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A BRIEF INDIVIDUALIZED TRAINING SYSTEM TO PROMOTE CHILD
ENGAGEMENT IN INCLUSIVE PRESCHOOL SETTINGS

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Abstract

There is substantial research supporting inclusion of children with autism and individualizing their services. The issue is development of strategies that special education professionals can use to assist Early Childhood Education (ECE) teachers to interact with children with autism in ways that facilitate peer engagement. The purpose of this study was to evaluate the effects of a brief, individualized, training system (BITS) on the interactions of ECE teachers with children with autism. Additionally, the secondary effect of BITS child engagement (cooperative participation and communication with peers) was investigated. This brief and individualized professional development approach is in marked contrast to traditional in-service training which is expensive, difficult to access, and so broad that it could be termed a “shotgun approach.” A nonconcurrent multiple baseline design was used across 3 teacher and 3 child participants. The results suggests that in a relatively brief amount of time (one 90 minute training session and three feedback sessions involving a maximum of 15 minutes per session), it is possible to train ECE teachers to use effective strategies (prompts and praise) to increase the engagement of children with autism with their peers. A relationship was found. Descriptive prompting increased for all three teachers after the training. This increase in prompting appeared to have an effect on child engagement as it also increased across all three children. Finally, all three teachers considered the BITS to be significant, socially appropriate, and useful with the target children.

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CHAPTER I INTRODUCTION

Statement of the Problem

This introductory section provides an overview of the need for in-service training for ECE teachers and a summary of the research that has begun to respond to the need for this training. This section concludes with a statement describing the proposed research and specifically how the proposed research will add to and expand extant knowledge. An extensive review of the literature is provided in Chapter II.

The following questions will organize this introduction and the literature review.

- What do ECE teachers need to know and be able to do in order to successfully include children with disabilities (specifically autism) in their classes?
- What are the problems with traditional in-service training for inclusion?
- What research is there that addresses this in-service training issue?
- What are possible strategies to ameliorate the problems surrounding traditional in-service training?
- How will the data collected in the proposed research add to and expand the extant research?

Inclusion of Children with Disabilities

There is substantial research supporting inclusion at the preschool level (Guralnick, 2001; Guralnick Gottman, & Hammond, 1996; Odom, 2002; Hauser-Cram, Bronson, & Upshur, 1993; Odom, & McEvoy, 1990; Peck, Odom, & Bricker, 1993). Findings have described what ECE teachers need to know in order to successfully include children with disabilities. Most importantly they need to be able to individualize the

supports and services that they provide. They need to be able to maximize engagement and providing scaffolding and support through feedback, prompts, and other forms of assistance (McCormick, 2006).

Successful inclusion of young children with autism may be the greatest challenge for ECE teachers because these children vary widely in their abilities. Most children demonstrate an array of challenging behaviors and significant social and communication delays. Many are obsessed with environmental stimulus and/or stereotypical patterns of behavior such as spinning objects and self stimulation (Noonan, 2006).

Extant In-Service Training Research

This section summarizes the seven issues related to traditional in-service training for inclusion and will briefly review research that has begun to address the seven issues. The problems with traditional in-service training for inclusion are numerous. The most glaring problem is that there is not enough training that specifically addresses inclusion. When training is available, it is often expensive and difficult for teacher to access due to time and distance constraints. It covers broad topics such as overviews of disabilities rather than specific strategies such as how to increase social interactions between children with autism and their peers.

The major problems with traditional in-service training are:

- Lack of compatibility with ECE theory
- Difficulty with access
- Lack of specific training for social and communication interventions.
- Incompatibility with adult learning principles
- Lack of relevancy

- Lack of feasibility
- Difficulty with generalization of skills

Lack of Compatibility with ECE Theory

The first issue with traditional in-service training for inclusion is that training does not provide strategies for facilitating children's social participation and communication that are compatible with Developmentally Appropriate Practice (DAP) on that ECE is based. Most social skill interventions developed for use with young children are behavioral in nature which differs from the developmental-interactionist approach, traditionally aligned with ECE training (Bruder, 1998).

Very few researchers are beginning to use naturalistic teaching strategies to teach ECE teachers and staff that are compatible with DAP practices (the Literature Review describes DAP) For example, Kohler, Anthony, Steighner, and Hoyson (2001) taught two teachers and two classroom aides to use naturalistic teaching approaches (milieu teaching, incidental teaching, the mand-modeling procedure, naturalistic time delay, and activity-based interventions). The teachers were encouraged to use novel materials, join the activity (e.g., the teacher joins the activity and engages in play-related actions and themes with the children), invite children to make choices, use comments and questions, require expansion of children's utterances, and encourage interactions with peers with prompts.

