all five participants. The relationship between compliance and other appropriate classroom behaviors, as well as the relationship between compliance and qualitatively good and qualitatively poor instructions, was also investigated. Those relationships were found to exist, but they were not as strong as had been reported in earlier studies. Generalization of participants' compliance with qualitatively good instructions

across school staff occurred. With the exception of one participant, increases in compliance with qualitatively good instructions were maintained for up to eight weeks. Limitations of the present study and suggestions for future research are presented.

(250 pages)

CHAPTER I

INTRODUCTION

Noncompliance, also commonly referred to as lack of discipline, is a problem of great importance for the nation's public schools (cf. Morgan & Jenson, 1988; Gallup, 1983). Students' noncompliance with teacher instructions can seriously obstruct successful school adjustment if not corrected (Barkley, 1981, 1990; Forehand, 1975; Forehand & McMahon, 1981; Morgan & Jenson, 1988; Ross, 1980; Ruggles & LeBlanc, 1982). Engelmann and Colvin (1983), in the introduction to their compliance training program, state that noncompliance is "the least negotiable characteristic that teachers of mainstreamed students express as essential to success" (p. 3). In Engelmann and Colvin's view, compliance is a prerequisite skill for students to benefit from instruction, because a student must be able to follow instructions before s/he can learn. Hersh and Walker (1981) report that elementary school teachers view compliance as the most needed essential desirable behavior in order for students to successfully adapt in the classroom.

This need for students to comply with teachers' instructions is further stressed by the results of an inventory of skills considered important by regular education teachers who were to receive special education students in their classrooms for purposes of mainstreaming. These regular education teachers considered compliance the most important student skill (Striefel, Killoran, & Quintero, 1987). Similarly, Cunningham and Sugawara (1988) found that preservice teachers were more tolerant of socially immature behaviors than of

defiance/noncompliance.

The importance of developing and evaluating effective intervention programs for noncompliance is also stressed by Atkeson and Forehand (1981). They indicate that if noncompliant students are not effectively treated, they are likely to exhibit similar behavior patterns in adulthood (Atkeson & Forehand, 1981). In addition, if students comply with instructions, they are more likely to contact reinforcement (Sulzer-Azaroff & Pollack, 1982), which in turn may help them become more competent organisms (Skinner, 1974).

There are a great number of programs that have been developed to treat problem behaviors such as noncompliance (cf., Bates & Wehman, 1977; Forehand & Baumeister, 1976; Matson & McCartney, 1981). Most of these treatment programs consist primarily of guidelines for parents either in a home or clinic setting. The small number of programs developed for teachers' use in the classroom mostly focus on how to give effective instructions and how to manage contingencies for students' compliance and noncompliance (Forehand, 1975; Forehand & King, 1977; Forehand & McMahon, 1981; Hanf & Kling, 1973; Jenson, Raevis & Rhode, 1987; Morgan & Jenson, 1988; Neville & Jenson, 1984). Whereas these programs produce drastic and immediate changes in behavior in the majority of the clients involved, they are characterized by an overall failure of the behavior to transfer to persons and settings not included in training (Engelmann & Colvin, 1983). Procedures that program for generalization are not generally integral parts of those treatment programs.

Engelmann and Colvin (1983) also point out that in highly

noncompliant students (they state that about 10% of the students labeled noncompliant fall in this category), the existing programs are not usually effective in increasing compliance. Engelmann and Colvin do not speculate about the reason for this ineffectiveness. They do indicate, however, that by including direct instruction in their compliance training program, the "communication received by the learner" (p. 9) (i.e., the antecedent events) can be controlled. It is not clear why Engelmann and Colvin expect the addition of direct instruction lessons to the conventional compliance training programs to lead to larger increases in compliance than are effected by those conventional programs alone. Conventional compliance training programs seem perfectly capable of controlling teacher and parent-related antecedent events such as the kinds of instructions used and the effect of those instructions on students' compliance (cf., Barkley, 1981, 1990; Forehand, 1975; Forehand & King, 1977; Forehand & McMahon, 1981; Patterson, Cobb, & Ray, 1973; Patterson, Ray, Shaw, & Cobb, 1969; Peed, Roberts, & Forehand, 1977; Wahler, House, & Stambaugh, 1976).

Moreover, Engelmann and Colvin (1983) report increases in compliance in only one of eleven case studies described in their book. The participant in that successful case study was diagnosed as having Down's syndrome. To do justice to the Engelmann and Colvin study, it must be noted that of the 10 case studies in which inappropriate behavior was one of the dependent variables, 100% of the participants showed a significant decrease in inappropriate behavior following introduction of treatment.

A partial answer to the question "why have compliance training programs failed with a certain percentage of noncompliant students?" may be found in studies by Neville and Jenson (1984) and Callaghan (1986). Both studies contend that some students have not learned how and/or when to comply or have learned when not to comply. Sulzer-Azaroff and Pollack (1982) proposed that compliance training programs should address the cause(s) of noncompliance. One cause of noncompliance in students may be that they have not yet learned how to appropriately respond to teachers' instructions. That is, either the teachers' instructions are not functional in controlling the students' compliance or the students do not know the chain of behaviors required in order to comply. It may also be the case that students, over time, have been reinforced more effectively for noncompliance with teachers' instructions than they were for compliance with those instructions.

In all probability, grade-school students do know the chain of behaviors required for compliance with instructions since they are typically capable of complying with instructions given by peers. For example, a peer yells "Johnny, throw me the ball" and within five seconds from that request Johnny throws the ball to the peer who made the request. Such behavior indicates that Johnny knows the behaviors required to comply. More likely, the contingencies surrounding students' compliance with teachers' instructions have become nonfunctional, or never were functional. This would argue that treatment of noncompliance should involve establishing a discriminative stimulus that sets the occasion for students to comply with teacher instructions, rather than setting the occasion for

students' noncompliance in an environment where functional reinforcers are provided for compliance. Such a discriminative stimulus should be as independent as possible of the persons giving the instructions and of the environment in which the instructions are given (cf., "common stimulus").

Of the procedures available for establishing a discriminative stimulus that would set the occasion for compliance, direct instruction must be considered the procedure of choice considering the current and rapidly expanding literature on effective teaching methods (cf., Peterson, 1980; Rosenshine & Stevens, 1986; Stevens & Rosenshine, 1981). Direct instruction is teacher directed. That is, the teacher plays an active role in the learning process. When a specific skill is taught, the teacher demonstrates, discusses and describes the skill to be learned. The student is then given ample opportunity to practice the new skill through role play and rehearsal.

Callaghan (1986) investigated the effects of compliance with teacher instructions by having the participants in her study say "Sure I will" to themselves after they received an instruction. Only one of the three participants in her study showed an increase in compliance following the introduction of treatment. Treatment consisted of teaching the participant, through direct instruction, to say "Sure I will" following a teacher's instruction and then to immediately do what was requested. In the absence of experimental control, no conclusions regarding treatment effectiveness could be drawn from this study. The Callaghan (1986) study also did not investigate the source of participants' noncompliance (i.e., whether noncompliance was due to

poor stimulus control of teachers' instructions or to the lack of reinforcement for compliance).

Callaghan did find a direct relationship between increases in students' compliance with teachers' instructions and the reduction of other inappropriate classroom behaviors such as tipping chairs, talking out, and off-task behavior. Such a correlation has also been reported by Parrish, Cataldo, Kolko, Neef, and Egel (1986) and by Cataldo, Ward, Russo, Riordan, and Bennet (1986).

The lessons developed and used by Callaghan (1986) are based on a model lesson prepared by Neville and Jenson (1984). The reason that the phrase "Sure I will" was used as the discriminative stimulus to set the occasion for compliance was that it is a simple phrase that can be easily taught to elementary school students.

Finally, a common problem in the evaluation of compliance training programs pertains to the definition of "compliance." A great number of definitions of both compliance and noncompliance have been developed. Engelmann and Colvin (1983), for example, define noncompliance as "occurring when the student does not do something that is directly commanded" (p. 1). The problem with this definition is that no time limit is given within which the student is expected to start complying. Noncompliance is defined by Forehand and McMahon (1981) as the refusal to initiate or complete a request made by another person. This latter definition implies an active intent on the part of the noncompliant person, which cannot generally be assumed. A statement of intent, such as "refusal," in the definition of a behavior is incompatible with an operational definition of a

behavior as is custom in the behavioral literature.

A more comprehensive definition of compliance is provided by Sulzer-Azaroff and Pollack (1982). They define noncompliance as, "A response that may consist of simply not performing the requested behavior, doing it slowly, stating a refusal to comply, promising to do it later but not following through on the commitment, engaging in a competing response, and others" (p. 927). This definition, too, has inherent problems. For example, a student may state that s/he is not going to comply, but yet immediately initiate and follow through with the requested behavior. In that case the student should not be considered noncompliant, but rather inappropriate while being compliant.

In this study (as in Callaghan's, 1986), an adaptation of a definition developed by Atkeson and Forehand (1981) was used. They defined noncompliance as "a failure to initiate a motoric response within five seconds, following a command" (p. 204). This definition was chosen because it appears to be the one most often used in the compliance literature. The adaptation chosen is as follows. Compliance is defined as: the student initiates the correct response to an instruction within five seconds of that instruction and continues, without interruption, until the response is complete. For example, if a teacher asks a student to line up at the door and the student continues with a math assignment while seated at his desk, the response would be marked as compliance only if that student stands up within five seconds and if s/he subsequently goes to the door, stands in line and stays in line. That is, both starting the requested

behavior within five seconds and completing the response (i.e., going to the door and lining up) are required for compliance (see also Table 1 in Chapter II). The reason for requiring that the response continues without interruption until completion (which is not generally included in definitions of compliance) is that the initiation alone of compliant behavior is not the target behavior in dealing with noncompliance. Instead, the target behavior is the actual completion of the requested task.

Problem Statement

It is generally agreed that noncompliance is a prevalent problem that may negatively affect students' school success (Barkley, 1981, 1990; Engelmann & Colvin, 1983; Forehand, 1975; Forehand & McMahon, 1981; Morgan & Jenson, 1988; Ross, 1980; Ruggles & LeBlanc, 1982). Most programs designed to treat noncompliance have been developed for parents, not for teachers (Callaghan, 1986; Morgan & Jenson, 1988). To date, Engelmann and Colvin (1983) have developed the only formally published program designed to treat student's noncompliance in the school setting. In addition, existing compliance training programs may not address the causes of noncompliance, at least in students who are considered highly noncompliant (Callaghan, 1986). The existing programs were developed for use by parents within home and clinic settings and for students not falling in the "highly noncompliant" category. The problem is that empirically validated programs that primarily rely on positive reinforcement for compliance and appropriate behavior (i.e., those that are nonrestrictive) are scarce.

Especially scarce are compliance training programs designed to modify student's noncompliance in school settings and which systematically program for generalization across classroom staff.

Purpose and Objectives

The purpose of this study was to develop and evaluate a treatment program intended to increase students' compliance with teacher instructions in a school setting by addressing the cause(s) of their noncompliance. Direct instruction was used in an attempt to improve students' compliance with teachers' instructions. The following were the specific research questions this study attempted to answer.

Questions

1. Can direct instruction be used to increase compliance in students for whom manipulation of conventional antecedent stimuli (in particular the kinds of instructions used) and manipulation of consequent stimuli (contingency management) have not led to an adequate increase in compliance (i.e., compliance with 80% of teachers' instructions)?
2. Does an increase in compliance due to the direct instruction program reported on in the following chapters, if found, maintain and transfer to other school staff such as teachers, aides, principal, librarian and lunch staff?
3. Does an increase in compliance due to the direct instruction program, if found, transfer across different types of qualitatively poor instruction (e.g., chain instructions, vague instructions, question instructions, let's instructions and/or instructions followed

by unnecessary verbalizations - see Appendices I and J for definitions)?

4. Does an increase in compliance due to the direct instruction program, if found, transfer across or impact other appropriate classroom behaviors?

CHAPTER II

REVIEW OF THE LITERATURE

Approaches to Compliance Training

There is a variety of approaches that increase compliance in children. According to Wells and Forehand (1982), most of the research literature deals with changing children's environments to increase their compliance with instructions. In those programs, parents are typically taught the use of behavior management techniques.

There is an overlap in the techniques employed in these approaches. Programs range from rather easily implemented behavior management programs directed toward inappropriate behavior, including mild noncompliance, such as the "Assertive Discipline" program (Canter & Canter, 1976), to sophisticated direct instruction/behavior management programs for children with severe behavior problems such as the "Generalized Compliance Training Program" (Engelmann & Colvin, 1983).

Behavior Modification

Many compliance training programs emphasize the use of behavior modification techniques, which are often referred to as behavior management techniques. The two classes of procedures employed in compliance training are the manipulation of consequent events (e.g., differential reinforcement for compliance and time-out and positive practice for noncompliance), and the manipulation of antecedent events

(e.g., the types of instructions ¹ given).

Manipulation of consequent events. Barkley (1981, 1990) indicates that teaching parents and teachers the use of behavior modification techniques resulted in some improvements in compliance with instructions in hyperactive children. Behavior modification techniques are effective in treating behaviors such as noncompliance, acting-out behavior and tantrums and have achieved superior results when compared with other methods such as medication and "family therapy" (Bates & Wehman, 1977; Barkley, 1981, 1990; Forehand & Baumeister, 1976; Matson & McCartney, 1981). However, Engelmann and Colvin (1983) indicate that there is little evidence in the existing literature concerning successful behavior modification programs for highly noncompliant children.

Until recently, the research literature on the modification of noncompliance in children has focused on training in the home or clinic setting. In these programs, parents have been trained in the use of behavior management techniques to modify child behaviors

¹ Different terms are used in the literature to refer to instructions given to students. The most commonly used terms are "commands" and "requests." Some researchers have questioned the ethical connotations of the use of the term "command" when referring to compliance training programs (cf., Ross, 1981). This report does not attempt to argue for the use of one particular term but, for the sake of consistency, and because of the lack of value laden connotations, the term "instructions" will be used. The nature of those instructions, that is, whether a student can reasonably be expected to comply with the instruction (see Table 7 for examples of instructions), has been referred to in the literature as "alpha and beta commands," "good and poor" and "appropriate and inappropriate." Again for the sake of consistency only, the adjectives "qualitatively good" and "qualitatively poor" will be used.

involving techniques to increase appropriate behaviors (e.g., compliance) and decrease inappropriate behaviors (e.g., noncompliance) (Forehand & King, 1977). Techniques that have shown to be effective in increasing appropriate behaviors range from contingent adult praise to complex token economy systems. Techniques for decreasing inappropriate behaviors have included differential reinforcement of appropriate behaviors, ignoring the inappropriate behaviors and the use of various time-out procedures.

The effectiveness of teacher praise contingent upon compliance has also been verified in several studies (Baer, Rowbury, & Baer, 1973; Bucher, 1973; Goetz, Holmberg, & LeBlanc, 1975; Roberts, Hatzenbuehler & Bean, 1981; Schutte & Hopkins, 1970). For example, Gardner, Forehand, and Roberts (1976) conducted a study which focused on maternal and child behavior. The mothers were only instructed in the use of time-out procedures. The authors found no changes in maternal responses to the children when they were actually complying. It was suggested that this was a documentation of the importance of specifically teaching parents to reinforce compliance in their children when aversive consequences for noncompliance are being used.

Similarly, in a more recent study, Roberts et al. (1981) investigated two variables related to the acquisition of compliance among thirty-two clinic-referred preschoolers. The participants were divided into four groups: time-out for noncompliance, adult attention for compliance, both time-out and attention, and a control group. They found that the implementation of time-out was the most likely cause of the initial changes in the children's behavior. Similar to

the Gardner et al. (1976) study, Roberts et al. (1981) suggested that social reinforcement (praise) also plays an important role.

Manipulation of antecedent events. Sulzer-Azaroff and Pollack (1982) argue that if particular antecedent events produce low rates of compliance, it is those antecedent events (e.g., the way in which instructions are delivered) that need modification. Many parent training programs include sections that involve methods for effectively delivering instructions to children (Barkley, 1981, 1990; Forehand & McMahon, 1981; Patterson et al., 1973; Peed et al., 1977). Patterson et al. (1973) observed positive treatment effects in the home when the parents were instructed in giving clear instructions. The parents were also asked to avoid interrupting (i.e., issuing a poor instruction) the children and to resist the temptation to carry out the instructions themselves.

Several investigators have identified different types of instructions (Forehand, 1975; Patterson et al., 1969; Wahler et al., 1976). Forehand and King (1977) differentiated instructions into those to which a motoric response is appropriate and feasible (alpha commands) and those to which there is no opportunity to comply because the instruction is too vague, interrupted by reasoning, or the parent complies with the instruction him/herself (beta commands). Barkley (1981, 1990) identified possible reasons why children do not comply with parental instructions. These include, but are not limited to: vague and ambiguous instructions, unnecessary verbiage and reasoning, complex instructions, too many instructions issued at the same time (one after another), and insufficient time allowed for the child to

comply. Patterson et al. (1969) developed a coding system for four types of instructions: (a) command (a direct, reasonable and clearly stated instruction); (b) command negative (instruction in which someone is told to stop doing something); (c) aversive command (instructions which threaten explicitly with aversive consequences if the child does not comply); and (d) command prime (instructions for which compliance cannot easily be assessed).

Although different types of instructions have been delineated, very few researchers have reported on the differential effects of the various types of instructions on compliance (Forehand, 1975). Roberts, McMahon, Forehand, and Humphreys (1978) conducted the first parent training study, utilizing a controlled group design, to examine the effects of an antecedent event on child deviant behavior. The participants were 27 children who displayed compliance rates of 60% or less during pretraining. They found that mothers who were trained to issue specific, single instructions, followed by a minimum of five seconds of silence, were able to successfully increase the ratio of this instruction type to all other instruction types. Changes in child compliance occurred when the type of maternal instructions was manipulated. The results of this study indicate that the types of instructions given to children differentially affect compliance. They also found, however, that treatment was most effective when both antecedent (type of instruction used) and consequent (time-out) conditions were manipulated.

Rickard, Forehand, Wells, Griest, and McMahon (1981) examined a nonclinic sample of mothers and children and two groups of clinic-

referred children and their mothers. Their findings indicated that two groups of clinic-referred children can be identified, those that resemble a non-clinic sample in terms of noncompliance and deviant behavior and those that are significantly more deviant and noncompliant than a non-clinic sample. Their findings indicate that parents in the "Clinic Deviant" group emitted significantly more vague, interrupted instructions than the "Clinic Non-Deviant" group. These findings are consistent with those of Roberts et al. (1978), that child noncompliance and deviant behavior are related to the number and type of parental instructions.

Peed et al. (1977) investigated the rate of beta commands or instructions to which the child does not have a reasonable opportunity to respond (e.g., giving the same instruction again without a waiting period to give the child a chance to start complying). Their study was unique in that they differentiated the rate of compliance for alpha commands and the rate of compliance for beta commands. They found that increased child compliance to total instructions is dependent not only on the parent's ability to effectively consequence child compliance and noncompliance, but also on the parent's use of instructions with which the child has a reasonable opportunity to comply. Similarly, Atwater and Morris (1988) found that the rate with which instructions are presented to a sample of preschool students was inversely related to compliance with those instructions.

Combined approaches. Command behaviors (antecedents) have a major impact on the rate of compliance in children as well as consequences delivered for compliance and noncompliance as the

literature suggests. The use of alpha commands and consequences such as differential reinforcement for compliance and time-out for noncompliance have effectively increased compliance in children (Forehand & King, 1977). Most studies that investigate compliance in children have been conducted to examine the effects of antecedent events and of consequences for compliance.

The programs on which antecedent studies report typically include components that teach parents how to deliver clear, precise instructions to children (Sulzer-Azaroff & Pollack, 1982). Forehand and McMahon (1981) systematically evaluated a compliance training program developed by Hanf and Kling (1973). In this program, parents were instructed to give the child clear, direct instructions. Alpha (good) commands are defined as specific, and direct instructions, given one at a time, and followed by a five-second waiting period during which the child is to respond. If the child complies within five seconds after the instruction is given, the parent provides a positive contingency following the behavior. Noncompliance with the instruction is followed by the contingent implementation of time-out. The Forehand et al. studies (e.g., Forehand & King, 1977; Forehand & McMahon, 1981; Roberts et al., 1978.) have verified that contingent praise for compliance and contingent time-out for noncompliance effectively increased child compliance to parental instructions. Their findings are consistent with those of Roberts et al. (1981). As mentioned earlier, Roberts et al. (1981) found that time-out was probably responsible for the initial changes in the child's behavior. However, they also suggested that social reinforcement for compliance

played an important role.

Roberts et al. (1978) investigated the effects of the types of parental instructions and use of time-out on children's compliance. Twenty-seven children (ages three to seven) participated in the research. Their results showed that a combination of good instructions (specific, single instructions) followed by a five-second waiting period, and time-out for noncompliance was more successful in increasing child compliance than either intervention used alone.

In summary, the literature suggests that a combination of techniques (good instructions, reinforcement for compliance, and time-out for noncompliance) is effective in increasing compliance in clinic and home settings.

Problems in using aversive procedures. A compliance training program should be the least restrictive alternative for a particular student (cf., Foxx, 1982; Morgan, 1989; Morgan & Striefel, 1987-1988; Sheldon-Wilgen & Risley, 1982; Striefel, 1984) since there is an increasing emphasis on treatment programs for students to involve as little punishment as possible. This increased emphasis implies that inclusion of aversive contingencies such as time-out in a compliance training program can therefore not be considered as a preferred treatment strategy because their use may be considered overly restrictive. An additional implication may well be that treatment programs should interfere as little as possible with a student's normal classroom curriculum (cf., DCHP, 1985).

Direct Instruction

Sulzer-Azaroff and Pollack (1982) proposed that compliance training programs should address the cause of noncompliance. Often, a change in the child's environment via manipulation of antecedent and/or consequent events is effective in increasing compliance (Wells & Forehand, 1981). However, these procedures may well fail if a child has not yet learned how to comply appropriately. The addition of a direct teaching approach (i.e., "direct instruction") to behavior modification will teach the child how to comply while, at the same time, making the environment most conducive for a child to comply.

The research literature on effective teaching techniques has generally concluded that teacher directed (or direct) instruction has most successfully promoted achievement gains in children (Becker & Carnine, 1982; Haring & Gentry, 1976; Jones & Kazdin, 1981; Stevens & Rosenshine, 1981). As Stevens and Rosenshine (1981) summarize, direct instruction is teacher directed. That is, the teacher plays an active and leading role in the learning process. Direct instruction is also individualized. Individualization is taken to mean that each student is helped to achieve a high percentage of correct responses. Finally, in direct instruction, students are taught in groups to maximize teacher-contact time.

In direct instruction, when a specific skill is being taught, the teacher demonstrates and, if appropriate, discusses the skill. In the second step, the student practices the skill and the teacher prompts and corrects errors. The student is then given ample opportunity to practice the newly acquired skill in a variety of ways (e.g., role-

play, rehearsal, and assignments to be independently completed), depending on the skill taught.

Direct instruction programs have been effective in enhancing academic performance in children with whom conventional teaching methods have failed (Jones & Kazdin, 1981). To date, only Engelmann and Colvin (1983) have used direct instruction in teaching compliance. However, there have been several studies that have incorporated the direct instruction model in teaching social skills. Social skills are closely related to compliance in nature. Hilton (1982), for example, views noncompliance as reducing the ability of an individual to ultimately function in society. This section will, therefore, also review some of the research on direct instruction in teaching social skills.

Direct Instruction and Social Skills Training. Stocking, Arezzo, and Leavitt (1980) have indicated that, in teaching social skills, it is important that the child have numerous opportunities to practice and thus experience the consequences of their actions in a structured setting through role-playing. Similarly, Kelly (1982) found that demonstration, practice, and the provision of feedback and reinforcement following practice are essential components in a successful social skills training program employing direct instruction. More generally, peer social interactions, contingent social reinforcement and the modeling of appropriate social responses are intervention procedures which have consistently demonstrated effectiveness in improving a variety of behaviors (Strain, 1982).

Engelmann and Colvin (1983) developed a compliance training

program for use with highly noncompliant children. The program employs procedures similar to those used in most behavior management programs for treating noncompliance. A component is also included which is referred to as the "direct instruction model." Engelmann and Colvin consider their program different from other compliance training programs because it prescribes precisely (as is done in direct instruction programs to enhance academic performance) the communications the learner receives regarding the skill that is being taught (i.e., the critical characteristics of the skill). Those communications include the types of examples presented, the number of examples, the order in which the examples are presented, the variation of examples, the pacing of the examples, and the amount and duration of examples. These variables have been found to be related to successful acquisition of math and reading skills (Engelmann & Colvin, 1983).

To date, Engelmann and Colvin (1983) are alone in developing a compliance training program utilizing a direct instruction model as a central feature. The program does however require a great deal of teacher time and teacher training, and it relies heavily on aversive contingencies (i.e., a series of stand-up, sit-down exercises upon loud vocal instructions while no reinforcement for compliance with those instructions is provided). The eleven participants involved in the field test of their program were diagnosed as having severe behavior handicaps (and other diagnoses such as autism, severely mentally retarded, etc.) and were between the ages of four and eight. Engelmann and Colvin (1983) report their program to be successful in

increasing compliance in severely noncompliant children with these characteristics. An examination of the case studies presented in their book showed the program resulted in an increase in compliance in only one of eleven cases. However, the program resulted in a decrease in inappropriate behavior (i.e., ripping, tearing, head banging, etc.) in all participants involved in the field test.

Independent of the effectiveness of Engelmann and Colvin's program, it would not be the program of choice in many school situations because of its reliance on punishment procedures to decrease noncompliance. It also requires the teacher to have good behavior management skills. The authors warn the reader: "Unless you have good management skills, do not consider trying to use this program" (p. 18). The authors do however not define what they mean by "good behavior management skills."

The one available compliance training program (Engelmann & Colvin, 1983) that includes direct instruction and behavior management procedures is not practical for most teachers to implement. It also does not follow recent developments in the ethics of treating children's behavior problems because it does not use the least restrictive programming possible.

In summary, direct instruction procedures generally employ the following teaching techniques: demonstration, prompting and correction, and practice and feedback. Direct instruction programs have been found effective in enhancing academic performance in children with whom conventional teaching methods have failed (Jones & Kazdin, 1981). Direct instruction has also been proven effective in

teaching social skills (Stocking et al, 1980). Finally, Engelmann and Colvin (1983) have made a start by using direct instruction to teach compliance to noncompliant children.

Summary

Forehand and King (1977) extensively surveyed a series of studies concerned with the behavioral treatment of noncompliance. Some of the variables that control compliance have been studied. Among these are the consequences of responding, such as reinforcement for compliance and time-out for noncompliance, as well as antecedent events such as instruction behavior.

The current literature suggests that controlling instruction behavior and implementing behavior modification techniques (e.g., differential reinforcement and time-out) are effective procedures for decreasing noncompliance. Although direct instruction has been effective in teaching social and academic skills (Jones & Kazdin, 1981) in retarded, learning disabled, deaf and normal children (Becker & Carnine, 1982) only one study (Engelmann & Colvin, 1983) has employed this technique for teaching children to comply with instructions.

With the exception of Engelmann and Colvin's (1983) study, research on compliance training has focused only on changing the nature of parental instructions and the contingencies they implement for children's compliance and noncompliance in home and clinic settings. Many of these programs have been found to be effective in the home and clinic, but their effectiveness has not yet been

investigated in the school setting.

There is a clear need to develop programs for teaching students to comply with their teachers' instructions. Such programs should be effective, as well as practical for teachers to implement. They should also further investigate the usefulness of direct instruction in this area. Finally, these programs should be the least restrictive treatment alternative for the student.

CHAPTER III

METHODOLOGY

The purpose of this study was to investigate the effectiveness of direct instruction on increasing compliance with instructions given by teachers with students for whom manipulation of specific classes of conventional antecedent (the types of instructions given) and consequent stimuli (the schedule and types of reinforcement presented for compliance) had not resulted in an increase in compliance to an appropriate level. The methodology used in this study is explained in this chapter. Descriptions of the participants, teachers, settings, data collection methods, observers, observer agreement assessment, dependent measures, experimental procedures and experimental design are provided.

Participants

Participant Selection

Prior to the onset of the study, the seventeen Special Education teachers in three rural Northern Utah school districts were contacted to inquire whether they currently had students with compliance problems enrolled in their classrooms. These seventeen teachers were known to have students with behavior problems in their classrooms, as identified by district special education staff. Six of the teachers responded affirmatively, and three teachers indicated that they were working with students who were considered severely noncompliant. In total, seven potential participants, enrolled in three different

classrooms, were identified. Informed parental and teacher consent for participation in the study was then obtained (see Appendices A and B).

The criterion for students' participation in the study was that they complied with an average of less than 30% of instructions given by the teacher during 10 consecutive pre-baseline observation sessions. Each of those 10 pre-baseline observation sessions lasted 30 minutes or until at least six instructions had been presented by the teacher, whichever was longer. During these sessions, teachers were instructed to give instructions in exactly the same fashion, and at the same rate as they would normally do, and to provide the same contingencies for students' compliance behaviors as they were scheduled for those behaviors before the onset of the experiment. Pre-baseline sessions were conducted during times in which the participants were being instructed by the teacher or a classroom aide in either one-to-one or small group (three students or less per adult) situations.

Five students scored an average of less than 30% compliance with teacher instructions and therefore met the criterion set for these pre-baseline sessions (see Table 1 for the definition of compliance). The participant selection was further validated in four ways:

1. Teachers and principals were asked to write down the names of the 10 most noncompliant students enrolled in their classroom and school, respectively, at the time of the onset of this study. Teachers and principals were also asked to write down the names of the 10 most noncompliant students they had ever worked with.

Table 1

Definition of Student Behaviors

COMPLIANCE (C): Student initiates the correct response to an instruction within five seconds of that instruction and continues, without interruption, until the response is complete.

NONCOMPLIANCE (NC): Student does not initiate the correct response to the instruction within 5 seconds of that instruction, and/or fails to continue, without interruption, until the response is completed.

APPROPRIATE BEHAVIOR (AP): Student is actively engaged in the task instructed by the teacher (e.g., completing math problems, reading silently etc.) or looks at the teacher (i.e., makes eye-contact and does not speak, while remaining in seat) while the teacher is talking to the student or to the class in general.

INAPPROPRIATE BEHAVIOR (INAP): Student engages in behavior (vocal or nonvocal) that is non-task related and that disturbs the teacher and/or other students or that prevents the student from working on the task at hand. (Examples include, but are not limited to: pencil tapping (excessive), clapping, tearing paper, rattling or tapping feet, laughing, whistling, unusual noises, talking without permission, talking back, shouting back, teasing, making sarcastic remarks, name calling, making obscene gestures and/or nonvocal threats, hitting, biting, shoving, choking, holding others, throwing objects, rocking in chair, running in classroom, throwing paper airplanes, signaling to friends, being out of seat without permission, not being in accordance with classroom rules and using materials inappropriately (mouthing objects, rolling or tapping pencils), etc.).

*Note: INAP is scored when one or more instances of the above described behavior occur during the 10-second observation interval. AP is scored only in the absence of inappropriate behavior (INAP). AP is scored at the end of the observation interval.

Subsequently, to protect the privacy of the students not considered for participation in this study, teachers and principals were given the names of the students considered for participation who were enrolled in their classroom/school. They were then asked to put the ratings they had given to the potential participants next to their names (see Appendix C for the format used and Table 2 for the results of the ratings).

2. Adults working with the potential participants (such as: classroom teacher, aides, lunchroom attendants, librarian, P.E. teacher, etc.) were asked to rate that students' compliance on a scale of one to ten, where 1 meant very compliant and 10 meant very noncompliant (see Appendix D for the format used, and Table 3 for the result of these ratings).

3. After obtaining permission from the appropriate principals (informed parental consent had already been obtained), existing records were checked for information such as the most recent intelligence tests, achievement tests, report cards etc. (see Table 4 for a summary of this information).

4. Teachers and classroom aides (provided that those classroom aides had worked with the student for at least two months) were asked to fill out both the Achenbach Child Behavior Checklist (Achenbach and Edelbrock, 1980) and the Behavior Evaluation Scale (McCarney, Leigh, & Cornbleet, 1983). Regarding the Achenbach Child Behavior Checklist (ACBC) the teachers were asked to complete all 131 behavioral items as well as well as biographic and testing information. Aides were asked to complete only the 131 behavioral items of the ACBC. With respect

Table 2

Teachers' and Principals' Ratings of Participants' Noncompliance
Compared with Non-Participants

Participant	Age	Teacher's rating Compared to students:		Principal's rating Compared to students:	
		currently enrolled	ever worked with	currently enrolled	ever worked with
1	6	3	5	5	-
2	8	1	1	3	7
3	6	1	1	1	3
4	8	3	5	6	-
5	9	2	4	2	5

Note: 1. means: very compliant, 10. means: very noncompliant

Table 3

Ratings of Participants' Noncompliance By Adults Working with
Those Participants

Participant	Age	# of Raters	Average Rating	Range
1	6	4	8	7-9
2	8	5	8.4	8-9
3	6	7	8.9	8-10
4	8	6	7.2	6-8
5	9	7	8.7	7-10

Note: 1. means: very compliant, 10. means: very noncompliant

Table 4

Summary Of Existing Data (Psycho-Educational Testing Results And The Behavior Evaluation Scale) Per Participant (Part.)