Kohler and Strain (1997) trained teachers to set out materials to match the child's interest and embed instruction into naturally occurring activities. They also were taught how to use peer-mediated interventions (e.g., looking for natural opportunities to

encourage and incorporate imitation, cooperation, and verbal exchanges between the focal child and a peer).

Shepis, Reid, Ownbey, and Clary (2003) trained preschool support staff to increase cooperative participation between children with severe disabilities and their peers. They taught teachers to incorporate the use of novel materials in line with the child's interest, to provide verbal prompts and descriptive praise to suggest cooperative play activities, and then to maintain interactions.

Two studies (Goldstein & Cisar, 1992; Schepis et al., 2001) did not teach ECE teachers or staff to use naturalistic intervention strategies. For example, Goldstein and Cisar used scripts to train preschoolers to verbally or nonverbally carry out a role during thematic-related activity (e.g., carnival); however, training was not embedded within the natural context of the classroom. Training occurred in a separate empty classroom. In addition, the trained theme-based scripts were not activities typically acted out by rest of the participants' preschool class. Schepis and colleagues (2001) taught only prompting and error correction procedures.

Difficulty with Access

Teachers have difficulty accessing training. Many variables affecting access to in-service include: (a) time, (b) distance, and (c) the expense of attending an in-service training. Many teacher training programs are time intensive for teachers and typically held in locations off-site or off campus. This makes it difficult for teachers to apply what they have learned to their particular situation. Time is a precious commodity for early childhood teachers who have full day responsibilities. Additionally, traditional training approaches, such as family child care workshops, are often held outside the providers'

neighborhood or district, and held during weekends or evenings (Bruder, 1998).

According to Bruder, family child care providers do not have the time and energy for training provided in settings located far from their homes or neighborhoods or during evening or weekends. Early childhood providers identified accessibility of training as a major factor and barrier to meeting their training needs (Bruder, 1998).

All of the training in the literature reviewed was provided either in the preschool classroom or somewhere else in the facility. The longest training involved a one week practice period in addition to a significant number (15 to 36) of 30 minute consultation sessions. The shortest training involved a 90-minute training in addition to three technical feedback session ranging from 5 to 15 minutes each. One study did not specify how long the teachers' prompting procedures were trained. Only one study (Shepis et al., 2003) provided brief on-site training with minimal (three) technical feedback sessions. The training was effective in that it increased the target behaviors of the focal children. However, no data were taken on the trained teacher behaviors making it difficult to determine the teachers actually implemented the strategies.

Lack of Specific Training for Social and Communication Interventions

Topics in the area of autism interventions are rarely covered. The majority of preschool teachers report that they have not received any training in the area of autism. Those that did have the training did not consider it adequate (McConkey & Bhlirgri, 2003).

Incompatibility with Adult Learning Principles

Adult learners need direct, concrete experiences in which they apply skills taught. Adults need to receive feedback on how they are doing and the results of their efforts.

Adults learn best when they are allowed to practice and receive structured helpful feedback (Speck, 1996). The majority of the training programs for early childhood educators are in the form of workshops. Workshops are delivered through lectures, seminars, discussions, problem-solving, and may be in conjunction with video-tapes, role plays, vignettes, activities, and case studies. Few in-service training utilizes hands on learning, on-site training, supervision, or consultation and technical assistance.

Research on adult learning indicates that adults learn best when training incorporates the following principles: (a) provide feedback on how the learner is doing and the results of his/her efforts, (b) provide opportunities built into training that allow the learner to practice skills, (c) provide opportunities for the learner to be involved in the process and have input, (d) provide positive feedback to reduce the fear of judgment during learning (Cross, 1981). Five studies were found in the literature that involved training preschool staff (Chapter 2 discusses these studies in more depth). Four of the five studies provided the teachers with feedback on their progress and the results of his/her efforts by incorporating technical feedback sessions after the initial training (Kohler, Anthony, Steighner, & Hoyson, 2001; Kohler & Strain, 1997; Schepis, Reid, Ownbey, & Clary, 2003; Schepis, Reid, Ownbey, & Parsons, 2001).

Two studies provided opportunities for the learner to be involved in the process (Kohler et al., 2001; Kohler & Strain, 1997). Kohler and colleagues (2001) allowed the teacher and aides to choose which social skill was important to target based on their perception of the child's current needs and abilities. Kohler and Strain (1997) incorporated a teacher planning session where teachers discussed how they would implement strategies taught to them. Two of the five studies incorporated positive

feedback into their training procedures. Four of the five studies provided opportunities for the learner to practice skills.

Lack of Relevancy

Professional development that is relevant to ECE teachers day-to-day activities is important. The available trainings for ECE teachers does not address teachers' immediate concerns related to children's social participation and communication. Research suggests that to maximize the likelihood of a training program's success, training should include what the providers want to know and focus on what is happening in their current, real-life situations (Kartub, Ownbey, Parsons, & Reid, 2000).

In order to maximize the likelihood of a training program's success, training should be responsive to their current needs. One way researchers can verify if the intervention is relevant or "socially significant" to the teacher is through social validity measures. These measures evaluate the significance of the goals of the intervention, the social appropriateness of its procedures, and the social importance of its effects (Wolf, 1978). All of the studies reviewed failed to systematically evaluate social validity. Only one study involved the teachers having input as to which target skills they felt were important to address for each focal child (Goldstein & Cisar, 1992). It is unclear whether the recipients of the training found the intervention, treatment goals, procedures, and outcomes socially important and acceptable. It is difficult to determine whether the teachers or staff considered the intervention and/or the training to be acceptable and worthwhile.

Lack of Feasibility

Another issue is that available training does not provide teachers with facilitation or support strategies that are feasible for implementation with their extant resources. There are many variables that influence teachers' perception of feasibility. One important variable is whether or not the teacher feels the intervention can be accomplished. When implementing an intervention in a classroom, the teachers' view of the ease of the intervention implementation is extremely important. Teachers are reluctant to attempt interventions that appear complicated and require a great deal of planning and assistance (Odom, McConnell, & Chandler, 1994). Many interventions described in the research and discussed in traditional trainings are complicated and demanding.

Feasibility of the intervention is extremely important. Without assurance that the strategies can be implemented with simplicity, teachers will be reluctant to attempt the intervention in their classroom. There are several ways a researcher can examine whether the intervention strategies are feasible for teachers to implement. One way would be through an open-ended interview. None of the studies conducted such an interview. One might assess the ease of implementation based on whether the teacher performed the trained strategies as they were intended through a fidelity checklist. Only one study conducted a fidelity checklist (Kohler et al., 2001).

One study did report that the teachers expressed some frustration in learning how to use some of the naturalistic tactics (Kohler et al., 2001). Another study (Kohler & Strain, 1997), noted that teachers felt it was not necessarily the training that they received that facilitated their acclimation to the strategies. Rather they said it was the planning time with the cooperating teacher that had the impact.

Difficulty with Generalization of Skills

Staff training that does not help teachers generalize the new knowledge and skills to their current classroom situation may be wasting resources. Most of the in-service provided to ECE teachers is not taught in the teachers own setting. Thus teachers are not able to embed the strategies into their daily routine.

Generalizability of the skills the teachers are trained to implement can be maximized through on-site training and practice and feedback sessions. Four of the five studies incorporated practice sessions into the teacher training program. All five studies provided the training on-site (Goldstein & Cisar, 1992; Kohler, et al., 2001; Kohler & Strain, 1997; Schepis, et al., 2001; Schepis, et al., 2003)

Four of the five studies incorporated on-site technical assistance sessions where preschool staff received feedback following the application of the strategies (Kohler, et al., 2001; Kohler & Strain, 1997; Schepis, et al., 2003; Schepis, et al., 2001).

Strategies to Ameliorate the Traditional In-service Training Issues

The following are possible strategies to ameliorate the problems surrounding traditional in-service training. A detailed discussion is found in the Literature Review. Strategies must be compatible with theory and best practice, accessible, adequate, relevant, feasible, and generalizable in order to thoroughly address the problems surrounding in-service training for ECE teachers.

Compatible with Theory and Best Practice

It is important to design in-service training that incorporates DAP principles and that are in line with adult learning principles. Providing teachers with strategies that are

in line with ECE theory, providing positive statements, direct, concrete experiences, and utilizing hands on learning are just a few of the strategies that will address the issue.

Accessible

It is important for in-service training to be at a convenient location, on-site, and as brief as possible in order to make training accessible for teachers.

Adequate

Evaluating the adequacy of the training by eliciting perceptions from the recipients of the training could be one strategy that addresses the issue of training being inadequate.

Relevant

Providing teachers opportunities to participate in decision making process is one strategy that would assist in making the training relevant for the teachers.

Feasible

Providing in-service training packages that are clear, concise and easy to implement is an important strategy in making training feasible for teachers to implement.

Generalizable

Providing opportunities for ECE teachers to apply and practice the trained skills in their current classroom with the children they work with is a strategy that will assist the teachers in generalizing the trained skills to their own classroom and to students they work with.

In summary, one of the most pressing problems faced by community preschools is preparation of their teachers for inclusion (Crowley, 1999; De Bord, 1993; Bruder, 1998; Burke, McLaughlin, & Valdivieso, 1988). Young children with autism are among the

most challenging. Teachers need to be able to facilitate cooperative participation and communication between children with autism and their peers. Until recently, neither pre-service nor in-service training for Early Childhood Education (ECE) teachers has addressed this need.