Part.	Age (years)	Grade	Intelligence		Woodcock-Johnson Psycho- Educational Battery - Tests Of Achievement	Grade- Equivalent	Behavior Evaluation Rater	Scale					
			IQ	Test used				Scales					
								1	2	3	4	5	Total
1	6	1	117	Slosson	Reading: Math: Written language: General Knowledge:	1% ^a 3% ^a 22% ^a 67% ^a	T ^c	4	5	4*	8	5	66*
2	8	2	109	WISC-R	Reading: Math: Written language: General Knowledge:	2.0 ^b 2.2 ^b 1.3 ^b 3.0 ^b	T ^d A ^d	6	3	5	6	5	65*
3	6	KG	104	WISC-R			T	6	5	4	2*	8	65*
4	8	2	81	WPPSI			T A	5 5	3 5	4 4	4 2	4 5	58* 59*
5	9	4	102	WISC-R	Reading: Math: Written language:	2.1 ^b 2.1 ^b 2.7 ^b	T A	8 7*	7 13	5 5*	7 8	7 7*	78* 86

Note: ^a percentile scores, ^b Grade-equivalent scores, ^c T means: Teacher, ^d A means: Aide
* Means: significantly below average.

to the Behavior Evaluation Scale (BES), teachers and aides were asked to fill out all 52 items.

The ACBC (Teacher Questionnaire) lists 131 behaviors that may be observed in the classroom environment. Results from the questionnaire are used to prepare a profile which indicates whether or not the student exhibits such behaviors within or above a normal range when compared to a reference group of students from six to 11 years of age. Behaviors exhibited at a level above the normal range are considered inappropriate. The eight scales on the ACBC are labeled: I. Anxious, II. Social Withdrawal, III. Unpopular, IV. Self-Destructive, V. Obsessive-Compulsive, VI. Inattentive, VII. Nervous-Overreactive and VIII. Aggressive.

The BES is a 52-item scale representing how a rater compares various classroom behaviors of a student with the behavior of other students s/he has known. Results on this scale, too, are used to prepare a profile of the students' classroom behavior compared to a reference group of 6- to 12- year olds. The five scales of the BES are labeled: 1. Learning Problems, 2. Interpersonal Difficulties, 3. Inappropriate Behavior, 4. Unhappiness/Depression and 5. Physical Symptoms/Fears.

Both assessment instruments contain items relating to noncompliance (e.g., "Does not obey teachers' directives or classroom rules," "Refuses or fails to complete class assignments or homework," "Demonstrates difficulty or reluctance in beginning tasks"). Both of these scales also address a great number of behaviors other than compliance but were considered to be some of the most appropriate

standardized instruments available (see Table 5 for a summary of the information obtained on these scales).

Neither the ACBC nor the BES allows for the comparison of participants' scores on items pertaining to compliance and noncompliance to national norms because the items that ask about students' compliance are represented in different scales. For both instruments, national norms have been generated for total scales, not for parts of scales.

Participants

Participant 1 (p1) was a six year-old boy who was enrolled in a combined self-contained/resource room for two hours and 20 minutes per day. His grade placement was first grade. P1 was placed in this classroom because of behavior problems such as noncompliance, inability to finish tasks, and below average academic performance. During the previous school year p1 had received special education services for behavior problems in a Kindergarten classroom. Prior to the onset of this study, no formal attempts had been made (e.g., through a behavior program set up by the teacher or school psychologist) to decrease inappropriate behaviors.

Tables 2 and 3 depict the results from rating forms that were presented to p1's teacher and principal (see Appendix C) and the four adults working daily with p1 (see Appendix D) in which they rated his level of compliance with instructions. P1's teacher rated him as the third most noncompliant student with whom he was currently working and as the fifth most noncompliant student he had ever worked with. P1's principal rated him as the fifth most noncompliant student enrolled in

Table 5

Summary Of Results, Per Participant,
(Part.) On The Achenbach Child Behavior
Checklist As Obtained From The
Participants' Teachers

Part.	Age	Grade	Current Performance	Rater	Achenbach Child Behavior Checklist								School Performance	Adaptive Functioning	Internalization	Externalization
					Scales											
					1	2	3	4	5	6	7	8				
1	6	1	Reading:FBG ^a Math:SBG ^c Writing:FBG	T ^b	3	6	6	4	5	23	7	35	1.3*	8*	7	58
2	8	2	Reading:G ^d Math:G English:G Spelling:G	T ^b A ^e	2	10*	7	6*	2	29	7	48*	3	7*	11	75*
					0	3	2	1	4	17	4	17			3	38
3	6	KG		T	1	5	7	4	1	25	8	44*		6*	6	69*
4	8	2	Reading:SBG Math:SBG	T A	4	8	6	2	4	30*	5	43*	2.0*	6*	12	72*
					11	8	11*	6*	7*	30*	8	49*				
5	9	4	Reading:FBG Math:SBG Writing:SBG	T A	3	11*	6	5	2	21	6	38	1.6*	8*	20*	65*
					1	3	1	0	3	15	9*	23			5	47

Note. ^a FBG means: Far Below Grade level, ^b T means: Teacher, ^c SBG means: Severely Below Grade level, ^d G means: at Grade level, ^e A means: Aide, * means: significantly below average

the school (out of 280 students). That principal did not rate p1 in the 10 most noncompliant student he had ever worked with (see also Table 2). The four adults working daily with p1 in school rated his compliance as 8 (range: 7-9) where 1 meant very compliant and 10 meant severely noncompliant (see also Table 3).

P1's IQ on the Slosson Intelligence Test was 117 (see also Table 4). P1's teacher completed the ACBC. The teacher's results indicated the presence of significant behavior problems in the areas of adaptive functioning and school performance (see also Table 5). Results on the BES completed by p1's teacher show that p1's total score was significantly below average when compared to a nation-wide sample of other students his age, indicating the presence of significant problem behaviors (see also Table 4). Both the BES and the ACBC were administered just prior to the start of Baseline.

Participant 2 (p2) was an eight year-old boy enrolled in the same combined self-contained/resource classroom as p1. P2 was enrolled in this classroom full-time. His grade placement was third grade. P2 was placed in this classroom because of behavior problems: Attention Deficit Hyperactivity Disorder (ADHD), noncompliance with teacher instructions and not finishing in-seat assignments. Throughout the present study p2 was medicated with Ritalin, 10 mg., twice daily, for his diagnosis of ADHD. He had received special education services since Kindergarten for behavior problems. Prior to the onset of this study, two formal attempts (i.e., through a behavior program set up by the school psychologist) and numerous informal attempts had been made to decrease his inappropriate behaviors.

P2's teacher rated him as the most noncompliant student with whom he was currently working and as the most noncompliant student he had ever worked with. P2's principal rated him as the third most noncompliant student enrolled in the school (out of 438 students). That principal rated p2 as the seventh most noncompliant student he had ever worked with (see also Table 2). The five adults working daily with p2 in school rated his compliance as 8.4 (range: 8-9) where one meant very compliant and 10 meant severely noncompliant (see also Table 3).

P2's IQ on the Wechsler Intelligence Scale for Children - Revised was 109 (see also Table 4). P2's teacher completed the ACBC. The teacher's results indicated the presence of significant behavior problems in the areas of adaptive functioning (see also Table 5). Results on the (BES) completed by p2's teacher show that p2's total score was significantly below average when compared to a nation-wide sample of other students his age, indicating the presence of significant problem behaviors (see also Table 4). The intelligence test, the BES and the ACBC were administered just prior to the start of Baseline.

Participant 3 (p3) was a six year-old boy enrolled in a self-contained classroom at a local elementary school. P3 was enrolled in this classroom three hours per day (i.e., full-time placement for students in Kindergarten). His grade placement was Kindergarten. P3 was placed in this classroom because of behavior problems, in particular noncompliance and aggressive behavior. P3 had been expelled previously from four preschools and one regular kindergarten

program. He had received special education services during the summer preceding the 1987/1988 school year in a Summer Program administered by Utah State University's Special Education Department. That Summer Program was intended for Special Education practicum students as a final practicum prior to state certification. Prior to the onset of this study, two formal attempts (i.e., through behavior programs set up by a special education practicum student and a school psychologist) had been made to increase p3's appropriate behavior.

P3's teacher rated him as the most noncompliant student with whom he was currently working and as the most noncompliant student he had ever worked with. P3's principal rated him as the most noncompliant student enrolled in the school (out of 438 students) and as the third most noncompliant student he had ever worked with (in 16 years) (see also Table 2). The seven adults working daily with p3 in school rated his compliance as 8.9 (range: 8-10) where 1 meant very compliant and 10 meant severely noncompliant (see also Table 3).

P3's full-scale IQ on a Wechsler Intelligence Scale for Children - Revised was 104 (see also Table 4). P3's teacher completed the ACBC. The teacher's results indicated the presence of significant behavior problems on one scale: VIII. Aggressive. The teacher also rated p3's adaptive functioning as below average. Results on the BES completed by p3's teacher show that p3's score on all subscales was significantly below average when compared to a nation-wide sample of other students his age, indicating the presence of a significant number of problem behaviors. The intelligence test, the BES and the ACBC were administered just prior to the start of Baseline.

Participant 4 (p4) was an eight year-old boy, enrolled full-time in the same self-contained classroom at a local elementary school, as was p3. His grade placement was second grade. He was placed in this classroom because of behavior problems (i.e., noncompliance, aggressive behavior and an inability to finish tasks) and because of below average academic performance. He had received special education services since Kindergarten for behavior problems. Prior to the onset of this study, numerous informal attempts had been made to decrease his inappropriate behaviors.

P4's teacher rated him as the third most noncompliant student with whom he was currently working and as the fifth most noncompliant student he had ever worked with. P4's principal rated him as the sixth most noncompliant student enrolled in the school (out of 438 students) but p4 did not rate on the principal's list of the 10 most noncompliant students he had ever worked with (in 16 years) (see also Table 2). The six adults working daily with p4 in school rated his compliance as 7.2 (range: 6-8) where 1 meant very compliant and 10 meant severely noncompliant (see also Table 3).

P4's full-scale IQ on a Wechsler Preschool and Primary Scale of Intelligence was 81 and results on the Achievement sections of the Woodcock Johnson Psycho-Educational Battery indicated above average academic performance in reading, math and general knowledge and slightly below average academic performance in written language (see also Tables 4 and 5).

P4's teacher and the classroom aide completed the ACBC. The teacher's results indicated the presence of significant behavior

problems on the following scales: VI. Inattentive, and VIII. Aggressive. The teacher also rated p4's school performance and adaptive functioning as below average. The aide's results indicated the presence of behavior problems on the following scales: III. Unpopular, IV. Self-Destructive, V. Obsessive-Compulsive, VI. Inattentive, and VIII. Aggressive.

Results on the BES completed by p4's teacher show that p4's score on all but one scale (VIII. Aggressive) was significantly below average when compared to a nation-wide group of students his age, as was the total score, indicating the presence of significant problem behaviors. Results on the BES completed by the aide in p4's classroom indicated significantly below-average scores on all individual scales and on the total score. The intelligence test, the BES and the ACBC were administered just prior to the start of Baseline.

Participant 5 (p5) was an eight year-old boy enrolled in the same self-contained classroom at a local elementary school, as were p3 and p4. His grade placement was fourth grade. P5 was enrolled in this classroom 31 hours per week. He had been placed in this classroom because of behavior problems (noncompliance, and aggressive behavior) and because of below average academic performance. He had received special education services since Kindergarten for behavior problems. Prior to the onset of this study, numerous formal and informal attempts had been made to decrease his inappropriate behaviors. P4 had also been in private therapy with a psychologist and had received services at a University Affiliated Center.

P5's teacher rated him as the second most noncompliant student

with whom he was currently working and as the fourth most noncompliant student he had ever worked with. P5's principal rated him as the second most noncompliant student enrolled in the school (out of 438 students) and as the fifth most noncompliant student the principal had ever worked with (in 16 years) (see also Table 2). The seven adults working daily with p5 in school rated his compliance as 8.7 (range: 7-10) where 1 meant very compliant and 10 meant severely noncompliant (see also Table 3).

P5's full-scale IQ on a Wechsler Preschool and Primary Scale of Intelligence was 102 and results on the Achievement sections of the Woodcock Johnson Psycho-Educational Battery indicated below average academic performance in reading, math and written language (see also Table 4).

P5's teacher and the classroom aide completed the ACBC. The teacher's results indicated the presence of significant behavior problems on the scale that measured Social Withdrawal (scale II). The teacher also rated p5's school performance and adaptive functioning as below average. The aide's results indicated the presence of behavior problems on the following scale: VII. Nervous/Overactive.

Results on the BES completed by p5's teacher show that p5's score on one scale was significant (III. Unpopular) as was the total score, indicating the presence of significant behavior problems. Results on the BES completed by the aide in p5's classroom also indicated a significantly below-average score on that scale when compared to a nation-wide sample of students his age. The total score obtained from the aide did not indicate the presence of significant behavior

problems. As was the case for the other participants, the intelligence test, the BES and the ACBC were administered just prior to the start of Baseline.

Teachers

The students' teachers, both of whom were certified special education teachers in the State of Utah, and their aides were in charge of the classrooms in which the experiment was conducted with the experimenter serving as a consultant. P1 and p2's teacher taught a combined self-contained/resource classroom at a large grade-school. At any given time, at least nine students were present in this classroom, ranging in age from six to 11 years and in grade placements from first grade to fifth grade. Six students were enrolled in this room for 31 hours (i.e., full-time placement), including p2. P2's teacher had been a special education teacher for six years prior to the 1987/1988 school year.

P3, p4 and p5's teacher was in charge of a self-contained classroom at a local elementary school. Seven students were enrolled full-time in this classroom while one student was being mainstreamed part-time into a regular education class. Ages of the children in this classroom ranged from five to 12 and grade placements from kindergarten to fifth grade. This second teacher was in his second year of certified teaching. Both teachers used a direct instruction format almost exclusively.

Prior to the start of this experiment, these two teachers and their aides had been observed for 10 consecutive daily sessions of 30

minutes each to ensure that they at least administered six instructions per half hour to the potential participants. The teachers and their aides were kept unaware of the purposes of the experiment at that time, with the promise of full disclosure after it had been established that they administered adequate numbers of instructions. All easily met this requirement.

The 10 direct instruction lessons (see Appendix E) were taught by the experimenter who was at the time a certified teacher of the severely handicapped and a certified school psychologist in the State of Utah.

Settings

The participants were observed in their special education classrooms (except when generalization probes were being taken). The direct instruction lessons (Treatment 2) were taught in a separate room in which the experimenter and the participant could work alone to avoid embarrassing the participants as a function of the sequences taught in those lessons.

In p1 and p2's classroom, students' desks were arranged in rows and the students would typically work independently at those desks. Both the teacher and her aide were usually seated at a large table to which they would call individuals or groups of students. Materials used during instruction included Distar Reading and Math. No formal behavior management program was in effect in this classroom.

P3, p4 and p5's classroom was divided into two areas; one in which students worked independently and one in which group instruction

took place. Materials used in this classroom included Distar Reading and Math, the Walker Social Skills Curriculum and a social skills program developed by faculty of the Special Education Department at Utah State University. A behavior management program was in effect prior to the onset of the experiment. This program consisted of reinforcement of appropriate behaviors and time-out (in a segregated time-out area) for aggressive behavior. However, this program was not implemented consistently. Only p5 was ever put into time-out.

Data Collection Procedures

Observation Codes

The main dependent measures in this study were participants' compliance with teachers' instructions, participants' appropriate behavior, instructions given by teachers, and the contingencies provided by the teachers for participants' compliance and appropriate behavior (see Tables 1 and 6 for definitions). Additionally, data were collected on the transfer of students' compliance across instructions given by other school staff and across types of instructions. For each participant, daily observations lasted 30 minutes. A record of the sequence and frequency of the main dependent measures (teachers' instruction-giving behavior, participants' compliance and appropriate behavior and the contingencies teachers implemented for participants' compliance and appropriate behavior) were collected daily and at the same time for each individual participant throughout baseline and treatment phases. During follow-up, the same 30-minute observations were conducted once per week

Table 6

Definition of Teacher Behaviors

GOOD INSTRUCTION FOR INDIVIDUAL (GII): Instructions, directed at one specific student and that are specific and direct (a clear direction), given one at a time, followed by a five second waiting period to see if the student complies before issuing a second instruction and that do not directly pertain to the content of what is being learned/taught.

Examples of good instructions:

- "Jimmy, (please) put your math book in your desk."
- "Suzie, (please) go to your bedroom."
- "Jason, (please) line up for the bathroom."
- "Marilyn, (please) make your bed."
- "Brad, (please) wash your hands."

Teachers may include "please" in an instruction if they prefer. In case of noncompliance with the instructions, the instructions will be repeated with the addition of "now," e.g.,:

- "Jimmy, (please) put your math book in your desk, now."
- "Suzie, (please) go to your bedroom, now."
- "Jason, (please) line up for the bathroom, now."
- "Marilyn, (please) make your bed, now."
- "Brad, (please) wash your hands, now."

Examples of excluded instructions:

- "Jimmy, $3 + 6$ equals 9; tell me how much is $3 + 6$?"
- "John, the last sound in the word boat is 't'; tell me the last sound in the word boat?"

QUALITATIVELY POOR INSTRUCTION FOR INDIVIDUAL (PII): Any instruction that consists of a series of unrelated instructions (chain instructions), and/or is vague (i.e., non-specific), and/or consists of a question (question instructions), and/or starts with Let's ("Let's" instructions), and/or is given within five seconds from the previous instruction (repeat instructions); instructions pertaining to what is being taught/learned excluded.

Examples of qualitatively poor instructions:

Chain instructions-- "Take out your math books, then turn to page 24, then turn in yesterday's reading assignment." (A series of unrelated instructions). "Take your reading books out, put your pencil on your desk, and get out yesterday's homework assignment." more than two related instructions in succession).

(Table continues)

Definition Of Teacher Behaviors

Vague instructions--"Be good while I'm at the principal's office."
"Be careful when you play next door." (What is meant by
"good" and "careful"?) Also, any type of gesture instructing
a participant to do something (e.g., pointing to the chair for
the participant to sit down, pointing to the door or motioning
the participant to line up, etc.

Question instructions-- "Would you like to do your math
assignment?" "Do you want to get into reading groups?" (I.e.,
an instruction that gives the participants an opportunity to
say "No").

"Let's" instructions-- "Let's put the art materials away." "Let's
get in a circle for reading." (Any instruction that starts
with "Let's," indicating an invitation rather than an
instruction and that is neither individual or group specific).

Repeat instructions-- "Put your books in your desk."- 3 second
waiting period-"Put all of your materials away." (I.e., two
instructions presented without a five second waiting period
separating them. This does not give the participant a
reasonable amount of time to comply).

GOOD INSTRUCTION FOR GROUP (GIG) Same as an Good Instruction for
Individual, but that is directed at 2 or more students. GIG is
recorded only when the participant is a member of the group at
which the instruction is directed (e.g., class, reading group,
etc.).

QUALITATIVELY POOR INSTRUCTION FOR GROUP (PIG) Same as an Poor
Instruction for Individual, but that is directed at 2 or more
students. PIG is recorded when the participant is a member of
the group at which the instruction is directed at (e.g., class,
reading group, etc.)

IMMEDIATE INSTRUCTION (indicated by not underlining instruction code)
Instruction of any of the above kinds that requires the
participant five seconds or less to comply with.

Examples of immediate instructions:

"John, look here"

"Brett, put your pencil down"

(Table continues)

Definition Of Teacher Behaviors

DELAYED INSTRUCTION (indicated by underlining instruction code)
Instruction of any of the above kinds that require the participant more than five seconds to comply with.

Examples of delayed instructions:

"John, go wash your hands"

"Brett, go to the bathroom"

PRAISE (PR): Teacher gives approval for students' behavior in the form of:

Verbal praise ("Good working," "Thanks," "Nice job," "Good," etc.). This does not include "OK."

Approving gestures (winks, waves). This does not include smiles.

Physical contact (pats on head, shoulder, arm, touches, etc.).

PRAISE FOR INDIVIDUAL (PRI) Praise directed at the target student who is being observed.

PRAISE FOR GROUP (PRG) Praise directed at a group (2 or more students). PRG is recorded only when the target student who is being observed is a member of the group at which the praise is directed (e.g., class, reading group, etc.)

PRAISE FOR OTHERS (PRO) Praise directed at an individual other than the target student being observed. The individual at whom the praise is directed must be a member of the target student's group.

DISAPPROVAL (DISAP): The teacher indicates dislike of students' current behavior through a verbal statement, a physical gesture and/or through implementation of a negative contingency other than verbal statements or physical gestures. This includes criticism, reprimand, or statement to the participant to change current behavior.

Examples of verbal statements indicating disapproval are: "No," "That's enough," "You're late," "Your answer is completely wrong," "I told you once if a million times....."

Examples of gestures indicating disapproval are: shaking of head by teacher, frowning, sighing loudly, throwing hands up, stomping out of the room.

Examples of other negative contingencies are: implementation of time-out, response-cost or overcorrection. The teacher may also

(Table continues)

Definition Of Teacher Behaviors

write the student's name on the board, send the student to the principal's office, fine the student with a loss of points or with withholding of recess or free time activities.

DISAPPROVAL OF INDIVIDUAL (DISAP I): Disapproval directed at the target student being observed.

DISAPPROVAL OF GROUP (DISAP G): Disapproval directed at a group (i.e., 2 or more students). The target student being observed must be a member of that group.

DISAPPROVAL OF OTHERS (DISAP O): Disapproval directed at a student other than the target student being observed. The student at whom the disapproval is directed must be a member of the group in which the student who is being observed participates.

at the identical time of day for each participant as was done during the other phases. No treatments were in effect during the follow-up phase.

To obtain a measure of the transfer of students' compliance to other school staff and across different types of instructions, probe data were taken twice weekly on students' compliance with instructions given by adults other than the teacher (such as classroom aides if the teacher was the student's instructor during the regular observations and teachers in other classrooms where the student spent time) and on instructions which were typically considered poor instructions (see Table 6 for definitions).

The daily data collection sessions for the main dependent variables were conducted at the same time during each school day to assure that variations in the dependent measures could not be attributed to a systematic bias due to the subject taught or the time

of the day the participants were observed. Data were only collected at times when the teacher or classroom-aide were working directly with the participants, either one-to-one or in groups of not more than three students (see Table 7 for typical instructions that were presented).

To preserve the integrity of the multiple baseline design, data on p1 were collected when his teacher was working with him. P2's data were collected when the classroom aide was instructing him. P3's data were collected while he was working with his teacher, while p4 and p5's data were collected when two different aides were instructing them. Thus, each participant had a different instructor for the purposes of the experiment allowing for a staggered introduction of Treatment 1 to the teachers and aides.

One particular type of instruction was excluded from the observations: those related to the content of what was being taught/learned. Such instructions included: "4 + 3 equals 7. What is 4 + 3?" and "The first sound in ship is 'sh'. What is the first sound in ship?," which are typical instructions given during direct instruction lessons. The reason for exclusion of these kinds of instructions was that noncompliance with such instructions does not indicate noncompliance per se, but could well be influenced by the participant's lack of knowledge of the answer.

Data collection

Data were collected daily on the main dependent variables (number of instructions presented, types and quality of those instructions,

students' compliance with those instructions, the amount of students' appropriate behavior versus inappropriate behavior and the

Table 7

Examples of Typical Instructions Given By Teachers

1. (Name), sit down.
2. (Name), put your pencil down.
3. (Name), put your books away.
4. (Name), sit up straight.
5. (Name), look up front. (alt.: (Name), eyes up here.)
6. (Name), come here.
7. (Name), go line up at the door.
8. (Name), raise your hand.
9. (Name), be quiet.
10. (Name), get ready. (as is used in direct instruction lessons)

contingencies provided by teachers or other staff for compliance and appropriate behavior). Observation sessions in all conditions lasted 30 minutes. Data were collected during 10-second intervals that were indicated to the observer by a beep-tape that indicated the beginning of each interval by giving the number of that interval (1 through 7). Data were not recorded during the first interval; that interval was used as a "catch-up" time for observers (see Appendix F for data sheet).

The coded behaviors were marked with increasing numbers (starting

with "1" for the first observed event in each seven-interval block). These numbers were placed underneath the codes to indicate the sequence of events as they happened during the intervals. If the participants' behavior had been appropriate for the entire 10 seconds, that interval was scored as appropriate. If any instance of inappropriate behavior occurred during the interval, it was scored as inappropriate for the entire interval.

To obtain a measure of the remaining dependent variables (e.g., the transfer of students' compliance across instructions given by other school staff and across different types of instructions), probe sessions were conducted twice weekly per participant for each of the two forms of generalization. Although the specifics of these generalization probes depended on the specific situation for a participant, for example, how many adults were available who regularly worked with that participant, how many different places the participant would visit during a week, etc. To assess participants' compliance across "other school staff," a set of six instructions was presented at least once weekly by at least one adult other than the person who instructed the participant during regular observations. The content of those six instructions depended on the age of the participant and was determined during the initial baseline condition.

To assess participants' compliance across different types of instructions, the person who instructed that participant during regular observations was asked twice weekly to present five instructions to that student that were qualitatively poor versions of instructions given to that student during the regular school day

(i.e., either the teacher or the classroom aide). The content of those instructions was determined during the initial baseline. The five types of poor instructions (chain instructions, vague instructions, question instructions, Let's instructions and repeat instructions) were each represented in the set.

Additional data were collected on the reliability of implementation of the behavior management program (Treatment 1) and the delivery of the direct instruction lessons (Treatment 2). Implementation of Treatment 1 was evaluated at least once per week for a half-hour interval for each participant. The observer marked on a data sheet similar to that used by the teacher to track participants' behavior whether or not behavior was consequted as prescribed in the treatment (see the description of Treatment 1). This evaluation was continued from the introduction of Treatment 1 throughout the remainder of the experiment. Treatment 1 was never withdrawn throughout the course of the study.

The accuracy of implementation of Treatment 2 was assessed on an average of once every six sessions for each participant. To this effect, video-tapes were made of selected lessons. An observer, familiar with direct instruction in general and the lessons which comprised Treatment 2 in particular, watched those video-taped lessons. During the viewing, she filled out a checklist as the experimenter had done while administering the lesson.

Observer Selection and Training

Prior to the onset of the experiment, three observers were given

a list of definitions, coding sheets, and a practice test. They were instructed to study the codes and to take a mastery test (See Appendix G) on which they would have to score 100% correct to pass. After they passed this test, the observers were required to sign a confidentiality agreement in which their responsibility regarding information obtained while observing the participants was outlined (See Appendix H).

The researcher then met with each observer to discuss questions or problems and role-play actual examples of the coded behaviors. The observers also spent at least two days observing and collecting data on students in the Education Unit classrooms at the Developmental Center for Handicapped Persons who were not candidates for participation in the study. When they reached 90% agreement, both on participant and teacher behaviors with the researcher in "mock" 30-minute observation sessions on a point-by-point comparison, they practiced together without the researcher present. Once they reached 90% agreement together. Again, on a point-by-point comparison, they were allowed to individually collect data on the actual participants.

A 30-minute video-tape was prepared of the compliance behavior of two students enrolled in the Education Unit classrooms who were not eligible for participation in this study. This tape was used to assess observers for observer drift at regular two-week intervals. If observer agreement using this criterion tape dropped below 90%, observers would have been re-trained to criterion (90% agreement) utilizing students not eligible for participation in this study. Observer agreement did not drop below 90%.

Interobserver Agreement

Interobserver agreement checks were made on the average of every fourth data collection session, throughout the study. To avoid introduction of observer-related extraneous variables, observers were rotated so that the same observer would not collect data on the same participant for more than four sessions in a row. Additionally, on the average, one out of every 10 observation sessions was video-taped to further control for observer drift. This video-tape was viewed and scored by the researcher plus an observer other than the one who had collected the data while the video-tape was being made. Interobserver agreement was determined by a comparison of the ratings by the original observer with the ratings obtained from the video-tape.

To assess the validity of the distinction between immediate and delayed instructions, a written transcript of the instructions given during one observation session per week was submitted to independent judges who scored the instructions as immediate or delayed (see Table 6).

Procedures

Baseline

Baseline was conducted until stability was achieved. Stability was defined as: five consecutive data points that were within one standard deviation of the mean of those five data points, with a minimum of 10 data points collected. During baseline teachers and their aides were asked to give instructions and to continue to provide the same contingencies for compliance that were used before the onset

of the experiment. Baseline sessions lasted 30 minutes or until six instructions had been presented, whichever was longer.

To comply with the format of a multiple baseline design (see end of this chapter), baselines on different participants were staggered. Before the onset of the experiment, it was decided that baselines for participants 1 and 4 would continue for at least 10 sessions and until stability was established. Baselines for participants 2 and 5 would continue for at least 15 sessions whereas baselines for participants 3 and 6 would continue for at least 20 sessions.

Teacher Orientation

Following baseline, teachers and classroom aides who participated in the study were provided with readings, first developed by Callaghan (1986), that addressed causes of noncompliance. Rationales and methods for giving good instructions and positive attention for compliance were also explained (see Appendices I and J). The readings were provided to increase the likelihood that: a) the teachers (or their classroom aides) would give a minimum of six good instructions per 30-minute observation session, and b) that participants would be reinforced for compliance. To ensure that classroom staff read and understood the hand-outs, the experimenter discussed the contents of the materials with the teachers and aides. During those discussions, the different types of compliance, the reasons for noncompliance, why and how to give good instructions and why, how, and when to give positive attention to participants was addressed. The teachers, aides and experimenter role-played giving good instructions and positive

attention for compliance. The teachers were asked to give the participants at least six good instructions during the 30-minute treatment and follow-up observation periods. During the baseline phase of the experiment, the teacher was to maintain any existing contingencies or behavior management programs that had been implemented in the participants' classroom prior to the study.

Treatment 1

During Treatment 1 an antecedent and contingency management program was implemented which consisted of "good instructions" (see Appendix I) and reinforcement for compliance and with teacher instructions and other appropriate classroom behaviors. The purpose for implementing this condition was to establish that giving good instructions in combination with a specific structured contingency management program was not sufficient to increase participants' compliance to acceptable levels (80% compliance with teachers' instructions - see Introduction).

Instructions were considered qualitatively "good" if they were directed at one specific student and if they were specific and direct, given one at a time, followed by a 5-second waiting period to see if the student complied before issuing a second instruction, and did not pertain to the content of what was being learned/taught (see also Table 6). Compliance with teacher instructions was defined as: the student initiates the correct response to an instruction within 5 seconds of that instruction and continues, without interruption, until the response is complete. Compliance was immediately followed by verbal praise (e.g., "John, that was good listening").

In addition, a behavior management system was in effect which was based on the system used at the Children's Behavior Therapy Unit in Salt Lake City (see Appendix K). This behavior management system is based on five levels, which progressively require more appropriate classroom behaviors and concurrently give the students more privileges as they move up the levels. Participants' behavior was assessed on the average of once every 10 minutes (i.e., VI 10 minutes schedule) as indicated by a beep-tape. Participants earned a point for each interval in which they had behaved according to the requirements for the level in which they were placed. The points were later traded in for back-up items and activities that had been identified either by the parents or by the classroom teacher as having previously increased behaviors in the specific participant. These items were labeled back-up reinforcers and ranged from free time to access to an Apple II computer and a commercial arcade game.

To verify the accuracy of implementation of Treatment 1, fidelity checks were conducted. During those checks, the way teachers gave instructions and consequated participants' behavior was compared against the Teacher Handouts (see Appendices I and J) and the protocol described in the behavior management program (see Appendix K).

A phase change to Treatment 2 was made when five consecutive data points were within one standard deviation from the mean of those five data points with a minimum of 10 data points collected. A participant was not eligible for participation in Treatment 2 if that participant attained 80% compliance or more in any of the five sessions that immediately preceded the phase change.

Treatment 2

The program that constituted Treatment 2 consisted of 10 direct instruction lessons adapted by the researcher, based on 10 lessons developed by Callaghan (1986) (see Appendix E). The 10 lessons were presented by the researcher to the participants in daily sessions, three days a week with at least one day between sessions. Each direct instruction lesson lasted approximately 10-15 minutes. The first five lessons (Part One) were intended to teach the participant to do what his teacher asked him to do right away (i.e., "before you can count to five") while the participant would say "Sure I will" out loud. The second five lessons (Part Two) were intended to teach the participant to do what his teacher asked him to do right away but without saying "Sure I will" out loud.