Purpose of the Study

The purpose of this study was to evaluate the effects of a brief, individualized, training system (BITS) on the interactions of ECE teachers with children with autism. Additionally, the secondary effect of child engagement (cooperative participation and communication with peers) was investigated. The research questions were:

- **Can BITS affect ECE teachers' use of prompts and praise for cooperative participation and communication with peers?**
- **Does the teacher behavior (prompts and praise) affect child engagement (cooperative participation and communication with peers)?**

CHAPTER II LITERATURE REVIEW

This literature review is organized into five primary sections. Section I examines the need for ECE teachers to receive adequate in-service training on strategies to include children with autism. Section II presents issues this researcher has identified as prevalent in the traditional in-service training research. Section III gives a brief history of social skill interventions for children with autism, summarizes literature reviews focused on social and communication skills instruction for preschool children with autism, and examines the current literature in the area of in-service training for teachers. Section IV discusses the shortcomings and methodological issues of the extant research and suggests how the proposed research adds to and expands the extant research. Section V presents strategies that could ameliorate the issues that I found prevalent in the literature. The following questions are addressed in this section:

- What do ECE teachers need to know and be able to do in order to successfully include children with disabilities (specifically autism) in their classes?
- What are the problems with traditional in-service training for inclusion?
- What research is there that addresses in-service training problems?
- What are strategies to ameliorate the problems surrounding traditional in-service training?
- How does the data collected from this research add to and expand the extant research?

Rationale for Early Childhood Teacher Training

This section is divided into three parts. The first segment discusses the inclusion of children with disabilities into community preschool programs. The second part discusses the lack of training and support ECE teachers receive in supporting the inclusion of children with disabilities. The third section discusses the importance of facilitating social and communication skills for children with disabilities, especially children with autism.

Inclusion of Children with Disabilities

Increasing numbers of young children with disabilities attend community-based preschools along with typically developing children (Bricker, 1995). During the last few years, the largest ECE and ECSE professional organizations have adopted a position statement supporting the inclusion of young children with developmental delays and disabilities in a variety of natural settings, including family homes, preschools, childcare facilities, and other community settings in which children without disabilities would be found (Division for Early Childhood of the Council for Exceptional Children, 1993). A key point of the position statement was the necessity of providing appropriate individualized supports and services within these natural environments.

Inclusion of preschool-age children with disabilities in classroom settings with typically developing peers is a relatively recent phenomenon. Although discussed since the early 1970s (Allen, Benning, & Drummond, 1972; Bricker & Bricker, 1971), it did not emerge as a major service program for children and families until the 1990s. Today the value of integrated programs is well recognized, and these arrangements are no longer considered novel or innovative; rather, they are perceived as acceptable practice (Peck,

Odom, & Bricker, 1993). Inclusion has now become a mainstay in the field of early childhood special education. By recent counts, over 50% of all preschool children with disabilities who are receiving special education services participate in some form of inclusive setting (U.S. Department of Education, 1998). The "typical" settings for children from birth to 5 years include a wide variety of community-based environments, such as public and private child care centers, private preschools, and family day care settings. Now, in addition to the early childhood special educators, preschool staff, family daycare staff and early childhood teachers are also responsible for the education of young children with disabilities (Harris & Diane, 2004).

Inclusion of Children with Autism

The number of young children being diagnosed with autism spectrum disorders has increased dramatically over the past decades. More and more children with autism are being educated in typical preschools due to evidence indicating positive developmental consequences of inclusive placements (Guralnick, 1993). Educational policy and pressure from advocates and parents have also played a role in the increased numbers of children with autism in inclusive environments. In addition, the majority of parents want their child to attend mainstream education facilities.

Fortunately, one consequence of the increased attention to autism and inclusion has been increased attention to interventions and staff development approaches that are effective and feasible in natural environments. Early childhood staff in inclusive settings must be able to facilitate and support children with autism.

Lack of Teacher Training and Support

Pre-service training has not adequately prepared teachers to work with children with disabilities, including autism. The National Research Council identified personnel preparation as one of the weakest elements of effective programming for children with autism and their families (Lord & McGee, 2001). Preschool personnel typically have no formal experience or training in instructional methods for use with young children with disabilities (Bricker, 1995). Topics in the area of autism interventions are rarely covered in their professional training courses or in-service training. While the number of courses relating to children with special needs has increased in recent years they do not sufficiently to address the specific and multiple needs of children with autism (McConkey & Bhlirgri, 2003).

In a national survey of faculty members who prepare general early childhood educators, lack of adequate training and consultation were listed more frequently than any other barrier to including children with disabilities in regular preschools, and it was the second most frequently listed barrier (after high child-to-staff ratios) by general early educators themselves (Wolery, Huffman, Brookfield, Schroeder, Venn, & Combe, et al., 1994).