The direct instruction approach employed in Treatment 2 program included modeling and demonstration, role-playing, drill and practice, discrimination training, application and feedback, and social praise (Rosenshine & Stevens, 1986). Each of the lesson that comprised Treatment 2 was divided into the following sections:

1. Introduction -- the trainer briefly indicated the purpose of the lesson.
2. Homework Discussion -- the homework given to the participant on the previous day (e.g., the participant was required to say "Sure I will" following a parental or teacher instruction and do what the parent had requested right away) was reviewed.
3. Role-play -- the skill to be learned in the current lesson was practiced (using modeling, demonstration, drill and practice of

the skill) with the trainer playing the role of teacher and student alternately.

4. Discrimination training -- the trainer, playing the role of the student, gave examples of the correct and the incorrect use of the skill to be learned in the current lesson and the participant was required to indicate whether the skill was used correctly or incorrectly.
5. Verification -- given examples of situations that would call for the use of the skill learned in the current lesson, the participant would indicate how he would use that skill.
6. Homework assignments -- the participant was instructed to practice the skill learned in the current lesson in appropriate situations.

To ensure that all participants received the same information in the same fashion during the direct instruction lessons, the experimenter kept a checklist of all items contained in every lesson. Thus, the lessons were presented in the same fashion to every participant. On the average, an observer filled out the checklist on one out of every six lessons while watching a video-tape of the experimenter teaching a lesson (see Appendix L).

Maintenance

During the Maintenance phase of this experiment, the behavior management program that constituted Treatment 1 remained in effect in the same fashion it was implemented during Treatment 1 and Treatment

2. To enhance the maintenance of treatment gains made during the implementation of Treatment 2, lesson 10 of that treatment was re-implemented each time a participant's compliance was observed to be below 80%.

Follow-up

During the Follow-up phase of the experiment, the enforced implementation of Treatment 1 was withdrawn. However, teachers were left free to continue using that behavior management program. No other scheduled interventions were implemented during this phase.

Experimental Design

A multiple baseline design across participants was used to assess treatment effectiveness (Baer, Wolf, & Risley, 1968). This design was employed since it was not possible to return to baseline conditions once the participants were exposed to the direct instruction lessons. The use of a multiple baseline design allows for the establishment of a reasonable functional relationship between the treatment and compliance by the participants if baseline for each participant remains stable and does not change until treatment is implemented.

Phase changes were made according to the criteria that follow. Baselines for participants 1 and 4 continued for a minimum of 10 sessions and until stability was achieved. Stability was defined as: five consecutive data points that are within one standard deviation of the mean of those five data points, was achieved. Baselines for participants 2 and 5 continued until stability was achieved. However,

for participants 2 and 5 baseline continued for at least 15 sessions. Baselines for participants 3 and 6 continued for at least 20 sessions. Phase changes to Treatments 1 and 2 were made when stability was achieved, provided that participants' compliance with teachers' instructions had not reached a level of 80% or more. In addition, phase changes to Treatment 2 were made with a staggered number of sessions. That is, at least five sessions separated introduction of Treatment 2 for participants 1 and 4 from participants 2 and 5 and another five sessions separated these participants from participants 3, 6 and 7. Participants 6 and 7 reached levels of compliance in excess of 80% during baseline and were therefore excluded from the study.

CHAPTER IV

RESULTS

The primary purpose of this study was to determine the effectiveness of the direct instruction compliance lessons in increasing compliance with teachers' instructions in a school setting with students for whom manipulation of conventional antecedent stimuli (in particular: the kinds of instructions used) and consequent stimuli (contingency management) had not led to an adequate increase in compliance (i.e., compliance with 80% of teachers' instructions). Seven participants were identified to participate in the study, but only five met the baseline criterion. The baseline criterion was defined as: less than 80% compliance with teachers' instructions during the baseline sessions.

Visual inspection of the data on compliance suggests that introduction of Treatment 1 was followed at best, by an increase in compliance with good instructions of 12 percentage points or less in four (i.e., p1, p2, p4, and p5) out of five participants (see Table 8, Figures 1 and 2 and Appendix M). Participant 3's (p3's) data did not show such an effect. His compliance did not increase during Treatment 1. Introduction of Treatment 2 was followed by an increase in compliance with good instructions in excess of 40 percentage points in participants 1 through 4 and by an 8% increase in compliance for p5. The sixth and seventh participants who were evaluated for inclusion in this study scored pre-baseline rates of compliance in excess of 30% and were therefore excluded from participation.

Table 8

Summary of Participants' Compliance with Instructions and their
Appropriate Behavior across Experimental Phases

Phase	Percentage Compliance with		Percentage Appropriate Behavior
	Qualitatively Good Instructions	Qualitatively Poor Instructions	
Participant 1			
Baseline	25	15	9
Treatment 1	32	54	69
Treatment 2	87	83	79
Maintenance	95	100	92
Follow-Up	82	50	80
Participant 2			
Baseline	26	29	20
Treatment 1	28	50	61
Treatment 2	81	100	77
Maintenance	95	100	80
Follow-Up	68	33	63
Participant 3			
Baseline	29	0	19
Treatment 1	29	0	24
Treatment 2	71	0	59
Maintenance	91	50	81
Follow-Up	95	50	89
Participant 4			
Baseline	16	50	38
Treatment 1	28	40	63
Treatment 2	77	0	85
Maintenance	95	0	85
Follow-Up	98	0	70
Participant 5			
Baseline	23	29	15
Treatment 1	31	50	32
Treatment 2	56	0	55
Maintenance	73	50	49
Follow-Up	86	0	43

A multiple baseline design requires that effectiveness of a treatment be demonstrated by introducing a phase change (i.e., introducing a treatment for one participant while holding conditions constant for all other participants) after which the behavior of the participant for whom the phase change was introduced, changes in the predicted direction (Kazdin, 1982). Thus, effectiveness can be claimed for both Treatments 1 and 2. However, since the increases in compliance following introduction of the first treatment were short of the criterion set for compliance (80%), the effectiveness of Treatment 1 to increase students' compliance in a classroom setting must be considered inadequate.

Data were also kept on participants' compliance with qualitatively poor instructions given by the teachers or aides during the observation sessions (see Table 8, Figure 3 and Appendix M). However, because of the small number of qualitatively poor instructions presented after introduction of Treatment 1, no conclusions can be drawn from these data. With the exception of Treatment 1 for p1, teachers and aides gave .5 or less qualitatively poor instructions per observation session following the introduction of Treatment 1. Treatment 1 consisted, in part, of teaching the teachers and aides to give qualitatively good instructions (see Appendix I). The reader is referred to the section entitled "Relationship Between Compliance and the Quality of Teachers' Instructions" on for further discussion of this issue.

Individual Participant Data

Compliance with Qualitatively Good Instructions

Figure 1 depicts compliance with good instructions as observed in the daily sessions for the five participants. Table 8 and Appendix M contain the raw data from which the figure is derived, including the number of qualitatively good instructions presented, the number of instructions with which the participants complied, and the percentage of compliance. These data indicate that following introduction of Treatment 1 an increase in compliance with good instructions for p1 was observed from baseline (mean: 24%, range 11-33%) to Treatment 1 (mean: 32%, range 9-91%). A more substantial increase in compliance was seen after introduction of Treatment 2 (mean: 87%, range: 22-100%). During Maintenance, p1's compliance stayed at an average of 95% (range: 83-100%). During Follow-up, p1's compliance decreased to an average of 83% (range 29-100%). No data could be collected on p1 during session #6 due to parent-teacher conferences being held on that day. P1 was ill during the week in which sessions 21 through 25 were scheduled.

P2's compliance did not change from Baseline (mean: 26%, range: 0-89%) to Treatment 1 (mean: 28%, range: 13-60%), except for a small decrease in variability, but increased following introduction of Treatment 2 (mean: 81%, range 22-100%). Compliance increased again during Maintenance (mean: 95%, range 80-100%), and showed a small reduction during Follow-up (mean: 68%, range 50-88%). No data could be collected on p2 during session #7 due to parent-teacher conferences

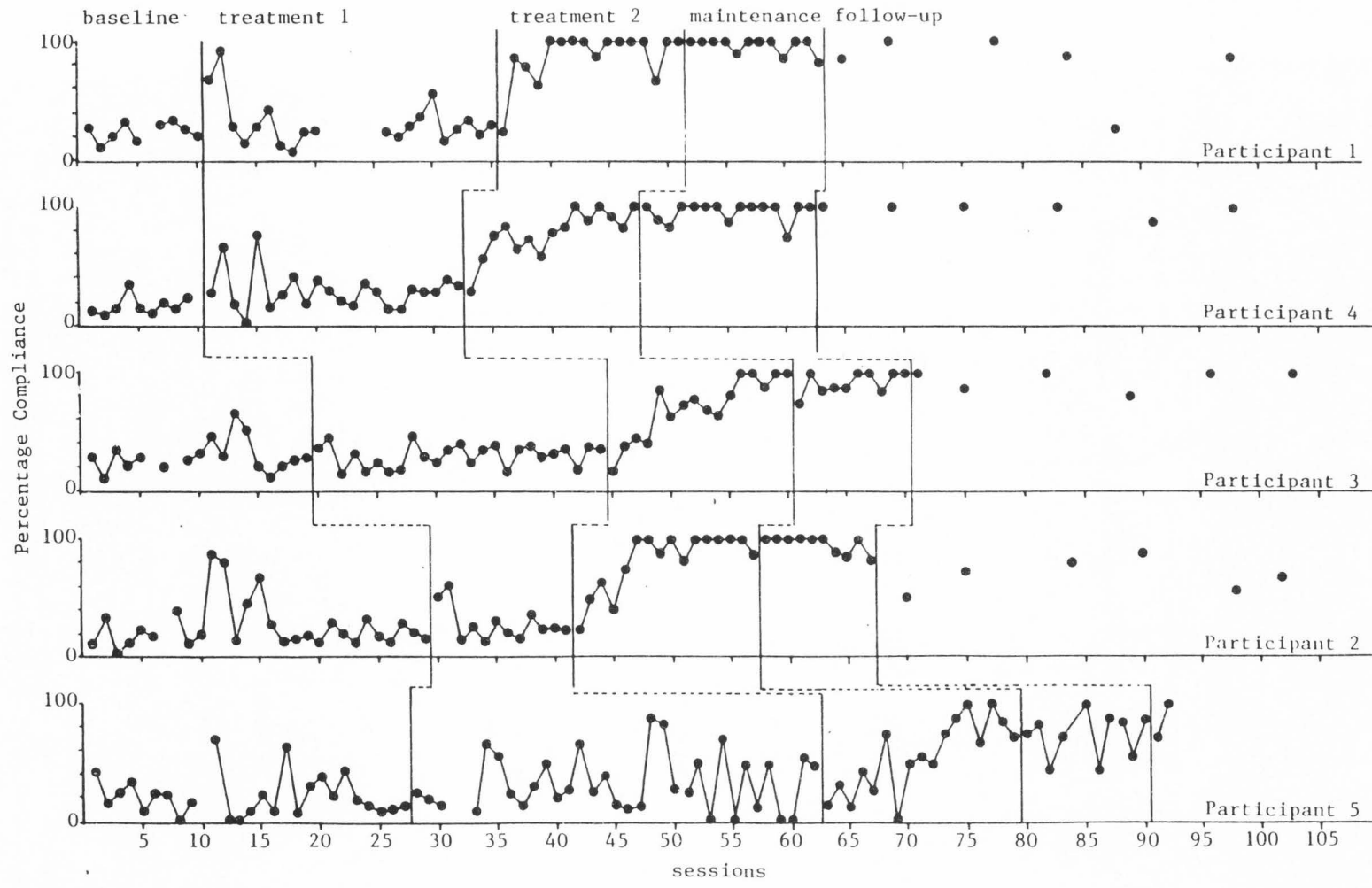


Figure 1. Participants' compliance with qualitatively good instructions across experimental phases as a percentage of the total number of qualitatively good instructions across experimental phases.

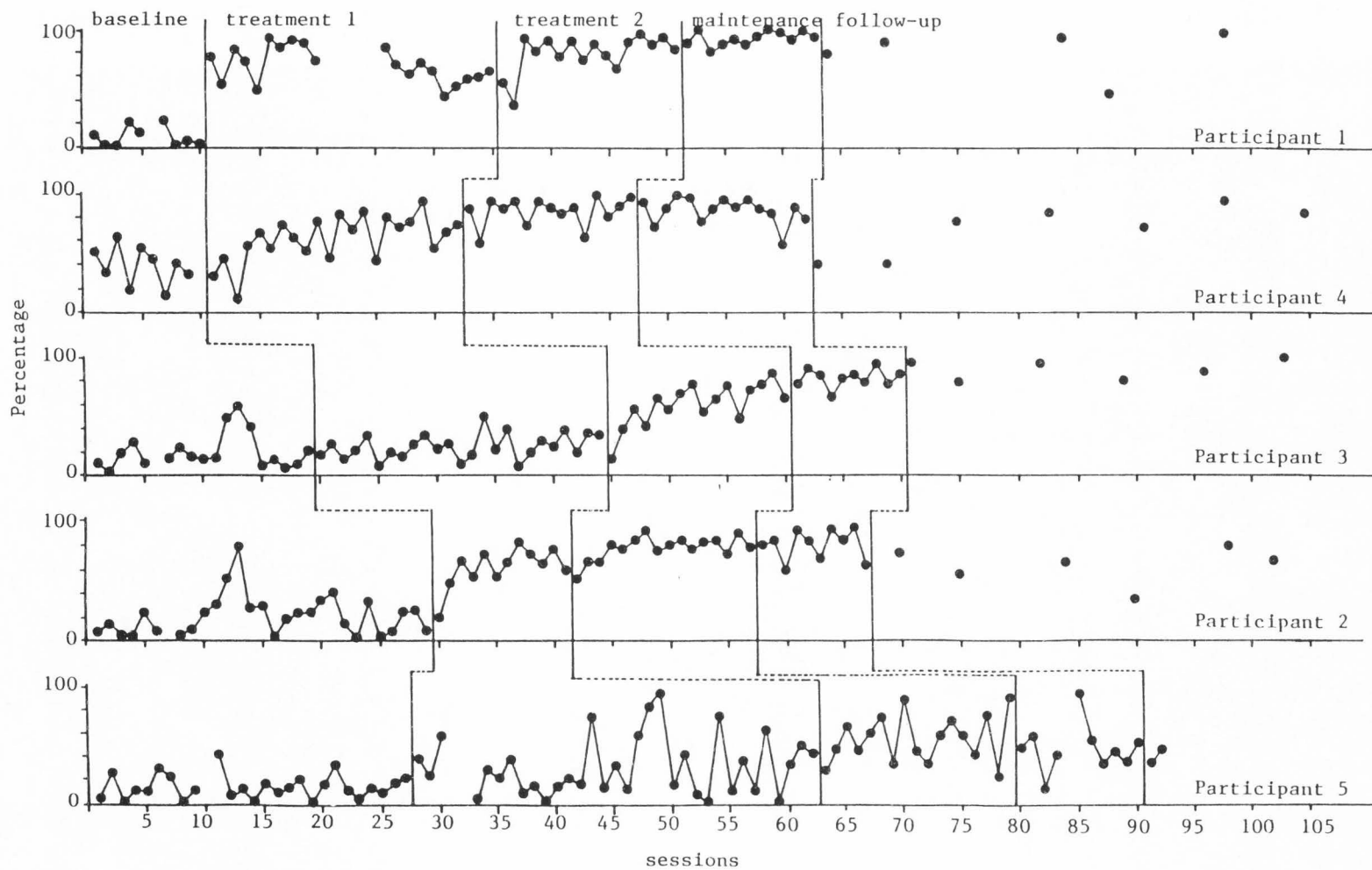


Figure 2. Percentage of intervals of participants' appropriate behavior across experimental phases.

being held on that day.

P3's compliance also showed a small decrease in variability from baseline (mean: 29%, range: 0-63%) to Treatment 1 (mean: 29%, range: 13-44%) and no other change. During Treatment 2, his average compliance was 72% (range: 17-100%), which increased to an average of 91% (range: 71-100%) during Maintenance. Follow-up data showed a mean of 95% compliance (range: 88-100%). No data could be collected on p3 during session #6 due to parent-teacher conferences being held on that day.

P4's compliance increased from baseline (mean: 16%, range: 9-33%) to Treatment 1 (mean: 28%, range 0-66%) and again during Treatment 2 (mean: 77%, range: 29-100%). During Maintenance, p4's compliance averaged 95% (range: 71-100%) and during Follow-up 98% (range: 88-100%). No data could be collected on p4 during session #10 due to parent-teacher conferences being held on that day.

Finally, p5's average compliance increased slightly from baseline (mean: 23%, range: 0-45%) to Treatment 1 (mean: 31%, range 0-89%) to Treatment 2 (mean: 55%, range: 0-100%). Noteworthy is the relatively large increase in the variability in his compliance. P5's compliance during Maintenance averaged 73% (range: 43-100%) and during Follow-up 85% (range: 71-100%), with a concomitant decrease in variability. No data could be collected on p1 during session #10 due to parent-teacher conferences being held on that day.

Booster sessions for Treatment 2. During the Maintenance phase of the experiment, booster sessions for Treatment 2 were conducted if the participant's compliance with qualitatively good instructions was

less than 80% during any of the observation sessions (see also Chapter III). P1 and p2's compliance never dropped below 80%. P3 and p4 each were taught one booster session (sessions 61 and 60, respectively) following an observation during which their compliance was found to be below 80%. P5 was taught five such booster sessions (sessions 80, 82, 83, 86 and 89).

Reinforcement for compliance. Table 9 summarizes how often participants received reinforcement for compliance in each of the experimental phases. That table indicates that, even though the opportunities to obtain reinforcement decreased from Treatment 1 to Treatment 2 for each of the participants, the number of reinforcers for compliance presented increased. The decrease in opportunities for reinforcement from Treatment 1 to Treatment 2 ranged from .1 per session for p5 to 1.7 per session for p1. Expressed as a percentage of opportunities that were actually reinforced, an increase was found of 54, 52, 35, 49, and 24%, respectively, for p1, p2, p3, p4 and p5.

Appropriate Behavior

Figure 2 depicts the daily percentage of intervals in which the five participants exhibited appropriate behavior. Table 8 and Appendix M contain the raw data from which the figures are derived. These data indicate that following introduction of Treatment 1 a very substantial increase in appropriate behavior for p1 was observed from baseline (mean: 9%; range 0-24%) to Treatment 1 (mean: 69%; range 49-92%). A small increase in appropriate behavior was seen after introduction of Treatment 2 (mean: 79%; range 34-97%). During the Maintenance phase, p1's appropriate behavior increased to an average

Table 9

Reinforcement for Compliance Averaged Per Participant and Per Condition

Phase	Number of opportunities for reinforcement	Number of reinforcers administered	Percentage of opportunities reinforced
Participant 1			
Baseline	9.9	2.4	24
Treatment 1	9.2	3.0	33
Treatment 2	7.5	6.5	87
Maintenance	7.3	6.9	95
Follow-up	7.2	5.8	81
Participant 2			
Baseline	8.4	2.2	26
Treatment 1	8.4	2.4	29
Treatment 2	7.9	6.4	81
Maintenance	7.1	6.8	96
Follow-up	7.3	5	68
Participant 3			
Baseline	9.2	2.4	26
Treatment 1	8	3.2	38
Treatment 2	6.6	4.8	73
Maintenance	6.8	6.2	91
Follow Up	6.8	6.5	96
Participant 4			
Baseline	9	1.6	18
Treatment 1	8.1	2.3	28
Treatment 2	7.7	5.9	77
Maintenance	7	6.7	96
Follow-up	7.6	7.4	97
Participant 5			
Baseline	9.4	2.1	22
Treatment 1	7.0	2.3	33
Treatment 2	6.9	3.9	57
Maintenance	7.4	5.3	71
Follow-up	6.5	5.5	85

of 92% (range 80-100%). During Follow-up, p1's appropriate behavior decreased to an average of 80% of the observed intervals (range 47-95%).

P2's appropriate behavior increased from Baseline (mean: 20%; range 1-80%) to Treatment 1 (mean: 61%; range 19-81%) and increased again following introduction of Treatment 2 (mean: 77%; range: 51-92%). Appropriate behavior increased marginally during Maintenance (mean: 80%; range: 59-95%), and showed a reduction during Follow-up (mean: 63%; range: 35-80%).

P3's appropriate behavior also showed a steady but small increase in appropriate behavior from baseline (mean: 19%; range 2-58%) to Treatment 1 (mean: 24%; range: 7-50%). During Treatment 2, his average amount of appropriate behavior was 59% (range: 11-84%), which increased to an average of 81% (range 64-95%) during Maintenance. Follow-up data showed a mean of 89% appropriate behavior (range 78-93%).

P4's appropriate behavior increased from baseline (mean: 36%; range 14-63%) to Treatment 1 (mean: 63%; range 10-96%) and again during Treatment 2 (mean: 85%; range 61-100%). During Maintenance, the amount of p4's appropriate behavior averaged 85% (range: 56-100%) and during Follow-up 70% (range: 40-100%).

P5's average appropriate behavior increased from baseline (mean: 15%; range: 1-41%) to Treatment 1 (mean: 32%; range: 1-94%) to Treatment 2 (mean: 55%; range: 24-90%). P5's appropriate behavior during Maintenance decreased to 49% (range: 12-94%) and during Follow-up decreased again to 43% (range: 37-48%).

Use of Time Out and Response Cost

Only p5 had a behavior program in which time-out was used as a contingency for inappropriate behavior. Time-out was not implemented with p5 during any of the observation sessions.

Table 10 shows the frequency of the use of response cost with each of the participants, averaged per experimental phase. A significant reduction in the frequency of use of response cost from Treatment 1 to Treatment 2 was observed for all participants. This reduction was due to a decrease in noncompliance with teacher instructions.

Relationship Between Compliance and the Quality of Teachers' Instructions

Figure 3 indicates the relationship between participants' compliance and the quality of teachers' instructions. Overall, as may be seen in the figure, participants' compliance with qualitatively poor instructions, where it was observed, was rather scattered whereas compliance with qualitatively good instructions showed an upward trend as the experimental conditions progressed. Yet, compliance with qualitatively poor instructions was often higher than compliance with qualitatively good instructions.

The fact that participants' compliance with qualitatively poor instructions was scattered while their compliance with qualitatively good instructions showed an upward trend was confirmed by Pearson Product Moment Correlation Coefficients calculated on the relationship between compliance with qualitatively good instructions and compliance

Table 10

Summary of the Use of Response Cost Per Participant and Per
Experimental Condition

Condition	Average Number of Times Response Cost Was Used Per Observation Session
	Participant 1
Baseline	n/a
Treatment 1	2.9
Treatment 2	.6
Maintenance	.5
Follow-Up	n/a
	Participant 2
Baseline	n/a
Treatment 1	1.2
Treatment 2	.3
Maintenance	.1
Follow-Up	n/a
	Participant 3
Baseline	n/a
Treatment 1	2.7
Treatment 2	.4
Maintenance	.2
Follow-Up	n/a
	Participant 4
Baseline	n/a
Treatment 1	.5
Treatment 2	.2
Maintenance	.2
Follow-Up	n/a
	Participant 5
Baseline	n/a
Treatment 1	4.1
Treatment 2	2.7
Maintenance	2.1
Follow-Up	1.1

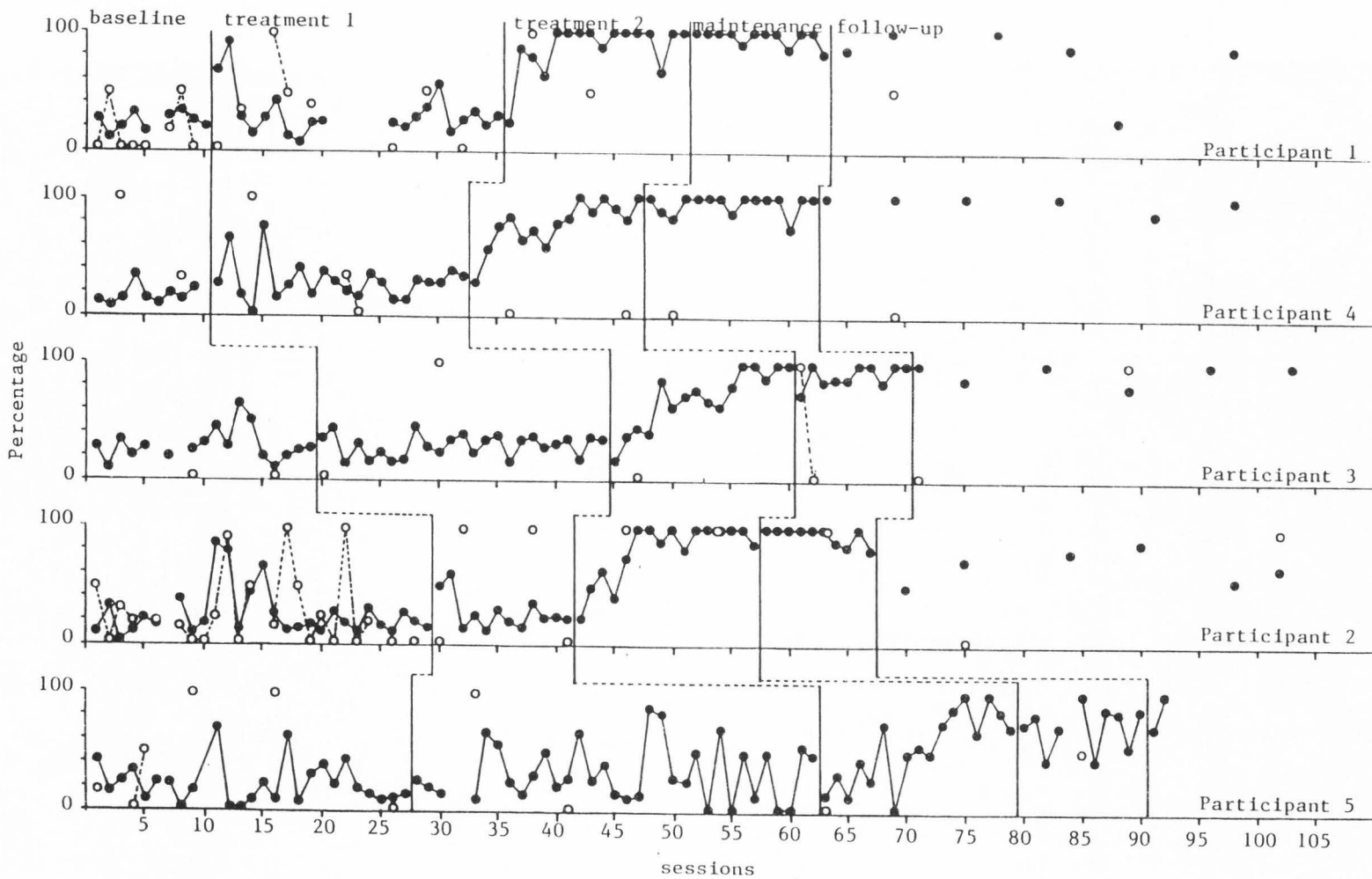


Figure 3. The relationship between participants' compliance with qualitatively good (closed circles) and qualitatively poor (open circles) instructions across experimental phases.

with qualitatively poor instructions from the raw data (see Table 8 and Appendix M). The following coefficients were obtained: .30, .43, .08, -.72 and -.10 for p1, p2, p3, p4 and p5, respectively (see Table 11). Squared, these coefficients yield percentages of 9, 18, 1, 52 and 1, respectively, of explained variance. These percentages indicate that only for p2 and p4 does a moderately strong relationship exist between compliance and the quality of the instructions presented. It is important to note that these correlation coefficients are based on rather small numbers of observations (see Table 11) which seriously limits the conclusions that may be drawn from them. For p1, p3 and p5 no significant relationship between compliance and the quality of the instructions presented to those participants is obvious from the data. Analysis of the correlations per experimental phase, for each participant (see Table 11) does not yield usable results because of the small number of observations per phase.

Anecdotally, most of the qualitatively poor instructions were judged to be poor because they did not include the 5-seconds waiting time as called for by the definition (see Table 6). Often, these instructions pertained to the teacher or aide wanting the participant to stop doing something. For example, a participant who was poking his neighbor with a pencil would be told: "(Name), stop." If that participant would not stop right away, the teacher or aide would immediately give the instruction again, for example, "(Name), stop poking Johnny, now." In this case the first instruction given would be judged qualitatively poor because it did not specify what had to be

Table 11

Relationship between Participants' Compliance with Qualitatively Good Instructions and their Compliance with Qualitatively Poor Instructions

Participant #	Phase	# of Observations	Correlation Coefficient	Percentage Explained Variance
1	Bl.	8	-.18	3
	Tx 1	8	-.08	1
	Tx 2	3	-.18	3
	Maint	1	n.a.	
	F.U.	1	n.a.	
	Total	20	.30	9
2	Bl.	23	.21	4
	Tx 1	4	-.36	13
	Tx 2	2	0	0
	Maint	1	n.a.	
	F.U.	2	-1	100
	Total	32	.43	18
3	Bl.	2	0	0
	Tx 1	2	-.28	8
	Tx 2	1	n.a.	
	Maint	2	-1	100
	F.U.	2	-1	100
	Total	9	.08	1
4	Bl.	2	-1	100
	Tx 1	3	-.89	79
	Tx 2	2	0	0
	Maint	1	n.a.	
	F.U.	1	n.a.	
	Total	9	-.72	52
5	Bl.	7	-.26	7
	Tx 1	2	-1	100
	Tx 2	1	n.a.	
	Maint	1	n.a.	
	F.U.	0	n.a.	
	Total	11	-.10	1

Note. Bl. = Baseline; Tx 1 = Treatment 1; Tx 2 = Treatment 2; Maint = Maintenance; F.U. = Follow Up; n.a. = not applicable

stopped. The second instruction, which was a qualitatively good instruction in itself, would be judged qualitatively poor because the 5-second waiting period was not observed. In this scenario, participants would generally comply with the second instruction. Therefore, the observer would mark that two qualitatively poor instructions had been given and that compliance occurred with the second instruction. Therefore, 50% compliance was marked. In addition, the poor instructions given with the intent to make a participant stop doing something were often given in a loud tone of voice and seemed to reflect the seriousness of that teacher's intent.

Relationship Between Compliance and Appropriate Classroom Behavior

Figure 4 indicates the relationship between participants' compliance with qualitatively good instructions and their other appropriate classroom behaviors. Pearson Product Moment Correlation Coefficients calculated on the relationship between compliance with qualitatively good instructions and appropriate behavior from the raw data (see also Table 8 and Appendix M) were: .34, .7, .95, .55 and .42 for p1, p2, p3, p4 and p5, respectively (see Table 14). Squared, these coefficients yield percentages of 12, 49, 90, 30 and 18 of explained variance. These percentages indicate that a significant relationship exists, albeit very moderate for p1 and p5, between compliance with qualitatively good instructions and appropriate behavior for the participants in this study. Correlations per experimental phase (see Table 12) were also calculated for each

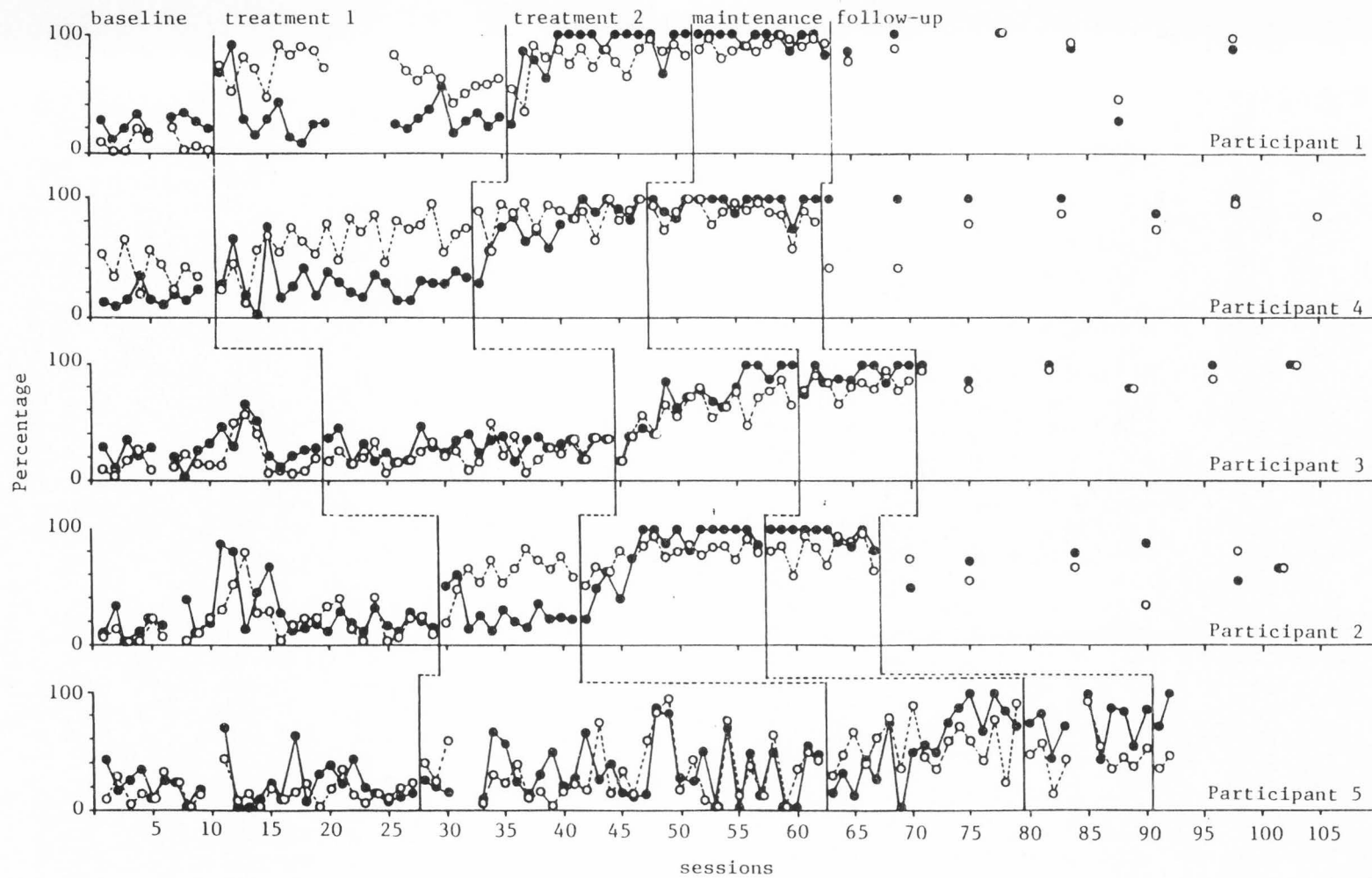


Figure 4. The relationship between participants' compliance with qualitatively good instructions and the percentage of intervals of participants' appropriate behavior across experimental phases.