In a national survey of preschool teachers employed in programs accredited by the National Association for the Education of Young Children (NAEYC) the majority of preschool teachers in NAEYC accredited programs, were college graduates and had some type of teacher certification or credential. Unfortunately, less than a third had an ECE or ECSE teaching certificate supporting the need for staff development for teachers in these programs (Wolery, Martin, Schroeder, Huffman, Venn, & Holcombe, 1994). Only a

minority of teachers have completed any ECE program. Many ECE teachers lack the knowledge, skills, and experiences necessary for working effectively with young children with disabilities (McDonnell, Brownell, & Wolery, 1997).

The lack of the provision of related services is another issue supporting the need for staff training in the area of autism. Many preschoolers with autism require services from a number of disciplines (e.g., speech-language pathology, physical therapy, occupational therapy, social work) (Lord & McGee, 2001). From national survey data, a couple of issues are clear. First, most preschool programs designed for children with typical development do not employ related service personnel, even on a part-time consultant basis, despite the fact that children with disabilities are enrolled. Second, these programs enroll children with specific disabilities without employing, even on a part-time consultant basis, members of disciplines related to that disability (Wolery, Martin Schroeder, Venn, & Halcombe, 1994). Relatedly, in a national mail survey of preschool teachers employed in programs accredited by the NAEYC, 58% of teachers reported that they currently had a child with a disability in their classroom and only 25% of teachers indicated that a special education teacher worked with them or any of the children in their classroom. Fifty-five percent of the teachers reported that this did not occur, and an additional 20% reported that they were not currently working with a special education teacher but had at some time in the past. If you compare the difference between teachers who at that time had a child with disabilities in their class and the percentage of teachers who reported that they were working with a special educator, it appears that more than half of the teachers who had a child with disabilities in their class were not receiving special education support (McDonnell, Brownell, & Wolery, 1997). The need for

ongoing staff development for preschool teachers becomes even more urgent in light of their limited access to special educators and related service personnel in many early childhood programs.

Importance of Facilitating Social and Communication Skills for Children with Disabilities

Why is it so important to work on social and communication skills? Establishing relationships with one's peers during the preschool years is now recognized as an important process with diverse developmental benefits (Hartup, 1983). Considerable information has been gathered that confirms that poor social skills will likely become more debilitating without active intervention (Roff, 1961; Strain, 1981). The development of appropriate social and communication skills at the preschool level has a major effect on the child's well-being and later development (McGinnis & Goldstein, 1990). Since the 1970s, communicative competence in young children has been recognized as an important feature of child development (Baundonniere, Garcia, Michel, & Liegois, 1989). Possessing social competence is fundamental to leading a normal, healthy life (Kennedy & Shukla, 1995; Pollard, 1998; Scott, Clark, & Brady, 2000). The absence of good social relations early in life appear to set into motion a downward spiral of events that culminate into poor outcomes such as: (a) increased behavior problems that result from not having the appropriate skills for social interaction, (b) increased the likelihood for maladaptive behavior later in life, (c) increased likelihood of unemployment later in life, (d) increased likelihood of dependent living, (e) decreased life expectancy, and (f) severe mental health problems (Strain, 1991; Frea, 1995). Studies have also linked inadequate social skills to job termination of adults with autism,

(Hanley-Maxwell, Rusch, Chadsey-Rusch, & Renzaglia, 1986). These concerns have led to very early and intensive intervention to support the development of social skills (McGrath, Bosch, Sullivan, & Fuqua, 2003).

Children with autism. Autism has life-long effects on how children learn to be social beings, take care of themselves, and participate in their community (Lord & McGee, 2001). Autism causes mild to severe pervasive impairment in thinking, feeling, language, and the ability to relate to others. One of the most noticeable differences in children with autism is the significant communication and social delays they have. Although children with autism vary widely in the manifestation of the symptoms, nearly all of them require intervention to support the development of social and communication skills (Lord & McGee, 2001).

Establishing social interactions between students with autism and their nondisabled peers was a major purpose of the mandate for integrated services (Haring & Lovinger, 1989). Although children with autism seem to benefit academically from inclusion (Harrower & Dunlap, 2001), social integration remains an important issue (Gus, 2000). Studies have indicated that typically developing children prefer to interact and build relationships mainly with other typically developing children and not with children with autism (Beckman, 1983; Guralnick, 1990). This lack of appropriate peer contact may lead children with autism to withdraw socially or to resort to negative acts, that will in turn increase the rejection from their peer group (Frederickson & Turner, 2003). Therefore, it is imperative to establish interventions that target social and communication skills training or the fostering of cooperative participation and friendship skills so that children with autism can benefit socially from inclusion (Oke & Schreibman, 1990).

Social Skills

This section begins with definitions of social skills provided in the research literature and review of dependent variables in selected studies concerned with development of social skills. Finally, the concept of child engagement is defined and discussed for this study.

There is overall agreement that the essence of social behavior is the ability to relate to others in a mutually reinforcing and reciprocal fashion and adapt to the varying demands of interpersonal contexts (Schopler & Mesibov, 1986). Combs and Slaby (1977) define social skills as "the ability to interact with others in a given social context in specific ways that are socially acceptable or valued and at the same time are personally beneficial, mutually beneficial or beneficial primarily to others" (p. 162). Libet and Lewinsohn (1973) define social skills as "the complex ability both to emit behaviors that are positively or negatively reinforced and not to emit behaviors that are punished or extinguished by others" (p. 304). Foster and Ritchey (1979) provide a more functional definition. They define social skills as "those responses, that within a given situation, prove effective, or in other words, maximize the probability of producing, maintaining, or enhancing positive effects for the interactor" (p. 626).

These definitions provide a general notion of what social skills are. However, there are a number of terms (e.g., personally beneficial, complex ability, positive effects) that need to be operationally defined in order for this construct to be conceptually and practically useful. There is considerable research investigating the effects of different interventions on the social skills of young children with autism. A review of 11 single subject design studies that included young children with autism indicates a variety of

dependent variables. Seven studies used the percentage, total number, or length of social interaction/exchanges as the dependent variable (Garfinkle & Schwartz, 2002; Goldstein et al., 1992; Kohler et al., 2001; Kohler & Strain, 1997; McGrath et al., 2003; Odom & Strain, 1986; Strain & Danko, 1995). Definitions of social interaction/exchange varied. Five studies measured spontaneous social initiations/utterances (Haring & Lovinger, 1989; Hancock & Kaiser, 2002; McGrath et al., 2003; Odom & Strain, 1986; Zanolli et al., 1996). Three studies measured early social-communicative skills associated with social reciprocity and communicative functioning (Garfinkle & Schwartz, 2002; Hwang & Hughes, 2000; Kohler & Strain, 1997). In these studies the dependent variables were eye contact, joint attention, and imitation skills. Finally, three studies examined social responses (e.g., percent of initiations, length of social initiation, percent of correct responses, types of play, sharing, and play organization (Haring & Lovinger, 1989; McGrath et al., 2003; Odom & Strain, 1986). Table 1 provides a list of the dependent variables identified in the 11 studies.

Table 1.

Dependent variables from single subject design studies

Peer imitation	Spontaneous initiations
Proximity to peers	Frequency of total utterances
# of interactions	Spontaneous utterances
Level of nonsocial engagement	Mean Length of Utterances (MLU)
Frequency of Social Interactions	Eye contact
# of communicative acts	Joint attention
% of initiations	Motor imitation
Length of social initiation	Social interactions with others
% correct responses	Other active behavior
Imitation	Passive responding
Cooperative interaction	Social initiations
Verbal exchange	Social responses
Length of interaction	Mean length of interaction
Appropriate responses	Sharing
Frequency of initiations	Play Organization
Frequency of responding	Levels of active engagement
Type of play (solitary, cooperative etc.)	Social exchanges
Sharing	Mean length of interaction
Play Organization	

Engagement

McWilliam and Bailey (1992) describe engagement as the amount of time children spend interacting with their social and nonsocial environments in a developmentally and contextually appropriate manner. It is considered by many to be the best indicator of the quality of a preschool environment. McWilliam and Bailey coded three types of engagement (with adults, peers, and/or materials). Children with disabilities have been found to be engaged for less time and at lower levels than children without disabilities (McWilliam & Bailey, 1995). Few studies have examined peer engagement of young children with autism in inclusive settings. For the purpose of the present study peer/child engagement is defined as having two components: (a) cooperative participation, and (b) communication.

Cooperative participation. The definition of cooperative participation for this study was adapted from Schepis, Reid, Ownbey, and Clary (2003). Cooperative participation is defined as the target child and a typically developing peer are engaging in a mutual activity that clearly displays a common purpose with or without a play object. These could include, but are not limited to: building a tower, putting all the fishes in the “sea,” singing a song, completing a puzzle, sharing paints to complete the same painting, holding hands and playing ring around the rosies, looking at the same book together, putting items into the play refrigerator, dressing up in the home center to play house, playing musical instruments in the music center together, playing the computer together by completing a game and taking turns using the mouse, pointing out interesting things in the science center together.