Table 12

Relationship between Participants' Compliance with Qualitatively Good Instructions and Appropriate Behavior for all Participants

Participant #	Phase	# of Observations	Correlation Coefficient	Percentage Explained Variance
1	Bl.	9	.47	22
	Tx 1	20	-.17	3
	Tx 2	16	.34	12
	Maint	12	-.19	4
	F.U.	6	.75	56
	Total	63	.34	12
2	Bl.	28	.37	14
	Tx 1	12	-.66	44
	Tx 2	16	.72	52
	Maint	10	.09	1
	F.U.	6	-.80	64
	Total	72	.70	49
3	Bl.	18	.62	38
	Tx 1	25	.08	1
	Tx 2	16	.10	1
	Maint	10	.14	2
	F.U.	6	.80	64
	Total	75	.89	79
4	Bl.	9	-.91	83
	Tx 1	22	.07	0
	Tx 2	15	.19	4
	Maint	15	.59	35
	F.U.	7	-.17	3
	Total	68	.55	30
5	Bl.	26	.32	10
	Tx 1	35	.46	21
	Tx 2	17	.33	11
	Maint	10	.63	40
	F.U.	2	1	100
	Total	86	.42	18

Note. Bl. = Baseline; Tx 1 = Treatment 1; Tx 2 = Treatment 2; Maint = Maintenance; F.U. = Follow Up

participant. No specific pattern seems obvious from those correlations.

Individual Teacher Data

Instruction-Giving Behavior

During Baseline, teachers and aides were asked to teach as they would normally. At the onset of Treatment 1, a training package was presented to the two teachers and the three aides that gave them information on the causes of noncompliance and on how to give qualitatively good directions (see appendix I).

Table 13 shows the number of qualitatively good and qualitatively poor instructions the teachers of each of the participants gave per experimental condition. It should be noted that the instructors for p1 and p2 gave more qualitatively poor instructions (19 and 22%, respectively) during the Baseline phase than did the teachers for p3, p4 and p5 (2, 5 and 5%, respectively). With the exception of the Baseline phases for p1 and p2, the percentage of qualitatively good instructions given to the participants ranged from 93% to 100%.

Inter-Observer Agreement

Compliance and Appropriate Behavior

Table 14 shows inter-observer agreement scores for teachers' delivery of qualitatively good instructions and participants' compliance with those good instructions. The table further shows inter-observer agreement scores for teachers' delivery of qualitatively poor instructions and participants' compliance with

Table 13

Qualitatively Good and Poor Instructions Given by Teachers Per Participant (Part.) and Per Experimental Phase

Part. #	Phase	# Good Instructions	# Poor Instructions	% Good Instructions	% Poor Instructions
1	Bl.	88	20	81	19
	Tx 1	183	13	93	7
	Tx 2	120	4	97	3
	Maint	87	1	99	1
	F.U.	42	2	99	1
2	Bl.	235	65	78	22
	Tx 1	127	33	98	2
	Tx 2	101	8	93	7
	Maint	71	1	99	1
	F.U.	44	3	94	6
3	Bl.	150	3	98	2
	Tx 1	201	2	99	1
	Tx 2	106	1	99	1
	Maint	68	2	97	3
	F.U.	41	2	95	5
4	Bl.	81	4	95	5
	Tx 1	178	5	98	2
	Tx 2	116	2	98	2
	Maint	105	2	98	2
	F.U.	53	1	98	2
5	Bl.	245	14	95	5
	Tx 1	232	2	99	1
	Tx 2	118	1	99	1
	Maint	74	2	97	3
	F.U.	12	0	100	0

Note. Bl. = Baseline; Tx 1 = Treatment 1; Tx 2 = Treatment 2; Maint = Maintenance; F.U. = Follow Up

Table 14

Observer Agreement on Participants' Compliance and Appropriate Behavior

Part. #	Phase	# of sessions	Agreement re. Good instructions	Agreement re. Poor instructions	Agreement re. Appropriate behavior
1	Bl.	3	87	85	96
	Tx 1	4	88	93	86
	Tx 2	6	93	100	91
	Maint	4	94	100	99
	F.U.	3	95	99	87
	Mean	n = 20	90	96	92
2	Bl.	3	93	86	96
	Tx 1	4	88	92	89
	Tx 2	6	90	100	88
	Maint	4	92	99	84
	F.U.	3	93	100	82
	Mean	n = 18	91	94	90
3	Bl.	3	91	92	91
	Tx 1	4	98	100	90
	Tx 2	6	98	95	86
	Maint	4	97	97	86
	F.U.	3	89	98	92
	Mean	n = 17	95	96	89
4	Bl.	3	96	90	90
	Tx 1	4	91	90	92
	Tx 2	6	96	100	91
	Maint	4	97	98	85
	F.U.	3	97	100	98
	Mean	n = 21	95	96	91
5	Bl.	3	91	97	93
	Tx 1	4	93	96	90
	Tx 2	6	90	98	93
	Maint	4	88	100	85
	F.U.	3	91	99	93
	Mean	n = 23	91	97	91
Grand Total		n = 99	92	96	91

Note. Bl. = Baseline; Tx 1 = Treatment 1; Tx 2 = Treatment 2; Maint = Maintenance; F.U. = Follow Up

those instructions. Finally, the table shows inter-observer agreement scores for participants' appropriate behavior. Across these three categories, inter-observer agreement averaged 93% and ranged from 84% to 100%

Treatment 1. To verify correct implementation of Treatment 1, fidelity checks were conducted. During those checks, the way teachers gave instructions and consequated participants' behavior was compared against the Teacher Handouts (see Appendices I and J) and the protocol described in the behavior management program (see Appendix K). Agreement averaged 84%, 80%, 99%, 98% and 96%, respectively, for p1, p2, p3, p4 and p5. Table 15 presents the results from these checks.

Treatment 2. Similar fidelity checks were conducted for the experimenter's implementation of Treatment 2. To this effect, videotapes of three randomly selected lessons for each participant were scored. Appendix L shows a sample checklist for one of the direct instruction lessons. Agreement averaged 100%, 100%, 100%, 100% and 97%, respectively, for p1, p2, p3, p4 and p5. Table 16 presents the results from these checks.

Generalization probes. To assess generalization of increases in compliance across different school staff, probe sessions were conducted throughout the study. Each probe session consisted of two sets of six instructions. The instructions presented during the generalization probes were the same as those used throughout the experiment and had been determined during the baseline phase. One set consisted of six qualitatively good instructions and one set consisted of six qualitatively poor instructions. Different school staff were

Table 15

Fidelity Checks for Treatment 1

Part.	Cond.	# of Checks	Checks														
			1	2	3	4	5	6	7	8	9	10	11	12			
1	Tx 1	6	100	91	98	88	90	84									
	Tx 2	7	89	80	77	75	91	80	74								
	Maint	5	79	77	83	70	83										
	F.U.	4	88	62	93	92											
	Total	22	Mean = 84%		Range = 70% - 91%												
2	Tx 1	6	82	70	79	69	78	77									
	Tx 2	9	78	93	90	92	80	87	81	83	86						
	Maint	4	71	80	92	68											
	F.U.	4	53	74	90	86											
	Total	23	Mean = 80%		Range = 53% - 93%												
3	Tx 1	10	100	100	97	100	100	100	100	97	100	100					
	Tx 2	6	100	96	100	100	100	100									
	Maint	4	100	99	97	100											
	F.U.	3	100	100	98												
	Total	23	Mean = 99%		Range = 96% - 100%												
4	Tx 1	6	92	87	100	100	95	100									
	Tx 2	6	100	100	100	100	100	98									
	Maint	7	100	100	100	100	100	100	91								
	F.U.	3	90	100	92												
	Total	22	Mean = 98%		Range = 90% - 100%												
5	Tx 1	12	91	99	88	92	94	93	100	100	100	94	100	100			
	Tx 2	7	100	98	100	99	100	91	93								
	Maint	5	100	84	100	79	100										
	F.U.	1	100														
	Total	25	Mean = 96%		Range = 84% - 100%												

Note. Tx 1 = Treatment 1; Tx 2 = Treatment 2; Maint = Maintenance; F.U. = Follow Up; n.a. = not applicable

Table 16

Fidelity Checks for Treatment 2

Participant #	Total # of Checks	Checks			Percentage Mean	Agreement Range
		1	2	3		
1	3	99	100	100	100	99 - 100
2	3	100	98	100	100	98 - 100
3	3	100	100	100	100	
4	3	100	100	100	100	
5	3	100	93	97	99	93 - 100

asked to conduct the probes. Table 17 and Appendix N summarize the results. With the exception of p5, all participants reached the criterion for compliance (80%) with the qualitatively good instructions during the Treatment 2 phase of the study, indicating that the new skill was generalizing. None of the participants reached the criterion for compliance with the qualitatively poor instructions.

Table 17

Summary of Compliance Probes and Corresponding Inter-Observer Agreement Data Per Experimental Condition

Condition	Number of Sessions	Percentage of Compliance with		Percentage of inter-observer Agreement
		Good Instructions	Poor Instructions	
		Mean (Range)	Mean (Range)	
Participant 1				
Baseline	2	25 (17-33)	7 (0-17)	
Treatment 1	5	46 (33-67)	17 (0-67)	100
Treatment 2	6	71 (50-100)	6 (0-33)	97 (83-100)
Maintenance	4	79 (67-83)	0	96 (83-100)
Follow-Up	4	96 (83-100)	0	100
Participant 2				
Baseline	4	17 (0-33)	25 (0-33)	100
Treatment 1	4	33	25 (17-25)	100
Treatment 2	8	67 (33-100)	0	85 (83-100)
Maintenance	5	97 (83-100)	0	100
Follow-Up	6	56 (0-83)	3 (0-17)	93 (83-100)
Participant 3				
Baseline	2	17 (0-33)	0	83
Treatment 1	5	30 (17-33)	10 (0-33)	89 (83-100)
Treatment 2	7	69 (17-100)	0	98 (83-100)
Maintenance	7	92 (67-100)	3 (0-33)	98 (83-100)
Follow-Up	5	92 (83-100)	0	94 (83-100)
Participant 4				
Baseline	2	25 (17-33)	17 (0-100)	100
Treatment 1	3	33 (17-50)	0	100
Treatment 2	6	75 (33-100)	3 (0-17)	97 (83-100)
Maintenance	8	96 (83-100)	0	100
Follow-Up	7	83 (50-100)	0	100
Participant 5				
Baseline	3	22 (16-33)	11 (0-33)	100
Treatment 1	10	50 (16-100)	0	98 (83-100)
Treatment 2	6	36 (0-67)	0	97 (83-100)
Maintenance	6	11 (0-33)	0	97 (83-100)
Follow-Up	2	17 (0-33)	0	100

CHAPTER V

DISCUSSION

The present study investigated the effectiveness of a modified version of a program developed by Callaghan (1986) that was intended to increase students' compliance with their teachers' instructions. This program was anticipated to have the potential of modifying students' compliance with non-aversive procedures and with minimal disruption to the regular curriculum and classroom routine (see also Foxx, 1982; Morgan & Jenson, 1988; Striefel, 1984).

The primary objective of the present study was to determine the effectiveness of a direct instruction program in increasing compliance with teachers' instructions in a school setting with students for whom manipulation of conventional antecedent stimuli (giving qualitatively good instructions) and consequent stimuli (contingency management) had not led to an adequate increase in compliance. Adequate increase was defined as students complying with 80% of teachers' instructions.

Data were collected within a multiple baseline design across participants (Baer et al., 1969) to determine treatment effectiveness. Within this design, treatment effectiveness was demonstrated by introduction of different treatment phases across participants in a staggered fashion. In doing so, other participants, who were not subjected to the phase change, served as "controls" for the participant for whom a different phase was initiated. Treatment was considered effective if the target behavior changed in the predicted direction only upon introduction of the treatment.

This chapter summarizes the major findings of the present study and critically analyzes the data. Finally, implications for future research, a summary and conclusions are presented.

Effectiveness of Treatment 1 in Increasing Compliance

Several researchers have used conventional behavior modification techniques, for example, qualitatively good instructions and consequences for compliance and noncompliance, to increase compliance in children. These studies have typically employed giving qualitatively good directions (e.g., Atwater and Morris, 1988) reinforcement for compliance (e.g., Goetz et al., 1975) and aversive consequences for noncompliance such as loss of points and/or privileges (e.g., Sulzer-Azaroff & Pollack, 1982), various forms of time-outs (e.g., Forehand & Scarborough, 1975; Roberts et al., 1981) and overcorrection (Engelmann & Colvin, 1983). It is, however, important to point out that it is difficult to compare research studies on compliance. In particular, as was pointed out by Koch (undated), neither researchers nor clinicians agree on a single definition of compliance (see also pp. 13-14).

The first treatment in the present study consisted of a behavior modification plan wherein teachers were to provide positive reinforcement for students' compliance with instructions and for other appropriate classroom behaviors. In addition, the teachers were taught how to give qualitatively good instructions. Teachers' following the behavior modification plan and giving qualitatively good instructions were monitored and additional training was provided when

the accuracy of implementation of the plan dropped below 90% and/or when teachers gave less than 90% qualitatively good instructions.

Introduction of Treatment 1 had at best only marginal effects on participants' compliance with teachers' instructions (see also Figure 1). That is, some small increases in compliance (less than 12%) were seen as well as some small decreases in variability in the compliance data. On the other hand, with the exception of p3, significant increases in other appropriate classroom behaviors were observed following introduction of Treatment 1 (see below) indicating that, generally, functional reinforcers were being used.

These observations are consistent with the hypothesis that the participants in this study had not yet learned to comply with their teachers' instructions or had learned not to comply with teachers' instructions. That is, if students do not have the skills involved in complying with a teacher's instruction, those skills would have to be taught. Reinforcement of compliance alone in such students, should not be expected to be an efficient way to increase compliance. With exception of p3, Treatment 1 was, however, effective in increasing other behaviors that apparently were already in the participants' behavioral repertoires (appropriate classroom behaviors other than compliance with teachers' instructions).

Effectiveness of Treatment 2 in Increasing Compliance

The literature suggests that there is a need to develop an effective treatment approach to increase students' compliance (Engelmann & Colvin, 1983; Callaghan, 1986; Wells & Forehand, 1982).

Several effective treatments have been developed, but these approaches are geared toward increasing students' compliance in home or clinic settings (Barkley, 1981, 1990; Forehand & McMahon, 1981; Hanf & Kling, 1973). Engelmann and Colvin (1983) developed a compliance training program for teachers in their classroom. However, this program requires much teacher training, much time for teachers to implement and relies heavily on the use of aversives.

Callaghan (1986) developed and tested a compliance training program on the basis of a model-lesson written by Neville and Jenson (1984). Her program was based on procedures that were found effective in increasing children's compliance in the home and school setting. That is, reinforcement of compliance and other appropriate classroom behaviors, precision instructions and direct instruction (Barkley, 1981, 1990; Engelmann & Colvin, 1983; Forehand & McMahon, 1981; Malyn & Jenson, 1986; Morgan & Jenson, 1988; Walker, Raevis, Rhode & Jenson, 1985). However, Callaghan did not include appropriate experimental controls in her study.

The first treatment in present study was aimed at instructing teachers to give qualitatively good instructions and to reinforce participants' compliance with teachers' instructions. Treatment 2 consisted of direct instruction lessons (the direct instruction compliance lessons), in which students were taught how to comply with teachers' instructions. Each lesson consisted of modeling and demonstration, role-playing, drill and practice, application and feedback and social praise. Treatment 1 remained in effect throughout Treatment 2 and the Maintenance phases.

Significant increases in compliance with teachers' instructions were observed for all participants following introduction of Treatment 2 (see also Figure 1). This observation, too, is consistent with the hypothesis that the participants in this study had not yet learned to comply with teachers' instructions, or had learned not to comply with teachers' instructions. The lessons that comprised Treatment 2 can, therefore, be considered to have been effective in teaching the skills required for the participants to comply with their teachers' instructions.

During Treatment 2 each participant was taught 10 direct instruction compliance lessons. In addition, during the Maintenance phase of the experiment, participants were taught booster sessions (lesson 10 of the direct instruction compliance lessons) if their percentage compliance with qualitatively good instructions dropped below 80 during any observation session in that phase. P3 and p4 were taught one booster session, p5 was taught five such sessions. Because p3 and p4 were only taught one booster sessions, it is difficult to conclude what impact those single sessions had. The results for p5 indicate that his compliance reliably increased during the observation that followed the booster session. From this it can be concluded that, at least for p5, the behavior management program alone (Treatment 1), was not effective in maintaining his compliance with qualitatively good instructions.

The present study does not allow for a definitive assessment of the necessary and sufficient components of Treatment 2. For example, the literature on effective teaching strategies is divided on the

effectiveness of direct instruction in teaching new (typically social and academic) skills. Most reviews indicate that direct instruction is effective in teaching new skills (cf., Jones & Kazdin, 1981; Stevens & Rosenshine, 1981) while others (cf., Peterson, 1980) indicate that neither direct or "open" instruction is inherently superior in teaching new skills. The present study does not allow for an assessment of the contribution of the direct instruction lessons relative to another ("open") form of instruction.

This study also does not allow for an assessment of the contribution of the specific components of the direct instruction lessons. It has been suggested that several allowances can be made for more mature learners (Rosenshine & Stevens, 1986). For example, more advanced learners need less overt practice of the new skill. Again, the present study does not allow for an assessment of the contribution of the individual components of the direct instruction lessons.

It would seem that at least some part of Treatment 1 is necessary for maintaining high rates of compliance. During the Follow-up phase of the experiment, probes were conducted for participants' compliance with teachers' instructions while the contingency management plan (Treatment 1) was not enforced. That is, teachers were not made to implement that plan. For each participant (except for p5 for whom the Follow-up phase only lasted two sessions) a decrease in compliance was observed. Final confirmation of this thesis could have been obtained by reintroducing Treatment 1 after which an increase in compliance should be seen. The present study did not do this.

Relationship Between Compliance and Other Appropriate Classroom Behavior

Another focus of this study was to investigate the relationship between participants' compliance with qualitatively good instructions and their other appropriate classroom behaviors. Such a relationship has been well-established in the literature (Cataldo et al., 1986; Morgan & Jenson, 1988).

As is clear from the graphed data (see Figure 2), significant increases in appropriate behavior were seen in all participants except p3 following introduction of Treatment 1. P3's appropriate behavior remained rather stable from Baseline to Treatment 1. Even though the evidence seems to suggest otherwise, it was felt that functional reinforcers were used for p3 and that he either had too few opportunities or too limited a repertoire of behaviors to contact those reinforcers. Additional increases in appropriate behavior following introduction of Treatment 2 were seen in all participants except p4; p4's average percentage of appropriate behavior had already reached 85 during Treatment 1.

For those participants who shared the same classroom (p1, p2 and p3 in one classroom and p4 and p5 in another classroom), an increase in appropriate behavior was observed following introduction of Treatment 1 for the first participant. That is, for p2 and p3 and for p5 an increase in appropriate behavior was observed following introduction of Treatment 1 for p1 and p4, respectively. This increase was, however, transitory and disappeared well prior to introduction of Treatment 2 for p2, p3 and p5 (see Figure 1).

of reinforcers presented, particularly when comparing the percentages of reinforced opportunities from Treatment 1 to Treatment 2.

The Relationship Between Compliance and the Quality of Teachers' Instructions

Several researchers (Forehand, 1975; Forehand & King, 1977; Forehand & McMahon, 1981; Hanf & Kling, 1973; Jenson et al., 1987; Morgan & Jenson, 1988; Neville & Jenson, 1984) have suggested a relationship between the quality of instructions and compliance. Pearson Product Moment Correlation Coefficients and the percentages of explained variance (see Table 13) indicate a significant relationship between compliance and the quality of the instructions presented to the participants for p1, p2 and p4 only. The relationship was inverse for p4. That is, as p4's compliance with qualitatively good instructions increased, his compliance with qualitatively poor instructions decreased. It should be noted that p4 had only been given 14 qualitatively poor instructions throughout the duration of the study (20 weeks) compared to 533 qualitatively good instructions. The size of the correlation for p4 may therefore be an artifact. For p3 and p5 no significant relationship between compliance and the quality of the instructions presented to those participants was obvious from the data. These correlations must be interpreted very cautiously because of the relatively small numbers of qualitatively poor instructions presented throughout the study (see also Figure 3 and Table 15). Analysis of the correlations per experimental phase, did not yield results that can be interpreted because of the large number of phases during which only up to three qualitatively poor

instructions were presented.

The results from the present study therefore do not confirm what has been reported in the literature regarding the relationship between compliance and the quality of instructions presented. However, the format of presentation of qualitatively poor instructions did not follow the format of the literature that investigated this relationship. In particular, in the present study, the large majority of instructions presented were good instructions (95% or more for each participant).

Maintenance and Generalization of Increases in Compliance

At the time of this study no literature was identified that investigated the maintenance of acquired compliance skills or the generalization of those skills to other school staff. The only other programs intended to increase compliance in a school setting (i.e., Callaghan, 1986; Engelmann & Colvin, 1983) did not include such an investigation.

The brief Maintenance phase that was included in the present study showed maintenance of increases in compliance with teachers' instructions up to eight weeks after termination of Treatment 2. Generally, participants' compliance decreased again after introduction of the Follow-up phase. During this Follow-up phase, the enforced implementation of the behavior management program and the requirement that teachers and aides give qualitatively good instructions (i.e., Treatment 1) was terminated. Even though the present study does not allow for an analysis of the contribution of the individual components

of Treatment 1, the total package seemed to contribute to the maintenance of the increases in compliance.

Participants' compliance with qualitatively good instructions given by school staff other than the primary instructor such as classroom staff, lunch room staff, librarian, other teachers and principal was assessed with generalization probes that were conducted throughout the study. With the exception of p5, the participants performed similarly during the generalization probes as they did in their classroom with their primary instructor. That is, for all participants a small increase in compliance was observed during Treatment 1, followed by a larger increase during Treatment 2. Compliance stayed at or above criterion during the Maintenance phase followed by a reduction in the Follow-up phase. Only p5 showed an immediate decrease in compliance during generalization probes following introduction of the Maintenance phase.

Participants' compliance with qualitatively poor instructions given by school staff other than the primary instructor was also assessed with generalization probes that were conducted throughout the study. The results indicate that the increases in compliance with qualitatively good instructions found in all participants did not generalize to increases in compliance with qualitatively poor instructions. The results of these probes must however be interpreted cautiously, since informal observations made it apparent that the participants discriminated well between the sets of qualitatively good instructions and the sets of qualitatively poor instructions. For example, both p2 and p3 would start smiling when a qualitatively poor

instruction was presented during the generalization probe sessions and would generally not even initiate the requested behavior. The other participants would generally just wait until the next instruction was presented. Future research should address this issue, for example, by designing the probe sessions to blend into the participants' daily routine as opposed to having distinctly separate generalization sessions. In addition, future research should consider providing consequences for compliance and noncompliance with instructions during generalization sessions as would be done outside those generalization sessions.

Reliability Of The Data On Compliance And Appropriate Behavior

Inter-observer agreement data were taken throughout the present study on participant behaviors (compliance and other appropriate classroom behaviors), teacher behaviors (instruction-giving and implementation of Treatments 1 and 2) and the instruction giving behavior of probers. Results indicate that no significant threat exists to the reliability of the data obtained as inter-observer agreement data commonly exceeded 90% and never were below 80% (see Table 16).

Validity Of The Data On Compliance And Appropriate Behavior

Data were collected within a multiple baseline design across participants (Baer et al., 1969) to determine treatment effectiveness. In the present study, the different treatment phases were introduced

across participants in a staggered fashion. In doing so, other participants, who are not subjected to the phase change, serve as "controls" for the participant for whom a different experimental phase was initiated. Treatment is considered effective if the target behavior changes in the predicted direction only upon introduction of the treatment.

As can be seen from the figures (see Figures 1 and 2), participants' compliance with teachers' instructions did not increase significantly until Treatment 2 was introduced. This effect of Treatment 2 on participants' compliance was then replicated with four more participants. Participants' appropriate classroom behaviors, with the exception of p3, increased upon the introduction of Treatment 1. In three out of five participants (p1, p2 and p4), this effect was distinct. Thus, although experimental control was not perfect, internal validity can be claimed.

Because only five participants across only two different sites were involved in this study, claims concerning the external validity are not justified. That is, the effectiveness of the treatment under conditions that differ from those in the current experiment cannot be addressed.

Implementation of the Direct Instruction Lessons

Implementation of the behavior program that comprised Treatment 1 and the direct instruction lessons of Treatment 2 took 35 minutes per day, on the average. This is in large contrast to the time required for the implementation of the Engelmann and Colvin (1983) compliance

training program. Adequate implementation of that program takes between one and two hours daily. In addition, Engelmann and Colvin's program requires advanced behavior management skills from the teacher. The program that was investigated in this study does not have this prerequisite.

At the time this study was written, three teachers were implementing both Treatments 1 and 2. Only one of these teachers has a direct instruction background. All three teachers are, however, effectively implementing the program, using only the materials that were available to the teachers in the experiment.

Limitations Of The Present Study

Obvious limitations of the present study include the following: (1) only a small sample of students and sites were represented, (2) variability in the data on compliance and appropriate behavior was observed across the different phases of the experiment, (3) Treatment 1 always preceded Treatment 2, (4) the results obtained in the present study have not yet been replicated, (5) the present experiment failed to distinguish between students who had not yet learned to comply with their teachers' instructions and students who had learned not to comply with their teachers instructions, and (6) teacher variables, such as size and sex of the teacher, were not investigated.

The sample of students who participated in the present study is no threat to the internal validity of the procedures. The limitations of the sample do, however, put constraints on the generality of the

conclusions that may be drawn. For example, students of a different age and/or sex might well respond differently, especially to the direct instruction lessons (see above).

Even though for most participants, and following most phase changes, significant and obvious changes in compliance and appropriate behaviors were observed, considerable variability within each phase remained. The presence of variability in data typically indicates that not all variables that affect the target behavior have been controlled.

Introduction of Treatment 1 always preceded the introduction of Treatment 2. It can be argued, therefore, that Treatment 1 set the occasion for Treatment 2 to be effective. The present study does not allow for the negation of this argument. One way to further investigate this question would be to counterbalance the introduction of the two treatments. From a clinical vantage point it could be argued, however, that systematic reinforcement of compliance should precede a more involved intervention such as direct instruction lessons and that such lessons should be used only if reinforcement of compliance alone proves to be ineffective.

Size and sex of the teacher may well be variables affecting compliance in students who have behavior disorders. In the present study the teacher for p1, p2, p3 and p4 was female, whereas the teacher for p5 was a male. Increases in compliance and other appropriate classroom behaviors were smallest for p5, but it is impossible to relate this to attributes of the teacher.

Suggestions For Future Research

The present study shows promise for the use of direct instruction lessons in teaching severely noncompliant students to comply with teachers' instructions, especially if such direct instruction lessons are used in conjunction with an effective behavior management program. In future research, an attempt should be made to replicate the results of the present study.

Behavior Management and Direct Instruction

Future studies should also attempt to distinguish the contributions of a behavior management program from the contributions of the direct instruction lessons. This could be attempted through the use of a reversal design. The use of counter-balanced introduction of both components, which would require more participants, might be more elegant.

Direct Instruction Lessons

As indicated above, many variables are involved in direct instruction. Future research should specifically address the necessary and sufficient components of those direct instruction lessons. Variables to be addressed should include the total number of lessons taught, the number of lessons per week to be taught, the amount of overt and covert practice and the amount of homework.

Several changes in the direct instruction lessons (see Appendix E) should be considered. For example, there are only 10 lessons

scripted. It is possible that some students need more than that number of lessons as was illustrated by the data on p5. Functional increases in compliance for that participant were not observed until the Maintenance phase of the experiment. During that phase, a booster lesson (lesson #10) was presented after each observation in which his compliance was found to be below 80%.

Effects of Teacher Variables
on Compliance and Other
Appropriate Classroom Behaviors

Future studies should investigate whether there are differential effects of teacher variables such as size, sex and tone of voice students' compliance and other appropriate classroom behaviors. Such variables may well interact with the effects of any treatment for noncompliance.

Conclusion

From the present experiment it can be concluded that the combination of teachers' giving qualitatively good instructions and the behavior modification plan (Treatment 1) in combination with the direct instruction compliance lessons (Treatment 2) was effective in teaching severely noncompliant students to comply with their teachers' instructions. It can also be concluded that the combination of Treatments 1 and 2 was more effective in increasing compliance and other appropriate classroom behaviors than either treatment alone.

Although the introduction of Treatment 1 resulted in a significant increase in appropriate classroom behaviors other than compliance, that treatment alone was only marginally effective in

increasing compliance. This finding supports the hypothesis that the participants in this study had not yet learned to comply with their teachers' instructions or had learned not to comply with those instructions.

Several researchers (Koch, undated; Morgan & Jenson, 1988; Sulzer-Azaroff & Pollack, 1982) have indicated that any program that is intended to deal with noncompliance must address the causes of that noncompliance. In the present study, Treatment 2, effectively did so.

The treatments implemented in this study required relatively little teacher time when compared to the time required for the completion of the requirements of the Engelmann and Colvin (1983) program. The 15-minute direct instruction lessons during Treatment 2 were taught twice per week and the reinforcement program took less than 30 minutes per day to implement, including the point-counting. Engelmann and Colvin's program requires the implementation of positive practice overcorrection for each occurrence of noncompliance as well as time for instruction for compliance, and has taken experienced teachers up to three hours per day to implement. The direct instruction compliance lessons, in combination with the reinforcement program therefore holds promise as an efficient and effective strategy for increasing students' compliance with their teachers' instructions.

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APPENDICES

Appendix A
Informed Parental Consent Letter

Informed Parental Consent Letter

Dear Parent:

Your child has an opportunity to participate in a research project we will be running during the next weeks at _____'s school. The project was developed to increase children's compliance (doing what teachers and parents ask them to do). We would like to tell you about the study and how we plan to do it. After we tell you about it, we would like to ask for your written informed consent for your child to participate in this project.

Throughout the research project, trained individuals (observers) will be coming to the students' classroom to observe and record how often the students comply (do what they are asked to do) with their teacher's requests before, during, and after we start the program. The reason we do this is to make it possible to see if the program actually works.

The students who participate will attend 10 lessons that teach them how to do what their teachers ask them to do, and why they should do it right away. They will initially be instructed to say "Sure I will" and do what they are asked to do before they can count to five. Later in the program they will be taught to do what they were told to do right away but without saying "Sure I will".

In the lessons, the students will be given "pretend" situations and asked how s/he would (or others should) behave. The lessons also involve role-playing between the teacher and the student. This teaching method is called "direct instruction" and it has been quite successful in teaching academic and social skills. We have reason to believe that compliance with instructions can also be taught through direct instruction.

We would like your child to participate in this study. It is anticipated that the students will suffer no physical or psychological harm or pain from participating in this study. It is believed that they will improve their compliance with their teachers' requests and thus improve their chances for school success. Confidentiality will

be maintained at all times and no real names will be released to others or listed in written reports or articles.

If you decide to grant your informed consent, please sign the informed consent form at the end of this letter and send it back as soon as possible to the Developmental Center in the stamped, self-addressed envelope that is enclosed. We understand that you may still have some questions about your child's participation in this study, and we would like you to contact us. We will be happy to talk with you about any concerns you may have and look forward to hearing from you.

Sincerely,

Sebastian Striefel, Ph.D.
Director, Division of Services and
Professor of Psychology

Hans Michielsen
Graduate Assistant
(750-2021)

I understand the purpose of this study, and that no psychological or physical harm is anticipated to come to my child. I also understand that I have the right at any time to withdraw my child from this study.