Communication. The definition of communication for this study was adapted from Wolfberg (2003). She described communication as the target child making a verbal or nonverbal communicative act while engaged in a mutual activity with a peer with or without a play object. Examples of verbal communication include the following:

- Verbally requesting an object from a peer
- Verbally requesting to engage in a desired activity
- Verbally requesting for peer's assistance, interaction, or affection
- Making a declaration or comment to peer
- Protesting
- Asking a question to the peer
- Answering a question posed by the peer
- Nonverbal communication involves communicating without words and clearly directed to a peer through one of the following means:
 - Gestures (e.g., conventional movements such as pointing, waving, nodding, shrugging shoulders)
 - Showing affection by patting peer, holding hands, hugging another child.
 - Physical proximity (e.g., positioning oneself close to peer or desired object)
 - Facial Expression (e.g., smiles, frowns, wrinkles forehead, pouts, shows surprise)
 - Showing-giving-taking object (e.g., holding up object facing peer, handing object to peer, taking object from peer)
 - Enactment (e.g., looks at peer to recreate chase)
 - Simple speech-sign-written words (e.g., one or two words/short phrases spoken, signed or expressed through augmentative communication system)

Issues with Traditional In-service Training

This section discusses the numerous problems with traditional in-service training for inclusion. The major problems with traditional in-service training are:

- Lack of compatibility with ECE theory
- Difficulty with access
- Lack of specific training for social and communication interventions
- Incompatibility with adult learning principles
- Lack of relevancy
- Lack of feasibility
- Difficulty with generalization of skills

Lack of Compatibility with ECE Theory

The lag in acceptance and use of social skill interventions has been historically linked to philosophical differences between two distinct fields of training: Early Childhood Education (ECE) and Early Childhood Special Education (ECSE) (Cavallaro, Haney, & Cabello, 1993). Philosophic differences clearly exist between general and early childhood special educators (Carta, Atwater, Schwartz, & McConnell, 1993; Johnson & Johnson, 1992; Wolery & Bredekamp, 1994). When staff development is conducted with the purpose of enhancing social and communication skills of young children with disabilities in community, early childhood inclusive programs, this difference in approaches becomes an immediate concern (Wolery & Werts, 1994).

Most social skill interventions developed for use with young children are behavioral in nature that differs from the developmental-interactionist approach, traditionally aligned with ECE training. The difference in philosophies may have an

impact on the teachers' acceptability of the intervention they are trained in using (Bredekamp, 1993; Guralnick, 1993).

Possibly the most diverse theoretical orientations are the developmental-interactionist approach, traditionally aligned with ECE training, and the behaviorist approach, associated with special education training. The developmental-interactionist approach emphasizes the use of Developmentally Appropriate Practice (DAP) as the acceptable method for teaching in all developmental areas (Bredekamp & Copple, 1997; Neuman, Copple, & Bredekamp, 2000). DAP, a child-centered curriculum, incorporates choice making and exploratory play, rather than a teacher directed structured curriculum. DAP emphasizes the importance of the social context in every child's learning process. It places a strong emphasis on the importance of environmental arrangements and procedures to facilitate and support social-communicative exchanges among children with and without disabilities. It stresses the need for teachers to provide children with a rich variety of experiences, projects, materials, problems, and ideas to explore and investigate while ensuring that these are worthy of children's attention. DAP also emphasizes the importance of providing children with opportunities to make meaningful choices and time to explore, through active involvement. Children should be offered the choice to participate in a small-group or a solitary activity. Children who are not yet able to use and enjoy child-choice activity periods are assisted and guided. Children should be provided cues and other forms of "scaffolding" that enable them to succeed in a task that is just beyond their ability to complete alone. DAP also emphasizes the importance of teachers posing problems, asking questions, and making comments and suggestions that stimulate children's thinking to extend their learning (Bredekamp & Copple, 1997).

Lovaas (1977) pioneered the use of behaviorist methods for children with autism more than 30 years ago. His methods involved time-intensive, highly structured, repetitive sequences in which a child was given a command and rewarded each time he responded correctly. For example, in teaching a young boy to sit still, a therapist might place him in front of a chair and tell him to sit. If the child did not respond, the therapist would nudge him into the chair. Once seated, he would immediately be rewarded in some way. A reward might be a bit of chocolate, a sip of juice, a hug, or applause—whatever the child enjoyed. The process would be repeated several times over a period of up to two hours. Eventually the child would begin to respond without being nudged and would eventually sit for longer periods of time.

Since the Lovaas era, researchers have found that children did not generalize skills when taught with this unnatural method. Over the years, researchers have modified the behaviorist approach and a contemporary behavioral approach has emerged.

Contemporary behavioral approaches include natural language paradigms, (Koegel, Camarata, Koegel, & Smith, 1997), incidental teaching (Hart, 1985; McGee, et al., 1992), time delay and milieu intervention (Charlop, Schreibman, & Thibodeau, 1985; Charlop & Trasowech, 1991; Hwang & Hughes, 2000; Kaiser, 1993; Kaiser, Yoder, & Keetz, 1992), and pivotal response training (Koegel, 1995; Koegel et al., 1998). These approaches incorporate the child's interest and provide systematic teaching approaches. Each intervention had several common features: (a) they were initiated by the child and focused on the child's interest, (b) they were interspersed and embedded in natural environments, and (c) they used natural reinforcers that followed what the child was trying to communicate.