I consent _____ for my child, _____ to
(print child's name)

I do not consent _____

participate in this study.

Date: _____ Signature: _____

Appendix B
Informed Teacher Consent Letter

Informed Teacher Consent Letter

Dear Teacher:

Your student, _____ has an opportunity to participate in a research project we will be running during the next weeks at your school. The project was developed to increase children's compliance (doing what classroom staff and parents ask them to do). We would like to tell you about the study and how we plan to do it. After we tell you about it, we would like to ask for your written informed consent for you and your student to participate in this project.

Throughout the research project, trained individuals (observers) will be coming to your classroom to observe and record how often the students comply (do what they are asked to do) with classroom staff's instructions before, during, and after we start the program. The reason we do this is to make it possible to see if the program actually works.

The students who participate will attend 10 lessons that teach them how to do what their teachers ask them to do, and why they should do it right away. They will initially be instructed to say "Sure I will" and do what they are asked to do before they can count to five. Later in the program they will be taught to do what they were told to do right away but without saying "Sure I will".

In the lessons, the students will be given "pretend" situations and asked how s/he would (or others should) behave. The lessons also involve role-playing between the teacher and the student. We will use direct instruction which, as you know, has been quite successful in teaching academic and social skills. We have reason to believe that compliance with instructions can also be taught through direct instruction.

We would like for you and _____ to participate in this study. It is anticipated that the students will suffer no physical or psychological harm or pain from participating in this study. It is believed that they will improve their compliance with their teachers' requests and thus improve their chances for school success.

Confidentiality will be maintained at all times and no real names will be released to others or listed in written reports or articles.

If you decide to grant your informed consent, please sign the informed consent form at the end of this letter and send it back as soon as possible to the Developmental Center in the stamped, self-addressed envelope that is enclosed. We understand that you may still have some questions about your child's participation in this study, and we would like you to contact us. We will be happy to talk with you about any concerns you may have and look forward to hearing from you.

Sincerely,

Sebastian Striefel, Ph.D.
Director, Division of Services and
Professor of Psychology

Hans Michielsen
Graduate Assistant
(750-2021)

I understand the purpose of this study, and that no psychological or physical harm is anticipated to come to _____. I also understand that I have the right at any time to withdraw from this study.

I consent _____ to participate in this study.
I do not consent _____

Date: _____ Signature: _____

Appendix C

Teachers' and Principal's Rating of Participants' Noncompliance

Teachers' and Principal's Rating of Participants' Noncompliance

Dear _____

On (date) we discussed the plan to implement a study during the next quarter with some students who are very noncompliant. The study's intent will be to investigate the effectiveness of a direct instruction approach to noncompliance.

This survey is intended to aide in identifying how noncompliant some of your current students are.

On the attached form, please fill out the first names and the initial letter of the last name (for confidentiality reasons) of the ten (10) most noncompliant students that are currently enrolled in your classroom/school in order from most noncompliant to least noncompliant. Next to that list, please indicate the first names and the initial letter of the last name of the ten (10) most noncompliant students you have ever worked with in order from most noncompliant to least noncompliant.

Thank you for your cooperation!

Your function: teacher / principal

How long have you been an educator? _____ years.

Note: Please rank students from most noncompliant to least noncompliant. (use first names and first letter of last names only)

Rank	Name	Rank	Name
1.	_____	1.	_____
2.	_____	2.	_____
3.	_____	3.	_____
4.	_____	4.	_____
5.	_____	5.	_____
6.	_____	6.	_____
7.	_____	7.	_____
8.	_____	8.	_____
9.	_____	9.	_____
10.	_____	10.	_____

Appendix D

School Staff's Rating of Participants' Noncompliance

School Staff's Rating of Participants' Noncompliance

Dear _____

On (date) we discussed the plan to implement a study during the next quarter with some students who are very noncompliant. The study's intent will be to investigate the effectiveness of a direct instruction approach to noncompliance.

This survey is intended to aide in identifying how noncompliant some of your current students are.

On the attached form, please fill out the first names and the initial letter of the last name (for confidentiality reasons) of the ten (10) most noncompliant students that are currently enrolled in your classroom/school in order from most noncompliant to least noncompliant. Next to that list, please indicate the first names and the initial letter of the last name of the ten (10) most noncompliant students you have ever worked with in order from most noncompliant to least noncompliant.

Thank you for your cooperation!

Your function: _____

How long have you worked in education: _____ years.

Note: Please rank students from most noncompliant to least noncompliant. (use first names and first letter of last names only)

Rank	Name	Rank	Name
1.	_____	1.	_____
2.	_____	2.	_____
3.	_____	3.	_____
4.	_____	4.	_____
5.	_____	5.	_____
6.	_____	6.	_____
7.	_____	7.	_____
8.	_____	8.	_____
9.	_____	9.	_____
10.	_____	10.	_____

Appendix E
Direct Instruction Lessons

PART ONEDOING WHAT YOUR TEACHERS TELL YOU TO DOLESSON ONEINTRODUCTION

T: This week we're going to talk about what you need to do when your teacher asks you to do something. What are we going to talk about?

S: What you need to do when your teacher tells you to do something?

TO CORRECT:

First error: What you need to do when your teacher (Then repeat the question.)

Second error: What you need to do when your teacher asks you to do something. (Then repeat the question.)

Third error: What you need to do when your teacher asks you to do something. Say it with me: What you need to do when your teacher tells you to do something. (Then repeat the question.)

T: Good job! Let's make sure that we both know who your teachers are. Your teachers are: ... (include teacher's name and the names of the classroom aides.) Who are your teachers?

S: (Mentions teachers' names.)

TO CORRECT:

First error: Who are your teachers? Say: "(classroom teacher's name), and". (Then repeat the question.)

Second error: Who are your teachers? They are: (Mention teacher's and aides' names.) (Then repeat the question.)

Third error: Who are your teachers? Say it with me: (Mention the teachers' names.) (Then repeat the question.)

T: Good listening. When your teacher tells you to do something, you need to do what you were told to do right away. What should you do when your teacher tells you to do something?

S: Do it right away. (Make sure the student says: right away.)

TO CORRECT:

First error: Remember, you need to do what you were told to do rrr... (Then repeat the question.)

Second error: You need to do what you were told to do right away. (Then repeat the question.)

Third error: You need to do what you were told to do right away.

Say it with me. You need to do what you were told to do right away. (Then repeat the question.)

T: Excellent!! for example, if your teacher told you to get out your pencil, you should get out your pencil right away. What should you do if your teacher told you to wash your hands?

S: I should wash them right away. (Make sure student says: "right away.")

TO CORRECT:

Error one: (If student does not say right away) Yes, you should wash them, but you should wash them rrr.... (Then repeat the question.)

Error two: (If student doesn't say anything) You should wash your hands right away. (Then repeat the question.)

Second error: You should wash your hands right away. Say it with me. (Then repeat the question.)

T: It is important to do what your teacher tells you to do right away for two reasons. One, it keeps you out of trouble. What is one reason it's important to do what your teacher tells you to do right away?

S: It keeps me out of trouble.

TO CORRECT:

First error: It keeps me out of tr..... (Then repeat the question.)

Second error: It keeps me out of trouble. (Then repeat the question.)

Third error: It keeps me out of trouble. Say it with me: It keeps me out of trouble. (Then repeat the question.)

T: Good!! That's one reason. Another reason is that it helps you to be a better student. What's another reason you need to do what your teacher tells you to do right away?

S: It helps me to be a better student.

TO CORRECT:

First error: It helps me to be a better... (Then repeat the question.)

Second error: It helps me to be a better student. (Then repeat the question.)

Third error: It helps me to be a better student. Say it with me: It helps me to be a better student. (Then repeat the question.)

T: Excellent!!! Now can you tell me both reasons why it's important to do what your teacher tells you to do right away.

S: It keeps me out of trouble. It helps me to be a better student.
(Student must give both answers.)

TO CORRECT:

First error: It helps me to be a better.... and it keeps me out... (Then repeat the question.)

Second error: It keeps me out of trouble and it helps me to be a better student. (Then repeat the question.)

Third error: It keeps me out of trouble and it helps me to be a better student. Say it with me: It keeps me out of trouble and it helps me to be a better student. (Then repeat the question.)

T: Wonderful!! I can tell you are getting the hand of this. That's just great. When I say 'right away' I mean before you can count to five. What do I mean by right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... How fast are you going to do what I tell you to do? (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

ACTIVITY 1

T: Good! Now let's try and see how fast 'right away' is. I'm going to tell you to do something and then I'll count to five. Let's see if you'll be done before I can count to five.

(Give student the instruction "Go line up at the door." Count out loud to five. If the student complies, praise and ask the following questions:)

1. What did you do?
2. Did you do it right away?
3. How do you know you did it right away? (Before you counted to five.)

(If the student does not comply, prompt (physically if necessary). Tell him/her what s/he did not do and do it until s/he does what you ask him/her to do right away (before you can count to five).)

T: There's a special trick to help you remember that you need to do what you have been told to do right away. When someone tells you to do something, you say out loud: sure I will. For example, if I told you to put your crayons away, you would quickly say: sure I will and then put your crayons away before I

counted to five. What should you say out loud, to help remind you to do something you were told to do?

S: Sure I will!!

TO CORRECT:

First error: Suurrr... (Then repeat the question.)

Second error: Sure I will. (Then repeat the question.)

Third error: Sure I will. Say it with me: Sure I will. (Then repeat the question.)

T: Good!! After you say sure I will, how fast will you put your crayons away?

S: Right away.

TO CORRECT:

First error: Remember, you need to do what you were told to do rrr... (Then repeat the question.)

Second error: You need to do what you were told to do right away. (Then repeat the question.)

Third error: You need to do what you were told to do right away. Say it with me: You need to do what you were told to do right away. (Then repeat the question.)

T: How fast is that?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me. Before you can count to five. (Then repeat the question.)

ACTIVITY 2

T: Excellent!!! Now let's practice. First, you tell me to do something and count to five out loud. (Prompt if necessary.) Have the student give you six instructions. Respond to each instruction as follows:

1. (Example) Say sure I will, and do it right away.
2. (Example) Say sure I will, and do it right away.
3. (Example) Say sure I will, and do it right away.
4. (Nonexample) Don't say sure I will, and don't do it right away. (Take longer than five seconds.)
5. (Example) Say sure I will, and do it right away.
6. (Nonexample) Say sure I will, and don't do it right away.

After each of the student instructions, ask the following

questions:

1. Did I say sure I will?
2. Did I do it right away?
3. How fast did I do it?

(Praise correct responses. Correct incorrect responses.)

ACTIVITY 3

T: GOOD!!! You can sure tell if I do what I am supposed to do right away. Now it's your turn. Remember to say sure I will, and do what I tell you do to do right away. What are you going to say?

S: Sure I will.

TO CORRECT:

First error: Suurrr... (Then repeat the question.)

Second error: Sure I will. (Then repeat the question.)

Third error: Sure I will. Say it with me. Sure I will. (Then repeat the question.)

T: And how fast are you going to do what I tell you to do?

S: Right away!

TO CORRECT:

First error: Rrr.... (Then repeat the question.)

Second error: Right away. (Then repeat the question.)

Third error: Right away. Say it with me: Right away. (Then repeat the question.)

T: And how fast is that?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

T: Good. Now let's try it.

(Set up situations if necessary, give the instructions, count to five out loud, praise and/or correct as needed.)

- a) "(Name), go line up at the door."
- b) "(Name), hand me your paper."
- c) "(Name), wash your hands."

d) "(Name), get a drink of water."

After each of the above instructions, if the student complies say, "Good!! You said: sure I will, and did what I asked you to do right away (before I counted to five)." If the student did not comply, tell him/her what s/he did not do and have him/her do it again until s/he says: sure I will, and does it right away.)

HOMEWORK

T: You are really getting the idea now! I'm so proud of you! Now I want you to practice. Between now and tomorrow, I want you to do what your teacher tells you to do right away. What will you say when your teacher tells you to do something?

S: Sure I will!

TO CORRECT:

First error: Suurrr... What should you say out loud right after I tell you to do something? (Then repeat the question.)

Second error: Sure I will. (Then repeat the question.)

Third error: Sure I will. Say it with me: Sure I will. (Then repeat the question.)

T: How quickly will you do it?

S: Right away.

TO CORRECT:

First error: Remember, you need to do what you were told to do rrr... (Then repeat the question.)

Second error: You need to do what you were told to do right away. (Then repeat the question.)

Third error: You need to do what you were told to do right away. Say it with me: You need to do what you were told to do right away. (Then repeat the question.)

T: How fast is that?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

T: Once more, what is your homework assignment?

S: To say sure I will, and do what I am told to do right away.

TO CORRECT:

First error: Say suurrr... and do... (Then repeat the question.)

Second error: Say sure I will, and do what I am told to do right away. (Then repeat the question.)

Third error: Say sure I will, and do what I am told to do right away. Say it with me: Say sure I will, and do what I am told to do right away. (Then repeat the question.)

T: Good. Let's try one more time. (Give the student a simple instruction such as, "(Name), Put your pencil on your desk.")

S: Sure I will. (Make sure student says: sure I will, and does it right away.)

(If the student complies, praise him/her for saying sure I will, and doing what you asked him/her to do right away. If the student does not comply, prompt him/her through it (physically if necessary). Give him/her another instruction until s/he says sure I will and does it right away on his/her own.)

LESSON 2

INTRODUCTION

T: Remember last time we talked about what you need to do when your teacher tells you to do something? What do you need to do when your teacher tells you to do something?

S: Do it right away.

TO CORRECT:

First error: Remember, you need to do what you were told to do rrr... (Then repeat the question.)

Second error: You need to do what you were told to do right away. (Then repeat the question.)

Third error: You need to do what you were told to do right away. Say it with me: You need to do what you were told to do right away. (Then repeat the question.)

T: Good job! Let's make sure that we both still know who your teachers are. Your teachers are: ... (include teacher's name and the names of the classroom aides and other teacher who may work with the student.) Who are your teachers?

S: (Mentions teachers' names.)

TO CORRECT:

First error: Who are your teachers? Say: "(classroom teacher's name), and" (Then repeat the question.)

Second error: Who are your teachers? They are: (Mention teacher's and aides' names.) (Then repeat the question.)

Third error: Who are your teachers? Say it with me: (Mention the teachers' names.) (Then repeat the question.)

T: Remember last time we talked about what you need to do when your teacher tells you to do something? What do you need to do when your teacher tells you to do something?

S: Do it right away.

TO CORRECT:

First error: Remember, you need to do what you were told to do rrr... (Then repeat the question.)

Second error: You need to do what you were told to do right away. (Then repeat the question.)

Third error: You need to do what you were told to do right away. Say it with me: You need to do what you were told to do right away. (Then repeat the question.)

T: Good. How fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... How fast are you going to do what I tell you to do? (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

T: Good remembering. And what is that special trick, the thing you say out loud, to help remind you to do what you have been told to do right away?

S: Sure I will!

TO CORRECT:

First error: Suurrr... What should you say out loud right after I tell you to do something? (Then repeat the question.)

Second error: Sure I will. (Then repeat the question.)

Third error: Sure I will. Say it with me: Sure I will. (Then repeat the question.)

T: Good. What are two reasons why it's important to do what your teacher tells you to do right away?

S: It keeps me out of trouble. It helps me to be a better student.

T: Good job! Let's make sure that we both still know who your teachers are. Your teachers are: ... (include teacher's name and the names of the classroom aides.) Who are your teachers?

S: (Mentions teachers' names.)

TO CORRECT:

First error: Who are your teachers? Say: "(classroom teacher's name), and" (Then repeat the question.)

Second error: Who are your teachers? They are: (Mention teacher's and aides' names.) (Then repeat the question.)

Third error: Who are your teachers? Say it with me: (Mention the teachers' names.) (Then repeat the question.)

HOMEWORK DISCUSSION

T: Yesterday (last meeting) I gave you a homework assignment. I asked you to say sure I will" and do what your teacher told you to do right away. Did you do it?

S: (Responds Yes/No.)

T: Did it keep you out of trouble? (Earn all of your points, stay out of time out, etc..) Did it help you to be a better student? (Get all of your work done, etc.)?

S: (Responds.)

ACTIVITY 1

T: Let's practice some more. You tell me to do something and count to five out loud.

(Have the student give you four instructions. Respond to each instruction as follows:)

1. (Nonexample) Say sure I will, don't do it right away (after five seconds.)
2. (Example) Say sure I will, do it right away.
3. (Nonexample) Don't say sure I will, don't do it right away.
4. (Example) Say sure I will, do it right away.

After each of the student instructions, ask the following questions:)

1. Did I say sure I will?
2. Did I do it right away? (How fast is right away?)
3. How fast did I do it?

(Praise correct responses. Correct incorrect responses and have the student give the exact same instruction and respond in the same manner.)

ACTIVITY 2

T: Now it's your turn to practice. I'll play your teacher. Remember to say sure I will, and do what I ask you to do right away (before I count to five). Get ready.

(Set up situations if necessary, give the instructions, count to five out loud, praise and/or correct as needed.)

- a) "(Name), go get a drink of water."
- b) "(Name), get your reading book please."
- c) "(Name), go open the door please."

After each of the above instructions, if the student complies say, "GOOD!! You said sure I will and did what I asked you to do right away (before I counted to five)." If the student did not comply, tell him/her what s/he did not do and have him/her do it again until s/he says sure I will and does it right away (before you can count to five).

ACTIVITY 3

T: You really know this stuff!! I can tell you know how to do what

you were told to do right away. Now I am going to tell you some pretend situations and you tell me what you would do.

1. During circle time you get out of your seat and your teacher tells you to sit back down.
2. It's time for lunch and your teacher tells you to set the table.
3. Your teacher tells you to throw all of the milk cartons in the trash can.

After each of the above situations, ask the following questions:

- 1) What were you asked to do?
- 2) Did you say sure I will?
- 3) Did you do it right away? (How fast is right away?)
- 4) What do you think would happen if you did it that way?

(Praise and/or correct as needed.)

HOMEWORK

T: I just can't believe how fast you catch on!!! But I want you to practice some more. Between now and tomorrow (or next meeting), I want you to do what your teacher(s) tells you to do right away. What will you say out loud, to help remind you to do what you are asked to do right away?

S: Sure I will!

TO CORRECT:

First error: Suurrr... (Then repeat the question.)

Second error: Sure I will. (Then repeat the question.)

Third error: Sure I will. Say it with me: Sure I will. (Then repeat the question.)

T: How quickly will you do it?

S: Do it right away. (Make sure the student says: right away.)

TO CORRECT:

First error: Remember, you need to do what you were told to do rrr... (Then repeat the question.)

Second error: You need to do what you were told to do right away. (Then repeat the question.)

Third error: You need to do what you were told to do right away. Say it with me: You need to do what you were told to do right away. (Then repeat the question.)

T: And how fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

T: Once more, what is your homework assignment?

S: To say sure I will, and do what I am told to do right away.

TO CORRECT:

First error: Say suurrr... and do... (Then repeat the question.)

Second error: Say sure I will, and do what I am told to do right away. (Then repeat the question.)

Third error: Say sure I will, and do what I am told to do right away. Say it with me: Say sure I will, and do what I am told to do right away. (Then repeat the question.)

T: Good! Let's quickly practice a couple more times.

(Set up situations if necessary, give the instructions, count to five out loud, praise and/or correct as needed.)

a) "(Name), go line up at the door."

b) "(Name), please get two sheets of handwriting paper."

(Praise the student for saying sure I will and doing what you ask right away. Correct student by telling them what s/he forgot to do and have him/her do it again until s/he says sure I will and do it right away.)

T: Tomorrow we'll talk about your homework assignment. We'll start the lesson with you telling me about how you said sure I will and did what you were told right away every time your teacher told you to do something.

LESSON 3INTRODUCTION

T: We've been talking about what you need to do when your teacher tells you to do something. Who are your teachers?

S: (Mentions teachers' names.)

TO CORRECT:

First error: Who are your teachers? Say: "(classroom teacher's name), and" (Then repeat the question.)

Second error: Who are your teachers? They are: (Mention teacher's and aides' names.) (Then repeat the question.)

Third error: Who are your teachers? Say it with me: (Mention the teachers' names.) (Then repeat the question.)

T: Remember last time we talked about what you need to do when your teacher tells you to do something? What do you need to do when your teacher tells you to do something?

S: Do it right away. (Make sure student says right away.)

TO CORRECT:

First error: Remember, you need to do what you were told to do rrr... (Then repeat the question.)

Second error: You need to do what you were told to do right away. (Then repeat the question.)

Third error: You need to do what you were told to do right away. Say it with me: You need to do what you were told to do right away. (Then repeat the question.)

T: How fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

T: What is that special trick, the thing you say out loud, to help remind you to do what you were told to do right away?

S: Sure I will.

TO CORRECT:

First error: Suurrr... (Then repeat the question.)

Second error: Sure I will. (Then repeat the question.)

Third error: Sure I will. Say it with me: Sure I will. (Then

repeat the question.)

- T: Good remembering. It's important for you to do what your teacher tells you to do for two reasons. One, it helps you to be a good student and two it keeps you out of trouble. What are two reasons why it's important to do what your teacher tells you to do right away?
- S: It keeps me out of trouble. It helps me to be a better student. (Student must give both answers.)

TO CORRECT:

First error: It helps me to be a better.... and it keeps me out...
(Then repeat the question.)

Second error: It keeps me out of trouble and it helps me to be a better student. (Then repeat the question.)

Third error: It keeps me out of trouble and it helps me to be a better student. Say it with me: It keeps me out of trouble and it helps me to be a better student. (Then repeat the question.)

HOMEWORK DISCUSSION

- T: Excellent. Yesterday I gave you a homework assignment. I asked you to say sure I will, and do what your teacher told you to do right away. Did you do it?
- S: (Responds Yes/No.)
- T: Did it keep you out of trouble? (Did you earn a lot of points?.) Did it make you a better student? What did your teacher say when you did what you were asked to do right away?
- S: (Responds.)
- T: (Prompt/praise when appropriate and discuss.)

ACTIVITY 1

- T: Let's practice. First, I'll tell you to do something. Remember to say sure I will and do what I tell you to do right away (before I count to five). Get ready.

(Set up situations if necessary, give the instructions, count to five out loud, praise and/or correct as needed.)

- a) "(Name), will you please pick up that piece of paper?"
- b) "(Name), will you please go wash your hands?"
- c) "(Name), will you please go sit at the desk?"

After each of the above instructions, if the student complies say, "GOOD!! You said sure I will and did what I asked you to do right away (before I counted to five)." If the student did not comply, tell him/her what s/he did not do and have him/her to it again until s/he says sure I will and does it right away (before you can count to five).

ACTIVITY 2

T: Excellent job!! I can tell you know how to do what you are asked to do right away. Now let's see if I know how to do what you ask me to do right away. You tell me to do something then count to five out loud.

(Have the student give you four instructions. Respond to each instruction as follows:)

- 1) (Example) Say sure I will, and do it right away.
- 2) (Nonexample) Don't say sure I will, don't do it right away.
- 3) (Example) Say sure I will, don't do it right away.
- 4) (Example) Say sure I will, do it right away.

After each of the above instructions, if the student complies say, "GOOD!! You said sure I will and did what I asked you to do right away (before I counted to five)." If the student did not comply, tell him/her what s/he did not do and have him/her do it again until s/he says sure I will and does it right away (before you can count to five).

ACTIVITY 3

T: I can tell you are really getting the idea. You know how to say sure I will and do what I tell you right away, and you can also tell if I do what you ask me to do right away. Now it's your turn to practice again. I'm going to tell you some pretend situations and you tell me what you would do.

1. You get off the bus and your teacher sees you running across the field. She tells you to come into the classroom.
2. Your teacher asks you to put the abacus on the counter.
3. Your teacher tells you to push the long table against the wall.

(Questions for each of the above situations):

- a. What were you asked to do?
- b. Did you say sure I will?
- c. Did you do it right away? (How fast is right away?)
- d. What do you think would have happened to you if you did it that way?

HOMEWORK

T: You catch on so fast. But I want you to practice some more. Between now and tomorrow, (or next meeting) I want you to do what your teacher(s) tells you to do right away. What will you say to help remind you to do what you are told to do?

S: Sure I will.

TO CORRECT:

First error: Suurrr... (Then repeat the question.)

Second error: Sure I will. (Then repeat the question.)

Third error: Sure I will. Say it with me: Sure I will. (Then repeat the question.)

T: How quickly will you do it?

S: Do it right away. (Make sure the student says: right away.)

TO CORRECT:

First error: Remember, you need to do what you were told to do rrr... (Then repeat the question.)

Second error: You need to do what you were told to do right away. (Then repeat the question.)

Third error: You need to do what you were told to do right away. Say it with me: You need to do what you were told to do right away. (Then repeat the question.)

T: How fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

T: Once more, what is your homework assignment?

S: To say sure I will, and do what I am told to do right away.

TO CORRECT:

First error: Say suurrr... and do... (Then repeat the question.)

Second error: Say sure I will, and do what I am told to do right away. (Then repeat the question.)

Third error: Say sure I will, and do what I am told to do right away. Say it with me: Say sure I will, and do what I am told to do right away. (Then repeat the question.)

T: Good! Let's practice a couple of situations quickly.

(Set up situations if necessary, give the instructions, count to five out loud, praise and/or correct as needed.)

- a. "(Name), go line up at the door."
- b. "(Name), will you scoot your chair up to the desk as far as you can?"
- c. "(Name), will you please put this book in your desk?"

T: Excellent!! Tomorrow we'll talk about your homework assignment. We'll start the lesson with you telling me about how you did what you were told to do right away every time your teacher told you to do something.

LESSON 4INTRODUCTION

T: When your teacher tells you to do something you need to do something. Who are your teachers?

S: (Mentions teachers' names.)

TO CORRECT:

First error: Who are your teachers? Say: "(classroom teacher's name), and" (Then repeat the question.)

Second error: Who are your teachers? They are: (Mention teacher's and aides' names.) (Then repeat the question.)

Third error: Who are your teachers? Say it with me: (Mention the teachers' names.) (Then repeat the question.)

T: What do you need to do when your teacher tells you to do something?

S: Do it right away. (Make sure the student says: right away.)

TO CORRECT:

First error: Remember, you need to do what you were told to do rrr... (Then repeat the question.)

Second error: You need to do what you were told to do right away. (Then repeat the question.)

Third error: You need to do what you were told to do right away. Say it with me: You need to do what you were told to do right away. (Then repeat the question.)

T: And how fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

T: What's that special trick, the thing you say out loud, to help remind you to do what you've been asked to do right away?

S: Sure I will!!

TO CORRECT:

First error: Suurrr... (Then repeat the question.)

Second error: Sure I will. (Then repeat the question.)

Third error: Sure I will. Say it with me: Sure I will. (Then repeat the question.)

"Good! You said sure I will and did what I asked you to do right away (before I counted to five)." If the student did not comply, tell him/her what s/he did not do and have him/her to it again until s/he says sure I will and does it right away (before you can count to five).

ACTIVITY 2

T: Excellent job!! I can tell you know how to do what you are asked to do right away. Now let's see if I know how to do what you ask me to do right away. You tell me to do something then count to five out loud.

(Have the student give you four instructions. Respond to each instruction as follows:)

- 1) (Nonexample) Say sure I will, and don't do it right away.
- 2) (Example) Don't say sure I will, do it right away.
- 3) (Nonexample) Say sure I will, don't do it right away.
- 4) (Example) Say sure I will, do it right away.

After each of the student instructions, ask the following questions:)

- 1) Did I say sure I will?
- 2) Did I do it right away? (how fast is right away?)
- 3) How fast did I do it?

(Praise for correct responses. Correct incorrect responses and have the student give the exact same instruction and respond in the exact same manner.)

ACTIVITY 3

T: That's fantastic!! Not only do you know how to do what I ask you to do right away, but you can also tell me whether other kids in our pretend situations are doing what they are supposed to do right away!!! I am impressed!!
Now it's your turn to practice again. I'm going to tell you some pretend situations and you tell me what you would do. Get ready.

- 1) You are on your way to the gym running down the halls. Your teacher tells you to walk, not run.
- 2) During circle time, your teacher tells you to keep your chair still.
- 3) Your teacher tells you it's someone else's turn to go to the office to report the absences, and s/he tells you to sit down.

(Questions for each of the above situations):

- a. What were you asked to do?
- b. Did you say sure I will?
- c. Did you do it right away? (How fast is right away?)
- d. What do you think would have happened to you if you did it that way?

HOMEWORK

T: You catch on so fast. But I want you to practice some more. Between now and tomorrow, (or next meeting) I want you to do what your teacher(s) tells you to do right away. What will you say to help remind you to do what you are told to do?

S: Sure I will.

TO CORRECT:

First error: Suurrr... (Then repeat the question.)

Second error: Sure I will. (Then repeat the question.)

Third error: Sure I will. Say it with me. Sure I will. (Then repeat the question.)

T: How quickly will you do it?

S: Do it right away. (Make sure the student says: right away.)

TO CORRECT:

First error: Remember, you need to do what you were told to do rrr... (Then repeat the question.)

Second error: You need to do what you were told to do right away. (Then repeat the question.)

Third error: You need to do what you were told to do right away. Say it with me: You need to do what you were told to do right away. (Then repeat the question.)

T: How fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

T: Once more, what is your homework assignment?

S: To say sure I will, and do what I am told to do right away.

TO CORRECT:

First error: Say suurrr... and do... (Then repeat the question.)

Second error: Say sure I will, and do what I am told to do right away. (Then repeat the question.)

Third error: Say sure I will, and do what I am told to do right away. Say it with me: Say sure I will, and do what I am told to do right away. (Then repeat the question.)

T: Good! Let's practice a couple of situations quickly.

(Set up situations if necessary, give the instructions, count to five out loud, praise and/or correct as needed.)

- a. "(Name), go line up at the door."
- b. "(Name), go sit at another desk please."
- c. "(Name), raise your hand."

T: Excellent!! Tomorrow we'll talk about your homework assignment. We'll start the lesson with you telling me about how you did what you were told to do right away every time your teacher told you to do something.

LESSON 5INTRODUCTION

T: Who are your teachers?

S: (Mentions teachers' names.)

TO CORRECT:

First error: Who are your teachers? Say: "(classroom teacher's name), and" (Then repeat the question.)

Second error: Who are your teachers? They are: (Mention teacher's and aides' names.) (Then repeat the question.)

Third error: Who are your teachers? Say it with me: (Mention the teachers' names.) (Then repeat the question.)

T: Great. When your teacher tells you to do something you need to do something, what do you need to do?

S: Do it right away. (Make sure the student says: right away.)

TO CORRECT:

First error: Remember, you need to do what you were told to do rrr... (Then repeat the question.)

Second error: You need to do what you were told to do right away. (Then repeat the question.)

Third error: You need to do what you were told to do right away. Say it with me: You need to do what you were told to do right away. (Then repeat the question.)

T: How fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

T: What's that special trick, the thing you say out loud, (but really to yourself, to help remind you what you've been told to do right away?

S: Sure I will!!!

TO CORRECT:

First error: Suurrr... (Then repeat the question.)

Second error: Sure I will. (Then repeat the question.)

Third error: Sure I will. Say it with me: Sure I will. (Then repeat the question.)

- T: Great remembering. What are the two reasons why it's important for you to do what your teacher tells you to do right away? (Prompt if necessary.)
- S: It keeps me out of trouble. It helps me to be a better student. (Student must give both answers.)

TO CORRECT:

First error: It helps me to be a better.... and it keeps me out...
(Then repeat the question.)

Second error: It keeps me out of trouble and it helps me to be a better student. (Then repeat the question.)

Third error: It keeps me out of trouble and it helps me to be a better student. Say it with me: It keeps me out of trouble and it helps me to be a better student. (Then repeat the question.)

HOMEWORK DISCUSSION

- T: Excellent!!! Yesterday (last meeting) I gave you a homework assignment. I asked you to say sure I will and do what your teacher told you to do right away. Did you do it?
- S: (Responds Yes/No.)
- T: Did it keep you out of trouble? (Did you earn a lot of points and get your work done?) Did it make you a better student? What did your teacher(s) say when you said sure I will and did what you were asked to do right away?
- S: (Responds.)
- T: (Prompt/praise depending on appropriateness and discuss.)

ACTIVITY 1

- T: Let's practice. First, I'll tell you to do something. Remember to say sure I will and do what I tell you to do before I can count to five (right away.) Get ready.

(Set up situations if necessary, give the instructions, count to five out loud, praise and/or correct as needed.)

- a) "(Name), go line up at the door."
- b) "(Name), put your desk against the wall."
- c) "(Name), will you please sharpen these pencils?"

After each of the above instructions, if the student complies say "Good! You said sure I will and did what I asked you to do right

away (before I counted to five)." If the student did not comply, tell him/her what s/he did not do and have him/her to it again until s/he says sure I will and does it right away (before you can count to five).

ACTIVITY 2

T: Excellent job!! I can tell you know how to do what you are asked to do right away. Now let's see if I know how to do what you ask me to do right away. You tell me to do something then count to five out loud.

(Have the student give you four instructions. Respond to each instruction as follows:)

- 1) (Nonexample) Say sure I will, and don't do it right away.
- 2) (Example) Say sure I will, do it right away.
- 3) (Example) Say sure I will, do it right away.
- 4) (Nonexample) Don't say sure I will, don't do it right away.

After each of the student instructions, ask the following questions:)

- 1) Did I say sure I will?
- 2) Did I do it right away? (how fast is right away?)
- 3) How fast did I do it?

(Praise for correct responses. Correct incorrect responses and have the student give the exact same instruction and respond in the exact same manner.)

ACTIVITY 3

T: Good job!! Now it's your turn to practice again. I'm going to tell you some pretend situations and you tell me what you would do. Get ready.

- 1) The bus driver tells you it is time to get off the bus and go into the classroom.
- 2) Your teacher tells you to be quiet and let someone else have a chance to answer.
- 3) Your teacher tells you to wait by the door until s/he comes back.

(Questions for each of the above situations):

- a. What were you asked to do?
- b. Did you say sure I will?
- c. Did you do it right away? (How fast is right away?)
- d. What do you think would have happened to you if you did it that way?

HOMEWORK

T: Good! You did a good job at practicing with me during the lesson. Now I want you to practice more on your own. Between now and tomorrow (next meeting), I want you to do what your teacher(s) tell(s) you to do right away. What will you say to help remind you to do what your teacher tells you to do?

S: Sure I will.

TO CORRECT:

First error: Suurrr... (Then repeat the question.)

Second error: Sure I will. (Then repeat the question.)

Third error: Sure I will. Say it with me: Sure I will. (Then repeat the question.)

T: How quickly will you do it?

S: Do it right away. (Make sure the student says: right away.)

TO CORRECT:

First error: Remember, you need to do what you were told to do rrr... (Then repeat the question.)

Second error: You need to do what you were told to do right away. (Then repeat the question.)

Third error: You need to do what you were told to do right away. Say it with me: You need to do what you were told to do right away. (Then repeat the question.)

T: How fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

T: Good! You remember everything so well. Things like saying sure I will and doing things right away. Tomorrow we'll start the lesson with you telling me about how you said sure I will and how you did what you were told to do right away every time your teacher told you to do something. Once more, what is your homework assignment?

S: To say sure I will, and do what I am told to do right away.

TO CORRECT:

First error: Say suurrr... and do... (Then repeat the question.)

Second error: Say sure I will, and do what I am told to do right away. (Then repeat the question.)

Third error: Say sure I will, and do what I am told to do right away. Say it with me: Say sure I will, and do what I am told to do right away. (Then repeat the question.)

T: Good!!! You did such a wonderful job during the lesson that I know you won't have any problems with your homework assignment.

PART TWODOING WHAT YOUR TEACHERS TELL YOU TO DO WITHOUT SAYING SURE I WILLLESSON SIXINTRODUCTION

T: We've been talking about what you need to do when your teacher tells you to do something. Remember who your teachers are?

S: (mentions teachers' names.)

TO CORRECT:

First error: Who are your teachers? (Say classroom teacher's name), and" (Then repeat the question.)

Second error: Who are your teachers? They are: (Mention teacher's and aides' names). (Then repeat the question.)

Third error: Who are your teachers? Say it with me. (Mention the teachers' names.) (Then repeat the question.)

T: What do you need to do when your teacher asks you to do something?

S: Do it right away. (Make sure the student says: right away.)

TO CORRECT:

First error: Remember, you need to do what you were told to do rrr... (Then repeat the question.)

Second error: You need to do what you were told to do right away. (Then repeat the question.)

Third error: You need to do what you were told to do right away. Say it with me: You need to do what you were told to do right away. (Then repeat the question.)

T: How fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

T: What's that special trick, the thing you say out loud, to help remind you to do what you've been asked to do right away?

S: Sure I will!!!

TO CORRECT:

First error: Suurrr... (Then repeat the question.)

Second error: Sure I will. (Then repeat the question.)

Third error: Sure I will. Say it with me: Sure I will. (Then repeat the question.)

T: Great remembering. What are the two reasons why it's important for you to do what your teacher tells you to do right away?

S: It keeps me out of trouble. It helps me to be a better student. (Student must give both answers.)

TO CORRECT:

First error: It helps me to be a better.... and it keeps me out... (Then repeat the question.)

Second error: It keeps me out of trouble and it helps me to be a better student. (Then repeat the question.)

Third error: It keeps me out of trouble and it helps me to be a better student. Say it with me: It keeps me out of trouble and it helps me to be a better student. (Then repeat the question.)

HOMEWORK DISCUSSION

T: OK! That's terrific. You know the reasons why it's important to do what you are asked to do at school. At the end of our last lesson, I gave you a homework assignment. I asked you to say sure I will and do what your teacher told you to do right away. Did you do it?

S: (Responds Yes/No.)

T: Did it keep you out of trouble? (Did you earn a lot of points, stay out of time out and get your work done?) Did it make you a better student? What did your teacher(s) say when you said sure I will and did what you were asked to do right away?

S: (Responds.)

T: (Prompt/praise when appropriate and discuss.)

ACTIVITY 1

T: Let's practice. I'm going to pretend I'm your teacher. Remember to do what I ask you to do right away (before I can count to five). But I don't want you to say sure I will out loud anymore. You can say it to yourself, but not out loud. If you want to, you may say "Sure" out loud, but not "Sure I will." What are you going to do?

S: Not say sure I will, but do it right away. (Make sure the student says, "right away".)

TO CORRECT:

First error: Remember, you need to do what you were told to do
rrr... (Then repeat the question.)

Second error: You need to do what you were told to do right away.
(Then repeat the question.)

Third error: You need to do what you were told to do right away.
Say it with me: You need to do what you were told to do right
away. (Then repeat the question.)

T: How fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the
question.)

Third error: Before you can count to five. Say it with me: Before
you can count to five. (Then repeat the question.)

T: Are you ready?

(Set up situations if necessary, give the instructions, count to
five out loud only following the first two instructions, praise
and/or correct as needed.)

- a) "(Name), will you please wipe off your desk for me?"
- b) "(Name), will you please wash your hands? It's time for
lunch."
- c) "(Name), go line up at the door please."
- d) "(Name), go put this paper in your bag please."

After each of the above instructions, if the student complies say
"Good! You did what I asked you to do right away (before I counted
to five)." If the student did not comply, tell him/her what s/he
did not do and have him/her to it again until s/he does it right
away (i.e., before you can count to five). Make sure the student
does not say sure I will out loud.

ACTIVITY 2

T: Excellent job!! You did everything right away! Now let's see if
I know how to do what you ask me to do right away. You tell me to
do something then count to five out loud.

(Have the student give you four instructions. Respond to each
instruction as follows:)

- 1) (Example) Do it right away.
- 2) (Nonexample) Don't do it right away.
- 3) (Nonexample) Don't do it right away.

4) (Example) Do it right away.

After each of the student instructions, ask the following questions:

- 1) Did I do it right away? (how fast is right away?)
- 2) How fast did I do it?

(Praise for correct responses. Correct incorrect responses and have the student give the exact same instruction and respond in the exact same manner.)

ACTIVITY 3

T: That's fantastic!! Now it's your turn to practice again. I'm going to tell you some pretend situations and you tell me what you would do. Get ready.

- 1) Your teacher tells you to tie your shoes before you go outside.
- 2) Your teacher tells you to put your pencil and papers in your desk.
- 3) Your teacher tells you to brush your teeth after lunch.
- 4) Your teacher tells you to empty the waste paper basket.
- 5) Your teacher asks you to get the mail for him/her.

After each of the above situations, ask the following questions:

- a. What were you asked to do?
- b. Did you do it right away? (How fast is right away?)
- c. What do you think would have happened to you if you did it that way?

(Praise and correct as needed.)

HOMEWORK

T: You catch on so fast and you do such a good job practicing in the lesson. But I want you to practice some more. Between now and tomorrow, (or next meeting) I want you to do what your teacher tells you to do right away.

T: What will you do when your teacher asks you to do something?

S: Do it right away. (Make sure the student says right away.)

TO CORRECT:

First error: Remember, you need to do what you were told to do rrr... (Then repeat the question.)

Second error: You need to do what you were told to do right away.

(Then repeat the question.)

Third error: You need to do what you were told to do right away.
Say it with me: You need to do what you were told to do right
away. (Then repeat the question.)

T: How fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the
question.)

Third error: Before you can count to five. Say it with me: Before
you can count to five. (Then repeat the question.)

T: Good! I know you can do a good job on your homework assignment.
Tomorrow we'll start the lesson with you telling me about how you
did what you were told to do right away every time your teacher
told you to do something.

LESSON SEVENINTRODUCTION

T: When your teacher tells you to do something, you need to do something. Remember who your teachers are?

S: (mentions teachers' names.)

TO CORRECT:

First error: Who are your teachers? (Say classroom teacher's name), and" (Then repeat the question.)

Second error: Who are your teachers? They are: (Mention teacher's and aides' names). (Then repeat the question.)

Third error: Who are your teachers? Say it with me. (Mention the teachers' names.) (Then repeat the question.)

T: What do you need to do when your teacher tells you to do something?

S: Do it right away. (Make sure the student says: right away.)

TO CORRECT:

First error: Remember, you need to do what you were told to do rrr... (Then repeat the question.)

Second error: You need to do what you were told to do right away. (Then repeat the question.)

Third error: You need to do what you were told to do right away. Say it with me: You need to do what you were told to do right away. (Then repeat the question.)

T: How fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

T: Good! Remember not to say sure I will out loud any more. What are the two reasons why it's important for you to do what your teacher tells you to do right away?

S: It keeps me out of trouble. It helps me to be a better student. (Student must give both answers.)

TO CORRECT:

First error: It helps me to be a better.... and it keeps me out... (Then repeat the question.)

Second error: It keeps me out of trouble and it helps me to be a better student. (Then repeat the question.)

Third error: It keeps me out of trouble and it helps me to be a better student. Say it with me: It keeps me out of trouble and it helps me to be a better student. (Then repeat the question.)

HOMEWORK DISCUSSION

T: OK! That's terrific. You know the reasons why it's important to do what you are asked to do at school. At the end of our last lesson, I gave you a homework assignment. I asked you to do what your teacher told you to do right away. Did you do it?

S: (Responds Yes/No.)

T: Did it keep you out of trouble? (Did you earn a lot of points, stay out of time out and get your work done?) Did it make you a better student?

S: (Responds.)

T: (Prompt/praise when appropriate and discuss.)

ACTIVITY 1

T: Let's practice. I'm going to pretend I'm your teacher. Remember to do what I ask you to do right away (before I can count to five). But I don't want you to say sure I will out loud anymore. You can say it to yourself, but not out loud. If you want to, you may say sure out loud, but not sure I will. What are you going to do?

S: Do it right away. (Make sure the student says: right away.)

TO CORRECT:

First error: Remember, you need to do what you were told to do rrr... (Then repeat the question.)

Second error: You need to do what you were told to do right away. (Then repeat the question.)

Third error: You need to do what you were told to do right away. Say it with me: You need to do what you were told to do right away. (Then repeat the question.)

T: How fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the

question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

T: Good!! But starting now, I also want you to smile when your teacher tells you to do something. What will you do when your teacher tells you to do something?

S: Smile and do it right away. (Make sure the student says both.)

TO CORRECT:

First error: Remember, you need to smile and do what you were told to do rrr... (Then repeat the question.)

Second error: You need to smile and do what you were told to do right away. (Then repeat the question.)

Third error: You need to smile and do what you were told to do right away. Say it with me: You need to smile and do what you were told to do right away. (Then repeat the question.)

T: How fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

(Set up situations if necessary, give the instructions, do not count to five out loud, praise and/or correct as needed.)

- a) "(Name), will you please tuck in your shirt?"
- b) "(Name), will you please close the classroom door?"
- c) "(Name), will you please write your name on this paper?"
- d) "(Name), show me how you get ready."

After each of the above instructions, if the student complies say "Good! You smiled and did what I asked you to do right away (before I could count to five)." If the student did not smile and/or comply, tell him/her what s/he did not do and have him/her to it again until s/he does it right away (before you can count to five).

ACTIVITY 2

T: Excellent job!! You did everything right away! Now let's see if I know how to do what you ask me to do right away. You tell me to do something but count to five silently to yourself.

Have the student give you four instructions. Respond to each

instruction as follows:

- 1) (Nonexample) Smile and don't do it right away.
- 2) (Example) Smile and do it right away.
- 3) (Nonexample) Do not smile and do it right away.
- 4) (Example) Smile and do it right away.

After each of the student instructions, ask the following questions:)

- 1) Did I smile?
- 2) Did I do it right away? (how fast is right away?)
- 3) How fast did I do it?

(Praise for correct responses. Correct incorrect responses and have the student give the exact same instruction and respond in the exact same manner.)

ACTIVITY 3

T: Great!! You really know this stuff now. I'm going to tell you some pretend situations and you tell me what you would do. Get ready.

- 1) Your teacher tells you to pull your chair into the circle.
- 2) Your teacher tells you to put your pencil and papers in your desk.
- 3) Your teacher tells you to sit straight in your seat.
- 4) Your teacher tells you to stop talking while s/he is explaining something on the blackboard.
- 5) Your teacher asks you to get a pencil for him/her.

After each of the above situations, ask the following questions:

- a. What were you asked to do?
- b. Did you smile?
- c. Did you do it right away? (How fast is right away?)
- d. What do you think would have happened to you if you did it that way?

(Praise and correct as needed.)

HOMEWORK

T: You do such a good job practicing in the lesson. But I want you to practice some more. Between now and or next meeting I want you to do what your teacher tells you to do right away. What will you do when your teacher tells you to do something?

S: Smile and do it right away. (Make sure the student says both.)

TO CORRECT:

First error: Remember, you need to smile and do what you were told to do rrr... (Then repeat the question.)

Second error: You need to smile and do what you were told to do right away. (Then repeat the question.)

Third error: You need to smile and do what you were told to do right away. Say it with me: You need to smile and do what you were told to do right away. (Then repeat the question.)

T: How fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

T: Good! I know you can do a good job on your homework assignment. Tomorrow we'll start the lesson with you telling me about how you did what you were told to do right away every time your teacher told you to do something.

LESSON EIGHT

INTRODUCTION

T: When your teacher tells you to do something, you need to do something. What do you need to do?

S: Smile and do it right away. (Make sure the student says both.)

TO CORRECT:

First error: Remember, you need to smile and do what you were told to do rrr... (Then repeat the question.)

Second error: You need to smile and do what you were told to do right away. (Then repeat the question.)

Third error: You need to smile and do what you were told to do right away. Say it with me: You need to smile and do what you were told to do right away. (Then repeat the question.)

T: How fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

T: Do you remember who your teachers are?

S: (mentions teachers' names.)

TO CORRECT:

First error: Who are your teachers? (Say classroom teacher's name), and") (Then repeat the question.)

Second error: Who are your teachers? They are: (Mention teacher's and aides' names). (Then repeat the question.)

Third error: Who are your teachers? Say it with me. (Mention the teachers' names.) (Then repeat the question.)

T: Great remembering. What are the two reasons why it's important for you to do what your teacher tells you to do right away?

S: It keeps me out of trouble. It helps me to be a better student. (Student must give both answers.)

TO CORRECT:

First error: It helps me to be a better.... and it keeps me out... (Then repeat the question.)

Second error: It keeps me out of trouble and it helps me to be a

better student. (Then repeat the question.)
 Third error: It keeps me out of trouble and it helps me to be a better student. Say it with me: It keeps me out of trouble and it helps me to be a better student. (Then repeat the question.)

HOMEWORK DISCUSSION

T: OK! That's terrific. You know the reasons why it's important to do what your teacher asks you to do. At the end of our last lesson, I gave you a homework assignment. I asked you to smile and do what your teacher told you to do right away. Did you do it?

S: (Responds Yes/No.)

T: Did it keep you out of trouble? (Did you earn a lot of points, stay out of time out)? Did it make you a better student (get your work done)?

S: (Responds.)

T: (Prompt/praise when appropriate and discuss.)

ACTIVITY 1

T: Let's practice. I'm going to pretend I'm teacher. Remember to smile and do what I ask you to do right away (before I can count to five). We are going to do something new. When I count to five, I am going to count silently to myself instead of counting out loud. I want you to count to five silently to yourself. Are you ready?

(Set up situations if necessary, give the instructions, count to five silently, praise and/or correct as needed)

- a) "(Name), go sit down at the table and show me that you are ready to work."
- b) "(Name), go line up at the door please."
- c) "(Name), go to the bathroom and wash your hands."
- d) "(Name), go throw this paper in the waste-paper basket."

After each of the above instructions, if the student smiles and complies say "Good! You smiled and did what I asked you to do right away (before I could count to five)." If the student did not smile and/or comply, tell him/her what s/he did not do and have him/her to it again until s/he smiles and does it right away (before you can count to five).

ACTIVITY 2

T: Excellent job!! You did everything right away! Now let's see if I know how to do what you ask me to do right away. You tell me to do something but count to five silently to yourself.

Have the student give you four instructions. Respond to each instruction as follows:

- 1) (Example) Smile and do it right away.
- 2) (Nonexample) Smile and don't do it right away.
- 3) (Nonexample) Don't smile and don't do it right away.
- 4) (Example) Smile and do it right away.

After each of the student instructions, ask the following questions:)

- 1) Did I smile?
- 2) Did I do it right away? (how fast is right away?)
- 3) How fast did I do it?

(Praise for correct responses. Correct incorrect responses and have the student give the exact same instruction and respond in the exact same manner.)

ACTIVITY 3

T: Great!! Now I'm going to tell you some pretend situations and you tell me what you would do. Get ready.

- 1) Your teacher asks you to get a book from the shelf.
- 2) Your teacher tells you to do your handwriting assignment.
- 3) Your teacher tells you to put your feet on the floor.
- 4) Your teacher asks you to help clean the art materials.
- 5) Your teacher tells you to hand in your homework.

After each of the above situations, ask the following questions:

- a. What were you asked to do?
- b. Did you smile?
- c. Did you do it right away? (How fast is right away?)
- d. What do you think would have happened to you if you did it that way?

(Praise and correct as needed.)

HOMEWORK

T: You do such a good job practicing in the lesson. But I want you to practice some more on your own. Between now and tomorrow, (or next meeting) I want you to smile and do what your teacher tells you to do right away. What will you do when your teacher asks you to do something?

S: Smile and do it right away. (Make sure the student says both.)

TO CORRECT:

First error: Remember, you need to smile and do what you were told to do rrr... (Then repeat the question.)

Second error: You need to smile and do what you were told to do right away. (Then repeat the question.)

Third error: You need to smile and do what you were told to do right away. Say it with me: You need to smile and do what you were told to do right away. (Then repeat the question.)

T: How fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

T: Good! I know you can do a good job on your homework assignment. Tomorrow we'll start the lesson with you telling me about how you did what you were told to do right away every time your teacher told you to do something.

LESSON NINE

INTRODUCTION

T: When your teacher tells you to do something, you need to do something. What do you need to do?

S: Smile and do it right away. (Make sure the student says both.)

TO CORRECT:

First error: Remember, you need to smile and do what you were told to do rrr... (Then repeat the question.)

Second error: You need to smile and do what you were told to do right away. (Then repeat the question.)

Third error: You need to smile and do what you were told to do right away. Say it with me: You need to smile and do what you were told to do right away. (Then repeat the question.)

T: How fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

T: Great!! Please tell me who your teachers are.

S: (mentions teachers' names.)

TO CORRECT:

First error: Who are your teachers? (Say classroom teacher's name), and" (Then repeat the question.)

Second error: Who are your teachers? They are: (Mention teacher's and aides' names). (Then repeat the question.)

Third error: Who are your teachers? Say it with me. (Mention the teachers' names.) (Then repeat the question.)

HOMEWORK DISCUSSION

T: Great remembering. What are the two reasons why it's important for you to do what your teacher tells you to do right away?

S: It keeps me out of trouble. It helps me to be a better student. (Student must give both answers.)

TO CORRECT:

First error: It helps me to be a better.... and it keeps me out...
(Then repeat the question.)

Second error: It keeps me out of trouble and it helps me to be a
better student. (Then repeat the question.)

Third error: It keeps me out of trouble and it helps me to be a
better student. Say it with me: It keeps me out of trouble
and it helps me to be a better student. (Then repeat the
question.)

T: OK! That's terrific. You know the reasons why it's important to
do what your teacher asks you to do. At the end of our last
lesson, I gave you a homework assignment. I asked you to say
smile and do what your teacher told you to do right away. Did you
do it?

S: (Responds Yes/No.)

T: Did it keep you out of trouble? (Did you earn a lot of points,
stay out of time out)? Did it make you a better student (get
your work done)?

S: (Responds.)

T: (Prompt/praise when appropriate and discuss.)

ACTIVITY 1

T: Let's try it. I'll pretend to be your teacher and you remember to
smile and do what I ask you to do right away (before I can count to
five). When I count to five, I am going to count silently to
myself. Are you ready?

(Set up situations if necessary, give the instructions, count to
five silently, praise and/or correct as needed)

- a) "(Name), will you please get me a pencil?"
- b) "(Name), take off your shoes please, the floor is wet."
- c) "(Name), hang your coat/bookbag on the hook please."
- d) "(Name), will you please get me my notebook?"

After each of the above instructions, if the student smiles and
complies say "Good! You did what I asked you to do right away
(before I could count to five)." If the student did not smile
and/or comply, tell him/her what s/he did not do and have him/her
to it again until s/he does it right away (before you can count to
five).

ACTIVITY 2

T: Excellent job!! You smiled and did everything right away! Now
let's see if I know how to do what you ask me to do right away.

You tell me to do something but count to five silently to yourself.

Have the student give you four instructions. Respond to each instruction as follows:

- 1) (Example) Smile and do it right away.
- 2) (Nonexample) Smile, don't do it right away.
- 3) (Example) Smile and do it right away.
- 4) (Nonexample) Don't smile and don't do it right away.

After each of the student instructions, ask the following questions:)

- 1) Did I smile?
- 2) Did I do it right away? (how fast is right away?)
- 3) How fast did I do it?

(Praise for correct responses. Correct incorrect responses and have the student give the exact same instruction and respond in the exact same manner.)

ACTIVITY 3

T: Great!! You're really catching on. Now I'm going to tell you some pretend situations and you tell me what you would do. Get ready.

- 1) Your teacher asks you to get some paper from him/her desk.
- 2) Your teacher tells you to do your handwriting assignment.
- 3) Your teacher tells you to sit down.
- 4) Your teacher asks you to go into the classroom.
- 5) Your teacher tells you to be quiet.

After each of the above situations, ask the following questions:

- a. What were you asked to do?
- b. Did you smile?
- c. Did you do it right away? (How fast is right away?)
- d. What do you think would have happened to you if you did it that way?

(Praise and correct as needed.)

HOMEWORK

T: Wow, I just can't believe how fast you catch on to things. Your homework assignment is to practice some more. Between now and tomorrow, (or next meeting) I want you to smile and do what your teacher tells you to do right away. What will you do when your teacher tells you to do something?

TO CORRECT:

First error: Remember, you need to smile and do what you were told to do rrr... (Then repeat the question.)

Second error: You need to smile and do what you were told to do right away. (Then repeat the question.)

Third error: You need to smile and do what you were told to do right away. Say it with me: You need to smile and do what you were told to do right away. (Then repeat the question.)

T: How fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

T: Good! I know you can do a good job on your homework assignment. Tomorrow we'll start the lesson with you telling me about how you smiled and did what you were told to do right away every time your teacher told you to do something.

LESSON TENINTRODUCTION

T: For the past two weeks we have been talking about why it is important to do what your teacher tells you to do right away. What are two reasons why it's important to do what your teacher tells you to do right away?

S: It keeps me out of trouble. It helps me to be a better student. (Student must give both answers.)

TO CORRECT:

First error: It helps me to be a better.... and it keeps me out... (Then repeat the question.)

Second error: It keeps me out of trouble and it helps me to be a better student. (Then repeat the question.)

Third error: It keeps me out of trouble and it helps me to be a better student. Say it with me: It keeps me out of trouble and it helps me to be a better student. (Then repeat the question.)

T: Great! Tell me again who your teachers are.

S: (mentions teachers' names.)

TO CORRECT:

First error: Who are your teachers? (Say classroom teacher's name), and" (Then repeat the question.)

Second error: Who are your teachers? They are: (Mention teacher's and aides' names.) (Then repeat the question.)

Third error: Who are your teachers? Say it with me. (Mention the teachers' names.) (Then repeat the question.)

T: Good!! When your teacher tells you to do something, you need to do something. What do you need to do when your teacher asks you to do something?

S: Smile and do it right away. (Make sure the student says both.)

TO CORRECT:

First error: Remember, you need to smile and do what you were told to do rrr... (Then repeat the question.)

Second error: You need to smile and do what you were told to do right away. (Then repeat the question.)

Third error: You need to smile and do what you were told to do right away. Say it with me: You need to smile and do what you were told to do right away. (Then repeat the question.)

T: How fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

HOMEWORK DISCUSSION

T: At the end of the last lessons, I gave you a homework assignment. I asked you smile and do what your teacher told you to do right away when s/he would tell you to do something. Did you do it?

S: (Responds Yes/No.)

T: Did it keep you out of trouble? (Did you earn a lot of points, stay out of time out)? Did it make you a better student (get your work done)?

S: (Responds.)

T: (Prompt/praise when appropriate and discuss.)

ACTIVITY 1

T: Let's practice. I'll pretend to be your teacher and you remember to smile and do what I ask you to do right away. Ready?

(Set up situations if necessary, give the instructions, count to five silently, praise and/or correct as needed)

- a) "(Name), please go sit down by the door."
- b) "(Name), please get a towel and wipe off your desk."
- c) "(Name), put your coat on."
- d) "(Name), please go ask the secretary what's for lunch."

After each of the above instructions, if the student smiles and complies say "Good! You smiled and did what I asked you to do right away (before I could count to five)." If the student did not smile and/or comply, tell him/her what s/he did not do and have him/her to it again until s/he does it right away (before you can count to five).

ACTIVITY 2

T: Excellent job!! You smiled and did everything right away! Now let's see if I know how to do what you ask me to do right away.

You tell me to do something but count to five silently to yourself.

Have the student give you four instructions. Respond to each instruction as follows:

- 1) (Nonexample) Smile and don't do it right away.
- 2) (Example) Smile and do it right away.
- 3) (Example) Smile and do it right away.
- 4) (Nonexample) Don't smile and don't do it right away.

After each of the student instructions, ask the following questions:)

- 1) Did I smile?
- 2) Did I do it right away? (how fast is right away?)
- 3) How fast did I do it?

(Praise for correct responses. Correct incorrect responses and have the student give the exact same instruction and respond in the exact same manner.)

ACTIVITY 3

T: Great!! You're really getting good at this. Now I'm going to tell you some pretend situations and you tell me what you would do. Get ready.

- 1) Your teacher tells you to go back to the end of the line because you were pushing.
- 2) Your teacher tells you to pick up your lunch tray and put it where it belongs.
- 3) Your teacher tells you to get off the bus and go into the classroom.
- 4) Your teacher asks you to turn off the T.V.

After each of the above situations, ask the following questions:

- a. What were you asked to do?
- b. Did you smile?
- c. Did you do it right away? (How fast is right away?)
- d. What do you think would have happened to you if you did it that way?

(Praise and correct as needed.)

HOMEWORK

T: Wow, I just can't believe how fast you catch on to things. You have been working so hard for the past two weeks. You have been smiling and doing what you are supposed to do right away. It has

You tell me to do something but count to five silently to yourself.

Have the student give you four instructions. Respond to each instruction as follows:

- 1) (Nonexample) Smile and don't do it right away.
- 2) (Example) Smile and do it right away.
- 3) (Example) Smile and do it right away.
- 4) (Nonexample) Don't smile and don't do it right away.

After each of the student instructions, ask the following questions:)

- 1) Did I smile?
- 2) Did I do it right away? (how fast is right away?)
- 3) How fast did I do it?

(Praise for correct responses. Correct incorrect responses and have the student give the exact same instruction and respond in the exact same manner.)

ACTIVITY 3

T: Great!! You're really getting good at this. Now I'm going to tell you some pretend situations and you tell me what you would do. Get ready.

- 1) Your teacher tells you to go back to the end of the line because you were pushing.
- 2) Your teacher tells you to pick up your lunch tray and put it where it belongs.
- 3) Your teacher tells you to get off the bus and go into the classroom.
- 4) Your teacher asks you to turn off the T.V.

After each of the above situations, ask the following questions:

- a. What were you asked to do?
- b. Did you smile?
- c. Did you do it right away? (How fast is right away?)
- d. What do you think would have happened to you if you did it that way?

(Praise and correct as needed.)

HOMEWORK

T: Wow, I just can't believe how fast you catch on to things. You have been working so hard for the past two weeks. You have been smiling and doing what you are supposed to do right away. It has

made you a better student, and it has kept you out of trouble. I'm so proud of you!!! I want you to keep it up and practice every chance you get. When your teacher tells you to do something, you need to do something. What do you need to do?

S: Smile and do it right away. (Make sure the student says both.)

TO CORRECT:

First error: Remember, you need to smile and do what you were told to do rrr... (Then repeat the question.)

Second error: You need to smile and do what you were told to do right away. (Then repeat the question.)

Third error: You need to smile and do what you were told to do right away. Say it with me: You need to smile and do what you were told to do right away. (Then repeat the question.)

T: How fast is right away?

S: Before you can count to five.

TO CORRECT:

First error: Before.... (Then repeat the question.)

Second error: Before you can count to five. (Then repeat the question.)

Third error: Before you can count to five. Say it with me: Before you can count to five. (Then repeat the question.)

T: From now on, every time your teacher asks you to do something, I want you to smile and do what you were asked to do right away.

Appendix F
Data Sheet

Student: _____ Teacher: _____
 Observer: _____ Date: _____ Time:(Start) _____ (Stop) _____

% Compliance: _____ Avg. Latency: _____ % Approp: _____

RELIABILITY:

TEACHER ANTECEDENT: _____
 STUDENT BEHAVIOR: _____
 TEACHER CONSEQUENCE: _____
 AVERAGE: _____

		#	%
GII	Good Instruction for Individual	_____	_____
PII	Qualitatively Poor Instruction for Individual	_____	_____
PII(C)	Chain Instruction for Individual	_____	_____
PII(V)	Vague Instruction for Individual	_____	_____
PII(Q)	Question Instruction for Individual	_____	_____
PII(L)	"Let's" Instruction for Individual	_____	_____
PII(U)	Instruction for Individual with unnecessary verbalizations	_____	_____
GGI	Good Instruction for Group	_____	_____
GPI	Poor Instruction for Group	_____	_____
GPI(C)	Chain Instruction for Group	_____	_____
GPI(V)	Vague Instruction for Group	_____	_____
GPI(Q)	Question Instruction for Group	_____	_____
GPI(L)	"Let's" Instruction for Group	_____	_____
GPI(U)	Instruction for Group with unnecessary verbalizations	_____	_____
C	Compliance	_____	_____
NC	Noncompliance	_____	_____
AP	Appropriate Behavior	_____	_____
INAP	Inappropriate Behavior	_____	_____
PRG	Group Praise	_____	_____
PRI	Individual Praise	_____	_____
PRO	Praise at Others	_____	_____
DISAPG	Disapproval for Group	_____	_____
DISAPI	Disapproval for Individual	_____	_____
DISAPO	Disapproval for Other	_____	_____

	TEACHER ANTECEDENT				STUDENT BEHAVIOR				TEACHER CONSEQUENCE			
	IGI	IPI ()	GGI	GPI ()	C(sec)	NC	AP	INAP	PR	(G O I)	DISAP	(G O I)
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	IGI	IPI()	GGI	GPI()	C(sec)	NC	AP	INAP	PR	(G O I)	DISAP	(G O I)
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	2	()	()	()	()					()		()	
	3	()	()	()	()					()		()	
	4	()	()	()	()					()		()	
	5	()	()	()	()					()		()	
	6	()	()	()	()					()		()	
	7	()	()	()	()					()		()	
		<u>IGI</u>	<u>IPI()</u>	<u>GGI</u>	<u>GPI()</u>	<u>C(sec)</u>	<u>NC</u>	<u>AP</u>	<u>INAP</u>	<u>PR</u>	<u>(G O I)</u>	<u>DISAP</u>	<u>(G O I)</u>
21	1												
	2	()	()	()	()					()		()	
	3	()	()	()	()					()		()	
	4	()	()	()	()					()		()	
	5	()	()	()	()					()		()	
	6	()	()	()	()					()		()	
	7	()	()	()	()					()		()	
		<u>IGI</u>	<u>IPI()</u>	<u>GGI</u>	<u>GPI()</u>	<u>C(sec)</u>	<u>NC</u>	<u>AP</u>	<u>INAP</u>	<u>PR</u>	<u>(G O I)</u>	<u>DISAP</u>	<u>(G O I)</u>
22	1												
	2	()	()	()	()					()		()	
	3	()	()	()	()					()		()	
	4	()	()	()	()					()		()	
	5	()	()	()	()					()		()	
	6	()	()	()	()					()		()	
	7	()	()	()	()					()		()	
		<u>IGI</u>	<u>IPI()</u>	<u>GGI</u>	<u>GPI()</u>	<u>C(sec)</u>	<u>NC</u>	<u>AP</u>	<u>INAP</u>	<u>PR</u>	<u>(G O I)</u>	<u>DISAP</u>	<u>(G O I)</u>
23	1												
	2	()	()	()	()					()		()	
	3	()	()	()	()					()		()	
	4	()	()	()	()					()		()	
	5	()	()	()	()					()		()	
	6	()	()	()	()					()		()	
	7	()	()	()	()					()		()	
		<u>IGI</u>	<u>IPI()</u>	<u>GGI</u>	<u>GPI()</u>	<u>C(sec)</u>	<u>NC</u>	<u>AP</u>	<u>INAP</u>	<u>PR</u>	<u>(G O I)</u>	<u>DISAP</u>	<u>(G O I)</u>
24	1												
	2	()	()	()	()					()		()	
	3	()	()	()	()					()		()	
	4	()	()	()	()					()		()	
	5	()	()	()	()					()		()	
	6	()	()	()	()					()		()	
	7	()	()	()	()					()		()	
		<u>IGI</u>	<u>IPI()</u>	<u>GGI</u>	<u>GPI()</u>	<u>C(sec)</u>	<u>NC</u>	<u>AP</u>	<u>INAP</u>	<u>PR</u>	<u>(G O I)</u>	<u>DISAP</u>	<u>(G O I)</u>
25	1												
	2	()	()	()	()					()		()	
	3	()	()	()	()					()		()	
	4	()	()	()	()					()		()	
	5	()	()	()	()					()		()	
	6	()	()	()	()					()		()	
	7	()	()	()	()					()		()	

Appendix G
Observers' Mastery Test

Observers' Mastery Test

Write the code that describes the following behaviors in the space provided on the left.

- _____ "Jimmy, put your math book in your desk now."
- _____ "Jason, please go to the office now."
- _____ "Everybody, please line up for the bathroom."
- _____ "Mary, I want you to make your bed."
- _____ "Brad, Jim and Steve, open your math book now."
- _____ "Tom, Derrik and Jimmy, take out your reading books, turn to page 28, then turn in yesterday's art assignment."
- _____ "Everybody, be good while I'm at the principal's office."
- _____ "Michelle and Brady, be careful when you are in the gym."
- _____ "Would you like to do your math assignment?"
- _____ "Do you want to get into reading groups?"
- _____ "Let's all line up at the door Michael and Rick."
- _____ "Let's get in a circle for reading everybody."
- _____ A good instruction directed to 2 or more people.
- _____ Student vocally or nonvocally produces noises that disturb the teacher and other students.
- _____ A poor instruction directed to 2 or more people.
- _____ Teacher gives approval in the form of verbal praise, approving gestures or physical contact to the target student.
- _____ Teacher implements time-out for the target student.
- _____ Teacher gives approval in form of verbal praise, approving gestures, or physical contact to 2 or more people.
- _____ The student is rocking back and forth in his chair.
- _____ Teacher verbally reprimands a student for being 10 minutes late (not the target student).

- _____ Teacher takes points away from the class because of the high noise level.
- _____ Child initiates completion of a instruction within 5 seconds without unnecessary responses (such as verbal comments, throwing objects, making faces, groaning etc. occurring at the same time).
- _____ Child does not do what the adult tells him to do within 5 seconds of the instruction.
- _____ Child complies within 5 seconds of a instruction, but groans the entire time and makes faces at the teacher.
- _____ Child is actively engaged in the task requested by the teacher (such as: completing math problems, reading silently, etc.) or the child looks at the teacher (i.e., makes eye-contact and does not speak, while remaining in seat) while s/he is talking to the child or the class in general. This also includes: answering questions, attending to teacher, asking for assistance, complying with group and individual instructions.
- _____ Student vocally or nonvocally produces noises that disturb teacher and/or other students.
- _____ Student is "talking back" to the teacher and making sarcastic remarks.
- _____ Teacher gives approval in form of verbal praise, approving gestures or physical contact to an individual other than target student.

Briefly describe the behavior that the code represents.

GGC _____

IPC _____

GPC _____

IGC _____

PRO _____

PRI _____

C _____

NC _____

AP _____

DISAP I _____

DISAP O _____

INAP _____

IGC _____

Appendix H
Observer Confidentiality Form

OBSERVER CONFIDENTIALITY FORM

I, _____ understand the necessity for keeping all information obtained during and after the course of this research study confidential. I also understand that any breach of confidentiality (e.g., referring to a child by name--either real or fictitious, by behaviors, by teacher, by data etc.) to others not directly affiliated with this research project will result in immediate termination of my employment without any notice.

Signature: _____

Date: _____

Appendix I
Teacher Handout I
Giving Good Directions

GIVING GOOD DIRECTIONS

The following program was designed to increase children's compliance with your instructions. We are in the process of evaluating the effectiveness of the program in a research study that will be conducted during the summer session. An independent observer will be collecting data on specific student/teacher behaviors throughout the summer session session.

We would like you to read the material and implement the techniques and strategies that are suggested. It is imperative that you follow the suggestions that are listed in the manual. If you have any questions concerning the material, please feel free to ask. Your cooperation in this research project is greatly appreciated. We hope that participation in the study will be beneficial to you.

Initially, we will be asking you to:

1. Give clear, precise instructions
2. Praise the students for behaving appropriately, and complying with your instructions - using the "Level System"
3. Ignore inappropriate behavior
4. Be systematic in your use of these procedures
5. Remember to give at least six instructions during each observation session.

After a period of time, we will ask you to continue with the above mentioned as well as:

6. Schedule an appropriate 15 minute period that we can take the student for approximately ten school days in a row.

INTRODUCTION

"Nathan will not line up at the door when I tell him to." "Sara never goes to bed when I ask her." "Sam refuses to get in his group when it's time for reading." "John never takes out the trash when I tell him to. He says he'll do it later, but it never gets done!"

These are some examples of a common complaint among teachers and parents alike--some children will not do as they are asked. This failure to comply with instructions is called "noncompliance". Noncompliance can take many forms. However, all forms of noncompliance are similar because they each involve a child's failure or refusal to comply with a parent or teacher's instruction.

Some Examples of Different Types of Noncompliance:

The child outright refuses to do what the adult requests.

"No mom, I am not going to bed right now."

The child insists he will do as he is asked, but doesn't.

"I promise I'll do my math as soon as I finish my reading assignment."

The child knows the rules of the classroom or house, but he constantly violates them.

"I forgot you told me not to jump on the furniture."

The child "ignores" the instructions of adults by pretending they aren't there or he can't hear them.

Noncompliance is a common problem among most children at one time or another. Most of us tend to accept noncompliance in younger children especially as a phase in their normal development such as "the terrible twos". However, noncompliance can lead to serious problems in childhood, adolescence and even adulthood if it is left untreated.

HOW NONCOMPLIANCE WORKS

One explanation for the development and maintenance of "deviant behaviors" has been developed by Patterson (1976). His explanation seems applicable to noncompliance as well. He calls it the "coercion hypothesis" in which both the child and parents are involved in developing and maintaining noncompliance.

Examples of Developing and Maintaining Noncompliance:

- A) (1) Parent: "Suzie, it's time to go to bed."
 (2) Child: "I don't want to go to bed." She cries, screams and whines.
 (3) Parent: "O.K. Suzie, you can stay up for 10 more minutes." The parent withdraws the instruction rather than listen to Suzie whine and scream.

In this example (A), Suzie got exactly what she wanted, therefore, the chances of her behaving the same way the next time she doesn't want to do something are quite high.

- (B) (1) Parent: "Jason, put your toys away."
 (2) Child: "No, I'm not done playing." He whines, yells, etc.
 (3) Parent: (raises voice) "Jason, put your toys away!"
 (4) Child: "No, I want to play some more." (yells louder, kicks toys)
 (5) Parent: (raises voice even louder, begins to yell)
 "Jason!!
 I'm telling you!! Put your toys away, or else!!"
 (6) Child: Whimpers and whines, but puts his toys away.

In this example (B), Jason finally did do as he was asked, but was able to put off the "unpleasant" chore for quite a while. He was also able to control his mom's behavior somewhat by getting her angry with him. Sometimes children find this kind of attention rewarding.

It is easy to see from these two examples how noncompliant behavior gets started and how it is maintained. As mentioned earlier, noncompliance can become a big problem in the future if it is not treated as soon as it becomes a pattern.

Imagine what Jason will be like in 10 years if at six years old he consistently refuses to do as he is asked by his teachers and parents and gets away with it every time. The chances are probably quite high that he will not obey others in authority as he gets older, such as employers and policemen. That is one reason we, as parents and teachers must break this pattern of noncompliance. It will also help enhance our relationships with our children and students by avoiding the negative interactions that area involved in noncompliance.

What Are Some Reasons Children Do Not Comply With Instructions?

- 1) They don't understand the instructions, directions or rules. The instructions are too complex, repeated too often or too many are given at one time.
- 2) They choose not to follow instructions because they find misbehavior more rewarding than good behavior. There may be too many punishments and not enough rewards.

PRECISION INSTRUCTIONS

Sometimes children don't comply with instructions because of the way the instructions are given. This portion of the handout focuses on showing you how to give clear instructions to the child. We have used the term "precision instructions" because such instructions are clear, short and precise.

Things you must know before giving an instruction:

1. Be sure the child didn't comply because he chose not to and not because he couldn't understand the directions.
2. Never give a instruction unless you are prepared to follow through with the consequences.

Precision Instructions are:

Specific and direct (say the child's name and then give a clear direction)

Given one at a time

Followed by a five second waiting period to see if the child complies (before issuing the second instruction)

(second) directions are followed by the the word "now"

If the child starts to comply within five seconds, reward/praise him. If the child does not start to comply within five seconds give him the same instruction, but wait five seconds. if the child doesn't comply, ignore him/her.

Examples of Precision Instructions:

"Jimmy, please put your math book in your desk (now)."

"Suzie, please go to your bedroom (now)."

"Jason, please take the garbage out to the garage (now)."

"Marilyn, please line up for the bathroom (now)."

"Brad, please make your bed (now)."

Types of Poor Instructions:

1. Chain Instructions-- a series of unrelated instructions that tend to confuse the child so that he forgets all the directions (which makes it impossible for him to comply).

"Take out your math books, then turn to page 28, then turn in yesterday's reading assignment."

"Wash your hands, then make your bed and put your clothes in the hamper."

2. Vague Instructions-- these make the children unsure about what exactly is expected of them.

"Be good while I'm at the principal's office."

"Be careful when you play next door."

"Listen!!"

"Pay attention everybody."

3. Question Instructions-- these give the child the opportunity to say "No".

"Would you like to do your math assignment now?"

"How about doing the dishes for me?"

4. "Let's" Instructions-- these are sometimes used by adults to get children started, but the adults seldom finish the task with the child so the child usually quits before the task is finished.

"Let's put all the art materials away."

"Let's clean up the family room."

5. Instructions followed by reason or other unnecessary verbalizations-- such rationales often cloud the original instruction.

"I want you to take a bath before company comes over. Mr. and Mrs. Anderson will surely think I'm a bad parent if they see you like this."

"I want everyone to clean off their desk. The principal is coming into the class this morning and I want the classroom to look nice for him."

To review this section on precision instructions, we list some things that affect whether or not a child will comply with an instruction:

1. The nature, complexity or clarity of the instruction Does the child understand exactly what you want him to do?
2. Whether the instruction is given as a question or statement. Do you tell the child what you want, or do you ask him if he wants to do it?
3. Whether the child is given enough time to comply before giving another instruction. Do you give the child enough time to start to do what you ask him, or do you give him more time than he actually needs so that he is the one making the decisions?
4. Adult expectations for compliance. Do you really expect the child to do as you say?
5. Whether or not consequences are provided for noncompliance and compliance. Do you reward the child when he does what you want him to do?

Appendix J
Teacher Handout II
Giving Positive Attention for Compliance

POSITIVE ATTENTION

This portion of the handout focuses on managing the child's behavior by making compliance to your instructions very rewarding for the child, thereby increasing his compliant behavior.

It is very important for you to be extremely **CONSISTENT** when you use the techniques presented in this section. In order for these techniques to work for you, you must take them seriously and follow through exactly the same way every time. If you are not consistent and systematic in the use of these procedures, the child will not know what to expect from you when he/she complies or doesn't comply. Remember: Mean what you say, say what you mean, and always follow through with what you say!!!

Start by giving the child a lot of positive feedback and attention when he/she is behaving appropriately. Hopefully, this will begin to reverse the problem and increase the child's appropriate behavior. The more time the child is engaged in appropriate behavior, the less time he/she can be engaged in inappropriate behavior.

Your attention toward the child can be a very valuable reward. Use it as often as possible when you see the child "being good" or doing what you have asked.

The following are some examples of positive attention you can use when the child is complying to your instruction or behaving appropriately:

PHYSICAL

pat on head or shoulder
move closer to the child
smile
wink
hug
kiss

touch on arm or shoulder

VERBAL

"I like it when you play nicely with your sister."
"Thanks for lining up at the door when I ask you."
"Nice job making your bed."
"It makes me happy when you turn in your assignments on time."
"I'm proud of you for clearing the table without my asking you."
"Great cleaning job in the art center!"

Always be **SPECIFIC** in telling the child exactly what he did to make you happy. Immediately praise the child for what he is doing or what he has done. Don't wait!!

At first, praise the child as often as you can, then gradually reduce the amount of praise you use as the child behaves more appropriately for longer periods of time. Never use "back-handed

compliments such as, "It's about time you did you math assignment neatly," or "So, you finally took out the trash without having me ask you ten thousand times!!!!!"

In summary, what we are asking you to do:

1. Give clear, short and precise instructions
2. Praise the students for behaving appropriately, and complying with instructions.
3. Ignore inappropriate behavior and noncompliance.
4. Be systematic and consistent in these procedures.
5. Give at least 6 instructions during the observation sessions.

Appendix K
Level System

POINT CARDS: GENERAL INFORMATION

During structured time a variable interval (VI-8) beep tape is played. If a pupil is exhibiting all appropriate behaviors according to his point card level when a beep goes off, he "earns that point," i.e., the teacher initials a box on his point card. If the pupil is behaving inappropriately, he "misses the point," and the teacher draws a line through the box.

NOTE: The issue is NOT how many points are earned, but how many points are missed. Too many missed points have to be made up at a rate of ten minutes of work for every point.

COOPERATIVE PLAY RATINGS

Recess and lunch are rated on a scale from 1 to 5:

1. Isolate Play
2. Parallel Play
3. Noncooperative play
4. Cooperative Play, Teacher Intervenes Once
5. Cooperative Play, No Teacher Intervention

TASK COMPLETION (CHART MOVES)

Chart moves are awarded for completion of assigned classwork, homework, good grooming, etc., and for appropriate behavior during groups (no more than two missed points, no timeout). A chart move is the connection of two sequential dots (out of a total of four hundred dots) on a picture or design of the pupil's choosing. The pupil connects a pair of dots for each chart move, and the teacher verifies the chart move with the date and an initial for the subject area. Yellow dots occur at a variable interval (VI-7); when a chart move hits a yellow dot the pupil is entitled a "grab bag" (a tangible or activity reinforcer).

ENTRY LEVEL

The pupil is subject to no contingencies for three days while baseline data is collected. He has no point card, no bank, no chart. During this time, the pupil enjoys all privileges, e.g., free snacks at recess, free access to all game equipment.

GREEN LEVEL

At this level, the pupil loses all privileges; about the only thing motivating him is the recollection of the privileges he enjoyed during baseline, and the knowledge that those privileges will become increasingly available to him as he moves up through the level system. He still has no bank, and no chart (chart moves are recorded by the teacher elsewhere in order to track task completion). Although contingencies are now attached to the pupil's behavior, they are relatively lax compared to those on subsequent levels.

Tracking without consequence is continued in regard to the following behaviors:

- NPA: Not Paying Attention
- NFD: Not Following Directions
- TO: Talking Out

The pupil misses points for the following behaviors:

- OS: Out of Seat
- TOS: Nonseclusionary/Seclusionary Timeout
- Hands/Feet Problems
- Grooming
- Theft/Cheating

BLUE LEVEL

The pupil now acquires a bank and a chart. He also gets to select a toy which he will receive upon completion of the chart (four hundred chart moves later). He must maintain a minimum of 60 points in his bank; he is allowed to "purchase" balls and bats, but not skateboards at recess and lunch, and he can only spend 40 points on snacks. A person on a

blue point card cannot play air hockey, play on the mats and bars, or play fooseball and must pay points to play ping-pong.

On this level all behavior is consequated, but for NPAs, NFDs, and TOs, the pupil is given warnings. For example, the pupil may "talk-out" without raising his hand; the teacher would respond by saying, "That's a talk-out," and by drawing a hash mark under TO in the warning column on the point card. If the pupil "talks-out" again within the same interval, the teacher again advises him of what he has done wrong, circles the hash mark in the warning column, draws another hash mark under TO under "Missed Points," and draws a line through the appropriate box.

Problems with OS, TOS, hands/feet, theft/cheating, and PA (physical aggression) result in immediate loss of the point for a given interval.

YELLOW LEVEL

The pupil acquires more privileges, can spend more bank points, etc. He must still maintain an account minimum of 60 points.

At this level, the pupil receives no warnings for misbehavior with the exception of warnings for noncooperation. All other behavior is immediately consequated with a missed point. VA (verbal aggression) is added to the list of behaviors subject to consequation.

PINK LEVEL

The pupil acquires still more privileges, the primary one being that he initials his own point card (the point being verified by the teacher in the corresponding box), and marks his own chart moves. It follows that he is also responsible for consequating his own behavior if the "talks-out" or fails to follow direction, etc. AT this level, he receives no warnings.

A pupil performing successfully on the pink level is a candidate for mainstreaming in the near future.

WHITE LEVEL

The pupil is not subject to consequence through earned and missed points. At this level, it is assumed that he can handle the responsibility of the privileges he has acquired. He is weaned off his bank within two weeks, and he takes his chart home.

The pupil and his teacher discuss those trouble areas he needs to attend to and these are listed on his point card. He rates his performance in each of these areas daily; these ratings are translated into "points earned" which are, in turn translated into chart moves. The point card goes home with the pupil, and he takes his chart moves there, presumably under the supervision (and doting approval) of his parents.

LEVEL PROGRESSION

The pupil progresses through the level system according to the criteria on the attached level progression summary. The pupil must be performing at the next higher level for two weeks in order to move up to that level. The pupil can also be dropped a level for severe and persistent infractions of his current level criteria.

LEVEL PROGRESSION SUMMARY

BEHAVIOR	GREEN	BLUE	YELLOW	PINK	WHITE
PA	1/d	1/wk	.5/wk	0	0
HANDS	1/d	1/wk	.5/wk	0	0
THEFT/CHEAT	1/wk	0	0	0	0
OS	2/d	1/d	1/wk	0	0
TOS					
% ATTENDANCE		70%	75%	85%	90%
NPA		3/d	2/d	1/d	1/d
NFD		3/d	2/d	1/d	1/d
TO		3/d	2/d	1/d	3/wk
VA			1/d	1/wk	0
NONCOOP			2/d	2/wk	1/wk
INACC. REPORT		1/d	1/wk	0	0
TASK COMPLETION		70%	80%	90%	95%
COOP R/L		60%	70%	80%	90%
BUS REPORT					
HR					
TAS					

Therapist: _____

Student: _____

DOB: _____

DOE: _____

Appendix L
Sample Checklist for Lessons

SAMPLE CHECKLIST

LESSON ONE

INTRODUCTION

- ___ T: What will be done
___ What will we be talking about?
- ___ S: Answer
___ Correction
- ___ T: reinforcement
___ Your teachers are
___ Who are your teachers?
- ___ S: Answer
___ Correction
- ___ T: reinforcement
___ When your teacher tells you
___ What should you do
- ___ S: Answer
___ Correction
- ___ T: reinforcement
___ For example,
___ What should you do
- ___ S: Answer
___ Correction
- ___ T: It is important
___ What is one reason
- ___ S: Answer
___ Correction
- ___ T: reinforcement
___ Another reason
___ What's another reason
- ___ S: Answer
___ Correction
- ___ T: reinforcement
___ What's another reason
- ___ S: Answer (2)
___ Correction

____ T: reinforcement
 ____ When I say 'right away'
 ____ What do I mean

____ S: Answer
 ____ Correction

ACTIVITY 1

____ T: reinforcement
 ____ let's try and see
 ____ I'm going to tell you
 ____ Let's see if you'll

____ Instruct: "Go line up at the door."
 ____ Count out loud to five.
 ____ praise compliance
 ____ ask:

- ____ 1. What did you do?
- ____ 2. Did you do it right away?
- ____ 3. How do you know you did it right away?

____ prompt for noncompliance
 ____ Tell him/her what s/he did do
 ____ Tell him/her what s/he did not do

____ There's a special trick
 ____ When someone tells you
 ____ For example,
 ____ What should you say out loud

____ S: Answer
 ____ Correction

____ T: reinforcement
 ____ After you say

____ S: Answer
 ____ Correction

____ T: How fast

____ S: Answer
 ____ Correction

ACTIVITY 2

____ T: reinforcement
 ____ Now let's practice. First
 ____ Prompt

___ S: Answer
 ___ Correction

___ T: reinforcement
 ___ Now let's try it.

___ count to five out loud
 ___ praise compliance: "Good!! You said:
 ___ correct noncompliance: tell him/her what s/he did not do
 ___ and have him/her do it again until s/he says: sure I
 ___ will, and does it right away

___ a) "(Name), go line up at the door."

___ count to five out loud
 ___ praise compliance: "Good!! You said:
 ___ correct noncompliance: tell him/her what s/he did not do
 ___ and have him/her do it again until s/he says: sure I
 ___ will, and does it right away

___ b) "(Name), hand me your paper."

___ count to five out loud
 ___ praise compliance: "Good!! You said:
 ___ correct noncompliance: tell him/her what s/he did not do
 ___ and have him/her do it again until s/he says: sure I
 ___ will, and does it right away

___ c) "(Name), wash your hands."

___ count to five out loud
 ___ praise compliance: "Good!! You said:
 ___ correct noncompliance: tell him/her what s/he did not do
 ___ and have him/her do it again until s/he says: sure I
 ___ will, and does it right away

___ d) "(Name), get a drink of water."

___ count to five out loud
 ___ praise compliance: "Good!! You said:
 ___ correct noncompliance: tell him/her what s/he did not do
 ___ and have him/her do it again until s/he says: sure I
 ___ will, and does it right away

HOMEWORK

___ T: Good, you are really
 ___ Now I want you to practice
 ___ What will you say

___ S: Answer
 ___ Correction

___ T: reinforcement
 ___ How quickly will you do it?

___ S: Answer
 ___ Correction

___ T: reinforcement

____ T: reinforcement
____ How fast is that?

____ S: Answer
____ Correction

____ T: reinforcement
____ Once more

____ S: Answer
____ Correction

____ T: reinforcement
____ Let's try one more time.
____ "(Name),"
____ count to five out loud
____ praise compliance: "Good!! You said:
____ correct noncompliance: tell him/her what s/he did not do and
____ have him/her do it again until s/he says: sure I
____ will, and does it right away
____ Give him/her another instruction until s/he says sure I will
____ and does it right away on his/her own.)

Appendix M

**Raw Data on Compliance and Appropriate Behavior
Per Participant**

Numbers of Qualitatively Good (# Good) and Poor (# Poor) Instructions, Compliance with Those Instructions (Comp), Appropriate Behavior (Appr) and Reliability (Rel) Per Session for Participant 1

Session #	# Good instr.	Comp. %	rel %	# Poor instr.	Comp. %	rel %	% Good instr.	Appr. %	rel %
Baseline									
1	14	29 4	86	1	0 0	78	93	10	100
2	9	11 1		2	50 1		81	0	
3	15	20 3		1	0 0		94	0	
4	12	33 3	91	1	0 0	87	92	21	94
5	3	17 1		3	0 0		66	13	
6	-	-- -		-	- -		--	--	
7	10	30 3	84	5	20 1	90	66	24	93
8	9	33 3		4	50 2		69	1	
9	7	29 2		3	0 0		70	6	
10	10	20 2		0			100	3	
Ave/sess	9.9	25 2.4	87	2.2	15 .4	85	81	8.7	96
Treatment 1									
11	9	67 6		1	0 0		90	76	
12	11	91 10	97	0		98	100	53	85
13	7	29 2		3	33 1		70	82	
14	14	14 2		0			100	71	
15	10	30 3	81	0		90	100	49	98
16	12	42 5		1	100 1		92	92	
17	9	11 1		2	50 1		82	83	
18	11	9 1		0			100	91	
19	10	25 3		5	40 2		66	89	
20	8	25 2		0			100	72	
21	-	-- -		-	- -		--	--	
22	-	-- -		-	- -		--	--	
23	-	-- -		-	- -		--	--	
24	-	-- -		-	- -		--	--	
25	-	-- -		-	- -		--	--	
26	9	22 2		2	0 0		82	83	
27	10	20 2		0			100	70	
28	7	29 2		0			100	61	
29	8	38 3		2	50 1		80	71	
30	7	57 4	92	0		86	100	63	80
31	6	16 1		0			100	42	
32	7	28 2		1	0 0		88	52	

P1 - Continued

Session #	# Good instr.	Compl. %	rel %	# Poor instr.	Compl. %	rel %	% Good instr.	Appr. %	rel %
33	9	33 3	83	0			99	100	59 82
34	9	22 2		0				100	60
35	10	30 3		0				100	64
Ave/sess	9.2	32 3.0	88	1.9	54 .3	93	93	93	69 86
Treatment 2									
36	9	22 2		0				100	53
37	8	88 7		0				100	34
38	10	80 8		1	100 1			91	93
39	8	63 5	91	0		100	100	100	81 87
40	6	100 6		0				100	90
41	7	100 7		0				100	75
42	10	100 10	90	0		100	100	100	90 81
43	5	100 5		2	50 1			71	72
44	7	86 6		0				100	87
45	8	100 8		0				100	78
46	8	100 8	90	0		98	100	100	64 98
47	6	100 6	99	0		100	100	100	89 92
48	9	100 9	100	0		100	100	100	97 96
49	6	67 4		0				100	86
50	7	100 7	89	0		100	100	100	92 90
51	6	100 6		1	100 1			86	81
Ave/sess	7.5	87 6.5	93	.3	83 1	100	97	97	79 91
Maintenance									
52	8	100 8		0				100	88
53	7	100 7	89	0		100	100	100	98 97
54	8	100 8		0				100	80
55	6	100 6	96	0		99	100	100	88 100
56	10	90 9		0				100	90
57	8	100 8		0				100	86
58	8	100 8	100	0		100	100	100	92 99
59	6	100 6		0				100	100
60	8	88 7		0				100	96
61	7	100 5		1	100 1			88	90
62	5	100 6	89	0		100	100	100	98
63	6	83 5		0				100	94
Ave/sess	7.3	95 6.9	94	.1	100 1	100	99	99	92 99
Follow-up									
64	7	87 6	100	0		98	100	100	79 88
69	7	100 7		2	50 1			78	87
78	5	100 5	87	0		100	100	100	70 86
84	9	89 8		0				100	95
88	7	29 2		0				100	47
98	8	88 7	99	0		100	100	100	99 87
Ave/sess	7.2	82 5.8	95	.3	50 1	99	96	96	80 87

Numbers of Qualitatively Good (# Good) and Poor (# Poor) Instructions, Compliance with Those Instructions (Comp), Appropriate Behavior (Appr) and Reliability (Rel) Per Session for Participant 2

Session #	# Good instr.	Comp. %	rel %	# Poor instr.	Comp. %	rel %	% Good instr.	Appr. %	rel %
Baseline									
1	10	10	1	2	50	1	83	8	
2	9	33	3	3	0	0	75	13	
3	12	0	0	3	33	1	80	4	
4	8	12	1	5	20	1	62	3	
5	9	22	2	0			74	100	22
6	11	18	2	5	20	1	91	69	9
7	--	--	-	-	--	-	--	-	-
8	10	40	4	6	17	1	63	4	
9	9	11	1	2	0	0	82	10	
10	11	18	2	3	0	0	86	79	22
11	9	89	8	4	25	1	87	69	30
12	10	80	8	1	100	1	91	51	
13	7	14	1	3	0	0	70	80	
14	11	45	5	2	50	1	85	27	
15	3	67	2	0			100	29	
16	7	29	2	6	17	1	54	2	
17	9	11	1	1	100	1	90	19	
18	7	14	1	2	50	1	89	78	22
19	11	18	2	2	0	0	85	21	
20	8	13	1	4	25	1	67	33	
21	7	29	2	2	0	0	78	40	
22	5	20	1	1	100	1	83	12	
23	9	11	1	1	0	0	90	2	
24	6	33	2	5	20	1	55	31	
25	6	17	1	0			100	1	
26	8	13	1	1	0	0	90	89	7
27	7	29	2	0			100	23	
28	10	20	2	1	0	0	91	24	
29	6	17	1	0			100	8	
Ave/sess	8.4	26	2.2	93	2.3	29 .5	86	78	20
Treatment 1									
30	8	50	4	2	0	0	80	19	
31	10	60	6	0			99	100	48
32	7	14	1	1	100	1	88	66	
33	8	25	2	0			100	53	
34	8	13	1	0			100	72	

P2 - Continued

Session #	# Good instr.	Compl. %	N	rel %	# Poor instr.	Compl. %	N	rel %	% Good instr.	Appr. %	rel %
35	10	30	3	83	0			92	100	52	93
36	10	20	2		0				100	65	
37	6	17	1		0				100	81	
38	8	38	3		1	100	1		89	72	
39	9	22	2	90	0			85	100	63	96
40	8	25	2		0				100	77	
41	9	22	2		1	0	0		90	58	
Ave/sess	8.4	28	2.4	88	.4	50	.5	92	96	61	89
Treatment 2											
42	9	22	2		0				100	51	
43	6	50	3		0				100	67	
44	8	63	5		0				100	65	
45	10	40	4	80	0			100	100	80	91
46	8	75	6		1	100	1		89	76	
47	7	100	7		0				100	84	
48	8	100	8		0				100	92	
49	8	88	7	100	0			97	100	75	81
50	9	100	9		0				100	80	
51	5	80	4		0				100	83	
52	8	100	8	81	0			89	100	76	88
53	8	100	8		0				100	81	
54	9	100	9		2	100	2		82	82	
55	8	100	8	99	0			99	100	71	92
56	9	100	9		0				100	90	
57	7	86	6		0				100	79	
Ave/sess	7.9	81	6.4	90	.2	100	1	96	98	77	88
Maintenance											
58	7	100	7		0				100	80	
59	8	100	8		0				100	84	
60	6	100	6	92	0			98	100	59	79
61	9	100	9		0				100	91	
62	5	100	5		0				100	82	
63	7	100	7	87	1	100	1	100	88	68	83
64	8	88	7		0				100	92	
65	7	86	6	98	0			100	100	83	90
66	9	100	9		0				100	95	
67	5	80	4		0				100	62	
Ave/sess	7.1	95	6.8	92	.1	100	1	99	99	80	84
Follow-up											
70	8	50	4		0				100	72	
75	7	71	5	86	2	0	0	100	78	54	93

P2 - Continued

Session #	# Good instr.	Compl. % N	rel %	# Poor instr.	Compl. % N	rel %	% Good instr.	Appr. %	rel %	
84	5	80	4	0			100	66		
90	8	88	7	0			100	35		
98	7	57	4	0		99	100	80	70	
102	9	67	6	1	100	1	94	68		
Ave/sess	7.3	68	5	93	.5	33 .5	100	94	63	82

Numbers of Qualitatively Good (# Good) and Poor (# Poor) Instructions, Compliance with Those Instructions (Comp), Appropriate Behavior (Appr) and Reliability (Rel) Per Session for Participant 3

Session #	# Good instr.	Compl. % N	rel %	# Poor instr.	Compl. % N	rel %	% Good instr.	Appr. %	rel %
Baseline									
1	14	29 4		0			100	10	
2	10	10 1		0			100	2	
3	9	33 3	83	0		85	100	18	93
4	10	20 2		0			100	28	
5	11	27 3		0			100	10	
6	--	-- -		-			---	--	
7	10	20 2	90	0		92	100	12	88
8	8	0 0		0			100	21	
9	8	25 2	92	1	0 0	100	89	14	90
10	10	30 3		0			100	13	
11	9	44 4	97	0		90	100	13	91
12	7	29 2		0			100	50	
13	8	63 5		0			100	58	
14	6	50 3		0			100	40	
15	10	20 2		0			100	8	
16	9	11 1	92	2	0 0	91	91	12	92
17	10	20 2		0			100	6	
18	9	22 2		0			100	9	
19	8	25 2		0			100	20	
Ave/sess	9.2	29 2.4	91	.2	0	92	98	19	91
Treatment 1									
20	6	33 2		1	0 0		86	17	
21	9	44 4		0			100	25	
22	7	14 1		0			100	11	
23	10	30 3		0			100	20	
24	8	13 1		0			100	31	
25	9	22 2	98	0		100	100	7	94
26	7	14 1		0			100	19	
27	6	17 1		0			100	15	
28	9	44 4	100	0		100	100	25	99
29	7	28 2		0			100	32	
30	11	22 2		1	100 1		83	20	
31	6	33 3		0			100	25	
32	8	38 3	93	0		100	100	9	89
33	9	22 2		0			100	16	
34	9	33 3		0			100	50	

P3 - Continued

Session #	# Good instr.	Compl. %	N	rel %	# Poor instr.	Compl. %	N	rel %	% Good instr.	Appr. %	rel %
35	11	36	4		0				100	20	
36	7	14	1		0				100	38	
37	9	33	3		0				100	7	
38	8	38	3	100	0			100	100	19	74
39	7	29	2		0				100	28	
40	10	30	3		0				100	22	
41	8	33	2		0				100	38	
42	6	17	1		0				100	19	
43	8	38	3	100	0			100	100	34	92
44	6	33	2		0				100	31	
Ave/sess	8	29	3.2	98	.1	0		100	99	24	90
Treatment 2											
45	6	17	1		0				100	11	
46	8	38	3	98	0			91	100	39	92
47	7	43	3		1	0	0		88	54	
48	5	40	2		0				100	40	
49	6	83	5		0				100	64	
50	5	60	3	100	0			99	100	54	83
51	7	71	5		0				100	67	
52	7	75	6		0				100	75	
53	6	67	4		0				100	51	
54	8	63	5	100	0			100	100	61	76
55	5	80	4		0				100	82	
56	7	100	7		0				100	46	
57	8	100	8	93	0			89	100	70	94
58	7	86	6		0				100	76	
59	6	100	6		0				100	84	
60	8	100	8		0				100	63	
Ave/sess	6.6	71	4.8	98	.1	0		95	99	59	86
Maintenance											
61	7	71	5		1	100	1		86	75	
62	8	100	8	100	1	0	0	100	89	90	83
63	6	83	5		0				100	81	
64	8	88	7		0				100	64	
65	7	86	6		0				100	80	
66	4	100	4		0				100	82	
67	8	100	8		0				100	78	
68	6	83	5	94	0			93	100	95	89
69	6	100	6		0				100	76	
70	8	100	8		0				100	84	
Ave/sess	6.8	91	6.2	97	.2	50	.1	97	98	81	86

P3 - Continued

Session #	# Good instr.	Compl. % N	rel %	# Poor instr.	Compl. % N	rel %	% Good instr.	Appr. %	rel %		
Follow Up											
71	6	100	6	1	0	0	86	92			
75	8	88	7	0			100	78			
82	7	100	7	0			100	93	92		
89	5	80	4	1	100	1	17	80			
96	8	100	8	0			100	88			
103	7	100	7	0			100	100			
Ave/sess	6.8	95	6.5	89	.3	50	.5	98	83	89	92

Numbers of Qualitatively Good (# Good) and Poor (# Poor) Instructions, Compliance with Those Instructions (Comp), Appropriate Behavior (Appr) and Reliability (Rel) Per Session for Participant 4

Session #	# Good instr.	Compl. % N	rel %	# Poor instr.	Compl. % N	rel %	% Good instr.	Appr. %	rel %
Baseline									
1	9	11 1	98	0		89	100	51	77
2	11	9 2		0			100	32	
3	8	13 1		1	100 1		88	63	
4	9	33 3		0			100	18	
5	7	14 1	90	0		100	100	53	94
6	10	10 1		0			100	42	
7	11	18 2		0			100	14	
8	7	14 1	99	3	33 1	80	70	40	99
9	9	22 2		0			100	31	
10	-	-- -		-	-- -		---	--	
Ave/sess	9	16 1.6	96	.4	50 .2	90	95	38	90
Treatment 1									
11	8	25 2	92	0		91	100	30	96
12	9	66 6		0			100	45	
13	6	16 1		0			100	10	
14	11	0 0		1	100 1		91	56	
15	8	75 6		0			100	69	
16	7	14 1		0			100	53	
17	8	25 2		0			100	74	
18	10	40 4	92	0		99	100	61	92
19	6	17 1		0			100	51	
20	8	38 3		0			100	78	
21	7	29 2		0			100	48	
22	10	20 2	94	3	33 1	87	77	81	88
23	8	17 1		1	0 0		89	70	
24	9	33 3		0			100	83	
25	7	29 2		0			100	44	
26	9	11 1	98	0		95	100	80	89
27	9	11 1		0			100	71	
28	10	30 3		0			100	77	
29	7	29 2		0			100	96	
30	7	29 2	81	0		76	100	52	97
31	8	38 3		0			100	69	
32	6	33 2		0			100	76	
Ave/sess	8.1	28 2.3	91	.2	40 .9	90	98	63	92

P4 - Continued

Session #	# Good instr.	Compl. % N	rel %	# Poor instr.	Compl. % N	rel %	% Good instr.	Appr. %	rel %
Treatment 2									
33	7	29 2		0			100	88	
34	9	55 5	99	0		100	100	59	84
35	8	75 6		0			100	94	
36	6	83 5		1	0 0		86	88	
37	8	63 5	90	0		99	100	96	100
38	7	71 5		0			100	72	
39	7	57 4		0			100	91	
40	9	78 7	96	0		100	100	88	81
41	11	82 9		0			100	82	
42	5	100 5		0			100	88	
43	8	88 7		0			100	61	
44	7	100 7	100	0		99	100	100	99
45	10	90 9		0			100	80	
46	6	83 5		1	0 0		86	89	
47	8	100 8		0			100	99	
Ave/sess	7.7	77 5.9	96	.1	0	100	98	85	91
Maintenance									
48	7	100 7	100	0		100	100	92	78
49	9	89 8		0			100	71	
50	6	83 5		2	0 0		75	87	
51	7	100 7	91	0		100	100	100	100
52	8	100 8		0			100	98	
53	9	100 9		0			100	75	
54	7	100 7		0			100	86	
55	7	86 6	100	0		91	100	94	70
56	8	100 8		0			100	89	
57	5	100 5	99	0		99	100	95	100
58	6	100 6		0			100	86	
59	6	100 6		0			100	83	
60	7	71 5	93	0		100	100	56	79
61	4	100 4		0			100	88	
62	9	100 9		0			100	78	
Ave/sess	7	95 6.7	97	.1	0	98	98	85	85
Follow-up									
63	7	100 7	100	0		98	100	40	100
69	9	100 9		1	0 0		90	40	
75	8	100 8		0			100	76	
83	5	100 5	99	0		100	100	82	99
91	8	88 7	88	0		100	100	71	100
98	7	100 7		0			100	96	
105	9	100 9	100	0		100	100	85	91
Ave/sess	7.6	98 7.4	97	.1	0	100	99	70	98

Numbers of Qualitatively Good (# Good) and Poor (# Poor) Instructions, Compliance with Those Instructions (Comp), Appropriate Behavior (Appr) and Reliability (Rel) Per Session for Participant 5

Session #	# Good instr.	Compl. %	N	rel %	# Poor instr.	Compl. %	N	rel %	% Good instr.	Appr. %	rel %
Baseline											
1	14	43	6		6	17	1		70	6	
2	9	18	2		0				100	28	
3	11	27	3		0				100	3	
4	9	33	3		1	0	0		90	12	
5	10	10	1		2	50	1		83	11	
6	11	27	3	93	0			100	100	30	86
7	8	25	2		0				100	24	
8	9	0	0		0				100	2	
9	10	20	2	94	1	100	1	88	91	12	93
10	--	--	-		-	---	-	--	---	--	
11	10	70	7		0				100	41	
12	7	0	0		0				100	9	
13	9	0	0		0				100	13	
14	11	9	0		2	0	0		84	4	
15	9	22	2		0				100	19	
16	10	10	1	92	1	100	1	95	91	10	96
17	8	63	5		0				100	13	
18	11	9	1		0				100	21	
19	10	30	3		0				100	1	
20	5	40	2	81	0			100	100	18	96
21	9	22	2		0				100	33	
22	11	45	5		0				100	11	
23	10	20	2		0				100	5	
24	8	13	1		0				100	15	
25	10	10	1	93	0			100	100	10	95
26	9	11	1		1	0	0		90	18	
27	7	14	1		0				100	21	
Ave/sess	9.4	23	2.1	91	.5	29	.2	97	95	15	93
Treatment 1											
28	8	25	2		0				100	39	
29	10	20	2	87	0			86	100	24	89
30	6	17	1		0				100	57	
31	--	--	-		-	---	-		---	--	
32	--	--	-		-	---	-		---	--	
33	9	11	1		1	100	1		90	5	
34	6	67	4		0				100	27	

P5 - Continued

Session #	# Good instr.	Compl. % N	rel %	# Poor instr.	Compl. % N	rel %	% Good instr.	Appr. %	rel %
35	7	57 4		0			100	21	
36	8	25 2	96	0		100	100	39	95
37	7	14 1		0			100	10	
38	10	30 3		0			100	16	
39	8	50 4		0			100	2	
40	5	20 1	98	0		99	100	16	90
41	7	29 2		1	0 0		88	21	
42	6	67 4		0			100	18	
43	8	25 2		0			100	73	
44	5	40 2	100	0		100	100	13	82
45	7	14 1		0			100	32	
46	8	13 1		0			100	12	
47	7	14 1		0			100	59	
48	9	89 8		0			100	82	
49	6	83 5	89	0		89	100	94	99
50	7	29 2		0			100	18	
51	6	27 1		0			100	41	
52	8	50 4		0			100	9	
53	6	0 0	77	0		100	100	1	79
54	7	71 5		0			100	75	
55	8	0 0		0			100	12	
56	4	50 2		0			100	37	
57	8	13 1	97	0		93	100	11	93
58	6	50 3		0			100	62	
59	7	0 0		0			100	3	
60	5	0 0		0			100	33	
61	7	57 4		0			100	50	
62	6	50 3	99	0		98	100	42	91
Ave/sess	7.0	31 2.3	93	.1	50 .1	96	99	32	90
Treatment 2									
63	7	14 1	87	1	0 0	96	88	28	94
64	6	33 2		0			100	47	
65	9	11 1		0			100	66	
66	7	43 3		0			100	45	
67	7	29 2	93	0		99	100	60	99
68	4	75 3		0			100	74	
69	6	0 0		0			100	32	
70	8	50 4	90	0		100	100	89	91
71	7	57 6		0			100	46	
72	6	50 3		0			100	31	
73	8	75 6	87	0		95	100	56	97
74	8	88 7		0			100	70	
75	7	100 7		0			100	58	
76	9	67 6		0			100	41	

P5 - Continued

Session #	# Good instr.	Compl. %	rel %	# Poor instr.	Compl. %	rel %	% Good instr.	Appr. %	rel %
77	5	100	5	93	0		100	75	82
78	7	86	6		0		100	24	
79	7	71	5		0		100	90	
Ave/sess	6.9	56	3.9	90	.1	0	98	55	93
Maintenance									
80	8	75	6	92	0		100	49	74
81	6	83	5		0		100	56	
82	7	43	3		0		100	12	
83	7	71	5	85	0		100	41	86
84	-	--	-		-	---	---	---	---
85	6	100	6		2	50	75	94	
86	9	44	4		0		100	55	
87	8	88	7	91	0		98	36	91
88	7	86	6		0		100	46	
89	9	56	5		0		100	38	
90	7	86	6	85	0		100	61	88
Ave/sess	7.4	73	5.3	88	.2	50	98	49	85
Follow-up									
91	7	71	5		0		100	37	
92	6	100	6	91	0		99	48	93
Ave/sess	6.5	86	5.5	91	0		99	43	93

Appendix N

**Raw Data on Compliance and Appropriate Behavior
Per Participant for Each of the Probe Sessions**

Compliance and Inter-Observer Agreement Per Generalization Probe

Session for Participant 1

Session #	Percentage of Compliance with		Prober	Percentage of Inter-observer Agreement
	Good Instructions	Poor Instructions		
Baseline				
1	33	17	Aide	
2	17	0	Aide	
Mean	25	7		
Range	17-33	0-17		
Treatment 1				
3	67	17	Aide	
4	67	0	Aide	100
5	33	0	Aide	
6	33	67	Aide	100
7	33	0	Aide	100
Mean	46	17		100
Range	33-67	0-67		
Treatment 2				
8	50	0	Aide	100
9	83	0	Aide	100
10	100	0	Aide	100
11	83	0	Aide	100
12	83	0	Aide	83
13	83	33	Principal	100
Mean	71	6		97
Range	50-100	0-33		83-100
Maintenance				
14	83	0	Principal	100
15	67	0	Teacher 1	83
16	83	0	Teacher 2	100
17	83	0	Teacher 2	100
Mean	79	0		96
Range	67-83			83-100
Follow-Up				
18	83	0	Teacher 1	100
19	100	0	Teacher 2	100

Session #	Percentage of Compliance with		Prober	Percentage of Inter-observer Agreement
	Good Instructions	Poor Instructions		
20	100	0	Aide	
21	100	0	Aide	100
Mean	96	0		100
Range	83-100			

Compliance and Inter-Observer Agreement Per Generalization Probe

Session for Participant 2

Session #	Percentage of Compliance with		Prober	Percentage of Inter-observer Agreement
	Good Instructions	Poor Instructions		
Baseline				
1	33	17	Teacher 1	100
2	0	0	Teacher 1	
3	33	33	Teacher 1	
4	0	0	Teacher 1	
Mean	17	25		
Range	0-33	0-33		
Treatment 1				
5	33	17	Teacher 1	100
6	33	0	Teacher 1	100
7	33	0	Teacher 1	100
8	33	0	Teacher 1	100
Mean	33	25		100
Range		17-25		
Treatment 2				
9	33	0	Teacher 1	100
10	33	0	Teacher 1	100
11	67	0	Teacher 1	83
12	50	0	Teacher 1	100
13	83	0	Teacher 1	100
14	100	0	Teacher 1	
15	83	0	Teacher 1	100
16	83	0	Teacher 2	100
Mean	67	0		85
Range	33-100			83-100
Maintenance				
17	100	0	Teacher 1	
18	100	0	Teacher 3	
19	100	0	Teacher 3	100
20	83	0	Teacher 2	100
21	100	0	Teacher 2	
Mean	97	0		100
Range	83-100			

Session #	Percentage of Compliance with		Prober	Percentage of Inter-observer Agreement
	Good Instructions	Poor Instructions		
Follow-Up				
22	83	0	Teacher 1	100
23	67	0	Teacher 3	83
24	83	0	Teacher 2	
25	67	0	Teacher 2	83
26	33	0	Teacher 4	100
27	0	17	Stranger	100
Mean	56	3		93
Range	0-83	0-17		83-100

Compliance and Inter-Observer Agreement Per Generalization Probe

Session for Participant 3

Session #	Percentage of Compliance with		Prober	Percentage of Inter-observer Agreement
	Good Instructions	Poor Instructions		
Baseline				
1	33	0	Aide	
2	0	0	Aide	83
Mean	17	0		83
Range	0-33			
Treatment 1				
3	33	0	Aide	
4	33	0	Aide	83
5	17	17	Aide	83
6	33	0	Aide	100
7	33	33	Aide	
Mean	30	10		89
Range	17-33	0-33		83-100
Treatment 2				
8	33	0	Teacher	100
9	17	0	Teacher	100
10	83	0	Aide	83
11	67	0	Teacher	100
12	83	0	Teacher	100
13	100	0	Teacher	100
14	100	0	Librarian	100
Mean	69	0		98
Range	17-100			83-100
Maintenance				
15	100	0	Librarian	100
16	83	0	Lunch Staff	100
17	100	33	Teacher	83
18	67	0	Lunch Staff	
19	100	0	Lunch Staff	100
20	100	0	Lunch Staff	
Mean	92	3		
Range	67-100	0-33		83-100

Session #	Percentage of Compliance with		Prober	Percentage of Inter-observer Agreement
	Good Instructions	Poor Instructions		
Follow-Up				
21	100	0	Librarian	83
22	83	0	Lunch Staff	
23	100	0	Stranger	100
24	83	0	Lunch Staff	
25	83	0	Aide	
Mean	92	0		94
Range	83-100			83-100

Compliance and Inter-Observer Agreement Per Generalization Probe

Session for Participant 4

Session #	Percentage of Compliance with		Prober	Percentage of Inter-observer Agreement
	Good Instructions	Poor Instructions		
Baseline				
1	17	33	Teacher 1	100
2	33	0	Teacher 1	100
Mean	25	17		100
Range	17-33	0-100		
Treatment 1				
3	50	0	Teacher 1	100
4	33	0	Teacher 1	100
5	17	0	Teacher 1	100
Mean	33	0		100
Range	17-50			
Treatment 2				
6	33	0	Teacher 1	100
7	50	17	Teacher 1	100
8	83	0	Teacher 1	100
9	83	0	Teacher 1	100
10	100	0	Teacher 1	100
11	100	0	Aide	83
Mean	75	3		97
Range	33-100	0-17		83-100
Maintenance				
12	100	0	Aide	100
13	100	0	Aide	100
14	100	0	Teacher 1	100
15	100	0	Aide	100
16	100	0	Teacher 1	100
17	83	0	Teacher 1	100
18	100	0	Librarian	100
19	83	0	Librarian	100
Mean	96	0		100
Range	83-100			

Session #	Percentage of Compliance with		Prober	Percentage of Inter-observer Agreement
	Good Instructions	Poor Instructions		
Follow-Up				
20	83	0	Teacher 1	
21	100	0	Librarian	100
22	67	0	Aide	
23	100	0	Librarian	100
24	83	0	Lunch Staff	100
25	50	0	Lunch Staff	100
26	100	0	Teacher 1	100
Mean	83	0		100
Range	50-100			

Compliance and Inter-Observer Agreement Per Generalization Probe

Session for Participant 5

Session #	Percentage of Compliance with		Prober	Percentage of Inter-observer Agreement
	Good Instructions	Poor Instructions		
Baseline				
1	33	33	Teacher 1	
2	16	0	Teacher 1	100
3	16	0	Teacher 1	100
Mean	22	11		100
Range	16-33	0-33		
Treatment 1				
4	33	0	Teacher 1	100
5	16	0	Teacher 1	
6	33	0	Teacher 1	100
7	33	0	Teacher 1	100
8	100	0	Teacher 1	100
9	50	0	Teacher 1	100
10	17	0	Teacher 1	100
11	100	0	Teacher 1	100
12	83	0	Teacher 1	83
13	33	0	Aide	100
Mean	50	0		98
Range	16-100			83-100
Treatment 2				
14	0	0	Teacher 1	100
15	50	0	Teacher 1	100
16	33	0	Aide	100
17	67	0	Aide	100
18	33	0	Aide	83
19	33	0	Teacher 1	100
Mean	36	0		97
Range	0-67			83-100
Maintenance				
20	33	0	Aide	100
21	0	0	Aide	100
22	0	0	Teacher 1	100
23	0	0	Teacher 1	100
24	0	0	Aide	

Session #	Percentage of Compliance with		Prober	Percentage of Inter-observer Agreement
	Good Instructions	Poor Instructions		
25	33	0	Teacher 1	83
Mean	11	0		97
Range	0-33			83-100
Follow-Up				
26	33	0	Teacher 1 Aide	100
27	0	0		100
Mean	17	0		100
Range	0-33			

VITA

Hans M. Michielsen

Educational Experience:

- Ph.D. - Program for Analysis of Behavior, Department of Psychology, Utah State University, Logan, UT, 1991.
- Doctoraal examen, Catholic University Nijmegen, Nijmegen, the Netherlands, Special Psychology, 1982.
- Kandidaats examen, Catholic University Nijmegen, Nijmegen, the Netherlands, Education, 1978.
- Propadeuse examen, Catholic University Nijmegen, Nijmegen, the Netherlands, Education, 1976.

Employment Experience:

- Coordinator of Program Review, Inservice Training and Technical Assistance, Educational Service District 105, Yakima, WA, 1990 - current.
- Psychologist-4 (Lead Psychologist), State of Washington, Department of Social and Health Services, Yakima Valley School, Yakima, WA, 1988 - 1990.

Refereed Publications:

- Michielsen, Hans M. (1983) Book review: Functional Speech and Language Training for the Severely Handicapped by Doug Guess, Wayne Sailor and Donald Baer. The Journal of Special Education Technology, 6, 51-53.
- Duker, Pieter C. & Michielsen, Hans M. (1983) Cross-setting generalization of manual signs to verbal instructions with severely retardates. Applied Research in Mental Retardation, 4, 29-40.

Newsletter Articles:

- Michielsen, Hans M. (1985) - Improving your Child's Compliance by Giving Good Instructions. In: The Parent Newsletter of the Developmental Center for Handicapped Persons, Utah State University, Logan, UT, Vol. 8, No. 3.
- Michielsen, Hans M. (1985) - Alternatives to Corporal Punishment. In: The Parent Newsletter of the Developmental Center for Handicapped Persons, Utah State University, Logan, UT, Vol. 8, No. 2.

Teaching Experience:**Instructor:**

Department of Family Life, Yakima Valley Community College, Yakima, WA.

Fall 1990, Spring 1991, Fall 1991

FL. 204 (5 cr.), Introduction to Principles of Applied Behavior Analysis.

Department of Psychology, Chapman College, Orange, CA. Taught at the Travis Air Force Base Campus, Travis, CA.

Fall 1987

Psy. 101 (3 cr.), Introduction to Psychology.

Winter 1987

Psy. 520 (2 cr.), Seminar in Professional and Ethical Issues.

Spring 1988

Psy. 294 (3 cr.), Research Methods for the Behavioral Sciences.

Department of Psychology, Utah State University, Logan, UT.

Fall 1986

Psy. 101 (5 cr.), Introduction to Psychology (extension class on teleconference system), team taught with Karen Coor.

Fall 1985, Spring 1986

Psy. 372 (3 cr.), Behavior Modification.

Spring 1985 - Spring 1986

Psy. 590/591 and 690/691 (1-6 cr.), Independent Study/Independent Research.

Spring 1984

Psy. 110 (5 cr.), Human Development (extension class) Moab, UT.

Department of Special Education, Utah State University, Logan, UT.

Winter 1986 through Summer 1986

Sp. Ed. 646 (3 cr.), Practicum in Programming and Implementing Treatment for the Severely Handicapped/Behaviorally Disordered - split responsibility practicum supervision with Daniel Morgan, Ph.D.

Spring, 1985 - Spring 1987

Sp. Ed. 590/591 and 690/691 (1-6 cr.), Independent Study/Independent Research.

Fall 1985

Sp. Ed. 621 (3 cr.), Assessment of Behavior Disorders, team taught with Daniel Morgan, Ph. D.

Practicum Liaison:

Department of Psychology, Utah State University, Logan, UT.

Fall 1984 through Summer 1986.

Psy. 110 (5 cr.), Human Development

Department of Special Education, Utah State University, Logan, UT.

Summer 1984 through Summer 1986.

Sp. Ed. 215 (3 cr.), Seminar Special Education.

Consultations:

Box Elder County, Utah School District, 1986-1987 school year (19 days).
 Cache County, Utah School District, 1986-1987 school year (14 days).
 Blackfoot, Idaho School District, 1986 (2 days).
 Price Headstart, Wellington, UT, 1986 (1 day).
 Bear River Headstart, Brigham City, UT, 1986 (2 days); Logan, UT, 1986 (2 days).
 Price Headstart, Wellington, UT, 1985 (3 days).
 Developmental Day Schools, UT, 1983-1984 (11 days).
 MAPPS Project, the Developmental Center for Handicapped Persons, Utah State
 University, Logan, UT, 1983-1985 (16 days).
 Blackfoot, Idaho School District, 1982-1983 (13 days).
 Bureau of Indian Affairs, Fort Defiance Agency (Navajo Nation), Arizona, 1982 (5
 days).

Fields of Major Scientific Interest (not prioritized):

Experimental analysis of behavior; behavior modification; developmental disabilities and behavior disorders; effective teaching techniques; language training; behavioral medicine; (mechanical and electronic) adaptive equipment for physically and multiply handicapped persons.

Memberships:

American Psychological Association; affiliate
 Association for Behavior Analysis; member
 Foundation for the Handicapped, Central Region Council; member
 Foundation for the Handicapped, Central Region Council - Standing Committee: Client
 Rights Committee; chairperson

Honors:

Doctoraal diploma, Catholic University Nijmegen, the Netherlands, with judice
 "Universitatis Noviomagensis. . . Ornatissimus Michielsen, Johannes, examen
 doctorale submit et admissus est, ut summos in Facultate Disciplinarum Socialium
honores petat.

Licensing and Certificates:

Standard Certificate - State of Utah, Utah State Board of Education.
 Certificate Type:
 I. School Psychologist (expired: June 1, 1990)

2. Special Education (expired: June 1, 1990) with endorsements:
 Severely Handicapped - Intellectually Handicapped
 Severely Handicapped - Emotionally Handicapped
 Severely Handicapped - Learning Disabled

Licensing as a Psycho-Educational Evaluator in the Netherlands (issued: 1982).

Editorial Experience:

Consulting Editor, Journal of Special Education Technology, Publication of Utah State University and the Association for Special Education Technology, 1983-1988.

Presentations and Workshops:

- Striefel, Sebastian; Allred, Joel; Quintero, Maria; Killoran, John; Michielsen, Hans M.; Hyer, LeAnn; Sevy, Biran; Schultz, Jane; Campbell, Brian; Nelke, Connie; and Korones, Robin (1987) – Obstacles and problems with mainstreaming school-age students. Presentation in a five-day workshop: A model for mainstreaming children who have handicaps in regular education settings, Logan, UT, Utah State University, June 10.
- Striefel, Sebastian; Allred, Joel; Michielsen, Hans M.; Hyer, LeAnn; Sevy, Brian; and Korones, Robin (1987) – Obstacles and problems with mainstreaming school-age students. Presentation in a five-day workshop: A model for mainstreaming children who have handicaps in regular education settings, Logan, UT, Utah State University, June 10.
- Striefel, Sebastian; Allred, Joel; Michielsen, Hans M.; Hyer, LeAnn; Sevy, Brian; and Korones, Robin (1987) – Systematic methods for breaking down barriers for mainstreaming handicapped students in public schools. Presentation in a five-day workshop: A model for mainstreaming children who have handicaps in regular education settings, Logan, UT, Utah State University, June 9.
- Striefel, Sebastian; Allred, Joel; Michielsen, Hans M.; Hyer, LeAnn; Sevy, Brian; and Korones, Robin (1987) – How to interact with regular education teachers involved in mainstreaming handicapped students. Presentation in a five-day workshop: A model for mainstreaming children who have handicaps in regular education settings, Logan, UT, Utah State University, June 9.
- Michielsen, Hans M. and Korones, Robin (1987) – Teacher's role in mainstreaming handicapped students; competencies and needs assessment. Presentation in a five-day workshop: A model for mainstreaming students who have handicaps in regular education settings, Logan, UT, Utah State University, June 8.
- Michielsen, Hans M. (1987) – Antecedent and consequent events in students' compliance with teachers' instructions. Workshop for staff and parents of Foothill Elementary School, Brigham City, UT, June 5.
- Michielsen, Hans M. and Striefel, Sebastian (1987) – Required eye contact contingencies and types of instructions in compliance with developmentally delayed preschoolers. Poster presentation at the Utah Psychological Association, Salt Lake City, UT, April 11.

- Michielsen, Hans M. (1987) – Behavior modification in the classroom. Series of twelve weekly lectures on applied behavior analysis in the classroom for teacher aides at the Developmental Center for Handicapped Persons, January through April.
- Michielsen, Hans M. (1986) – Instructional control and use of aversives and their alternatives in classroom behavior management, Wellington, UT, March 13.
- Michielsen, Hans M. (1986) – Classroom management and instructional control. Workshop for Bear River Headstart personnel, Logan, UT, January 17.
- Michielsen, Hans M. (1985) – Advanced classroom management and curriculum/I.P.P. development. Workshop for Price Headstart teachers, Wellington, UT, September 26.
- Michielsen, Hans M. (1985) – Behavior modification for nurses working with developmentally delayed children. Workshop in a nationally accredited continuing education seminar for nurses at the Westminster College of Nursing, Salt Lake City, UT, August 9.
- Michielsen, Hans M. (1985) – Prerequisite skills for severely and profoundly handicapped students. Preservice workshop for Box Elder County special education personnel at the Developmental Center for Handicapped Persons, Logan, UT, August 1.
- Michielsen, Hans M. and Callaghan, Kathleen M. (1985) – Classroom behavior management. Workshop for Blanding Headstart teachers, Blanding, UT, February 22.
- Michielsen, Hans M. and Callaghan, Kathleen M. (1985) – Classroom behavior management. Workshop for Price Headstart teachers, Price, UT, February 21.
- Michielsen, Hans M. (1985) – Teaching your child to go to the bathroom independently. Workshop for parents of students enrolled in the Education Unit of the Developmental Center for Handicapped Persons, Utah State University, Logan, UT, January 12.
- Stowitschek, Joe; Salzberg, Charles; Lignugaris-Kraft, Ben; Likins, Marilyn; Agran, Marty; and Michielsen, H. (1984) – Social Vocational Skills for Handicapped Sheltered Workshop and Activity Center Employees. Workshop for regional (Utah, Idaho, Wyoming) sheltered workshop administrators and service personnel. Logan, UT, Utah State University, February 15.
- Stowitschek, Joe; Salzbert, Charles; Lignugaris-Kraft, Ben; Likins, Marilyn; Agran, Marty; and Michielsen, H. (1984) – Social Vocational Skills for Handicapped Sheltered Workshop and Activity Center Employees. Workshop for regional (Utah, Idaho, Wyoming) workshop administrators and service personnel. Logan, Utah, Utah State University, January 31.
- Michielsen, Hans M. (1983) – Reducing bias in the measurement of inter- and intra-observer agreement scores; an extension of the Harris and Lahey method. Paper presentation at the first annual conference of the Utah Association of Behavior Analysis, November 5.
- Duker, Pieter C. and Michielsen, Hans M. (1982) – Teaching sign language to severely intellectually handicapped students. Presentation at the annual colloquium day of the Department of Special Psychology, Catholic University Nijmegen, Nijmegen, the Netherlands.

Current Research:

- Michielsen, Hans M. and Osborne, J. Grayson – The generality of behavioral contrast: Negative contrast and the following schedule effect. (Data collection finished - Manuscript in preparation.)
- Michielsen, Hans M. & Striefel, Sebastian – Inhibition and sequential training of manual signs in developmentally delayed students; acquisition, transfer and maintenance. (Data collection finished - Manuscript in preparation.)
- Michielsen, Hans M.; Striefel, Sebastian; and Mott, Stacy – Required eye contact, consequent events and two types of instructions in compliance with developmentally delayed students. (Data collection finished - Manuscript in preparation.)
- Michielsen, Kathleen C.; Morgan, Daniel P.; and Michielsen, Hans M. – Teaching children to comply with their teachers' commands. (Data collection finished -Manuscript in preparation.)

Unpublished Manuscripts and Technical Reports:

- Michielsen, Hans M. (1991) – Using Direct Instruction to Teach Compliance in Severely Noncompliant Students. Unpublished Doctoral Dissertation, Logan, UT, Department of Psychology, Utah State University.
- Michielsen, Hans M. (1990) – Qualified Mental Retardation Professional (QMRP) Training. Yakima, WA, Department of Social and Health Services, Yakima Valley School.
- Michielsen, Hans M. (1988, 1989, 1990) – Psychology Department – New Employee Training Manual. Yakima, WA, Department of Social and Health Services, Yakima Valley School.
- Michielsen, Hans M. (1989, 1990) – Soft Self-Defense Training for Yakima Valley School Employees. Yakima, WA, Department of Social and Health Services, Yakima Valley School.
- Michielsen, Hans M. (1985) – The Use of EEG Biofeedback in the Reduction of Seizure Activity in Developmentally Delayed Students - Procedures. Logan, UT, Developmental Center for Handicapped Persons, Utah State University.
- Michielsen, Hans M. (1985) – Time-out, a Procedures Manual. Logan, UT, Developmental Center for Handicapped Persons.
- Michielsen, Hans M. (1985) – Introduction to the Special Education 215 and Psychology 110 Practica: Primer on Behavior Modification. Logan, UT, Utah State University Printing Service.
- Michielsen, Hans M. and Striefel, Sebastian (1984) – Some Dimensions of Applied Behavior Analysis in Organization Psychology.
- Michielsen, Hans M. (1983) – Reducing Bias in the Measurement of Inter- and Intra-observer Agreement Scores; An extension of the Harris and Lahey Method.
- Michielsen, Hans M. (1983) – A Simple Procedure for House Training an Adult Female Golden Retriever.
- Michielsen, Hans M. (1982) – Nonverbale Communicatie Bij Ernstig Ontwikkelingsgestoorde Kinderen. Unpublished Doctoral thesis, Catholic University Nijmegen, Nijmegen, the Netherlands.