Another contemporary behavioral approach is peer-mediated interventions. The recent trend toward inclusion in general education has resulted in an increasing number of children with autism and other pervasive developmental disorders who are being educated in the same classroom settings as their typically developing peers. As a consequence, considerable attention has been dedicated to promoting effective intervention techniques to enhance social and communication skills among children with autism. Several studies revealed that involving peers in social skills interventions provides children with autism the opportunity to observe, imitate, and learn from the social behaviors of their typically developing peers (Kamps et al., 2002). Recently there has been a shift in adult directed teaching to involving peers in the interventions. Many current approaches, such as incidental teaching and various peer-mediated strategies are built upon careful prompting and shaping of child behaviors encouraging peer initiated interactions within natural environments. Strain, McGee, and Kohler (2001) emphasized that peer mediated interventions can be implemented in the inclusive setting. Strain et al. (2001) gives several examples of how peers can be used as the intervention. Peers can be coached to maintain peer proximity with a hesitant playmate. They may prompt the next word or phrase needed to maintain a dramatic play theme. They may remind one another that everyone has to play. They may model specific behaviors that their classmates may be asked to imitate, and they may expand on or praise what a peer has done or said.

Difficulty with Access

Early childhood providers identified accessibility of training as a barrier to meeting their training needs (Bruder, 1998). Many variables affect access to in-service for teachers such as (a) time, (b) distance, and (c) the expense of attending an in-service

training. Many teacher training programs are time intensive for teachers and typically held off-site making it difficult for teachers to apply what they have learned to their particular situation. Time is a precious commodity for early childhood teachers who have full day responsibilities. Additionally, traditional training approaches, such as family child care workshops, are often held outside the providers' neighborhood or district, and held during weekends or evenings (Bruder, 1998). According to Bruder, family child care providers do not have the time and energy for traditional training provided in settings located far from their homes or neighborhoods or during evening or weekends.

Lack of Specific Training for Social and Communication Interventions

A sizeable literature now exists that documents that ECE teachers report that the training and support they receive on providing services to children with disabilities is minimal and ineffective. A substantial literature also documents that training opportunities for preschool staff are very limited. A recent review of relevant early intervention literature suggests that even when preschool staff receive pre-service or in-service training in areas such as teaching skills to young children, the training is often ineffective in significantly improving the staff's actual performance (Crow & Snyder, 1998). McConkey and Bhlirgri (2003) verified this finding noting the majority of the preschool staff surveyed felt they had inadequate or no training to meet the needs of children with autism.

The field is now beginning to gather information on preschool personnel who are already including children with autism such as (a) their experience working with children with autism, (b) supports that are available to them, and (c) what training they require. In a recent survey of preschool staff who were providing services to children with autism,

38% of the staff reported they had not received any training in the area of autism and 46% felt the training they did receive was inadequate. The majority of preschool teachers reported that they would like training in techniques and strategies for assisting children with autism in their particular settings and more background knowledge/understanding of autism. Nearly all were committed to enrolling children with autism in the future, but they felt a lack of staffing could preclude this (McConkey & Bhlirgri, 2003).

Although teachers generally have positive attitudes about including children with disabilities in their classes, concerns also exist. When asked, early childhood teachers say that children with disabilities should be served in inclusive settings (Eiserman et al., 1995), and they are confident about providing childcare (Dinnebeil, McInerney, Fox, & Juchartz-Pendry, 1998). However, teachers are also concerned with their lack of knowledge about children with disabilities (Dinnebeil et al., 1998) and are particularly concerned about enrolling children with severe disabilities (Odom, 2000).

A review of the literature indicates that the majority of the training programs for early childhood educators employed workshops as a method of delivering training. Workshops were delivered in the form of lectures, seminars, discussions, problem-solving, and were in conjunction with video-tapes, role plays, vignettes, activities, and case studies. Few studies utilized hands on learning, clinical experiences, home-visits, and on-site training, supervision, bi-monthly newsletters, and resource lending libraries. Even fewer methods of training delivery included consultation and technical assistance (Bruder, 1998; Crowley, 1999; Deiner & Whitehead, 1988; Giovinazzo & Cook, 1995; Jones & Meisels, 1987; Kontos, 1988; Krajicek, Robonson, & Moore, 1989).

The content for these trainings was also quite extensive. All of the programs reviewed included topics such as family partnerships, child development, teaching strategies and interventions, and an overview of children with disabilities. Other programs incorporated topics from fields other than special education, such as psychology, social work, medicine, and dentistry (Bruder, 1998; Crowley, 1999; Deiner & Whitehead, 1988; Giovinazzo & Cook, 1995; Jones & Meisels, 1987; Kontos, 1988; Krajicek, Robonson, & Moore, 1989). The majority of the staff trainings failed to address the current issues faced by teachers daily in their classrooms and with the target child of concern. Teachers' attitudes toward the success of the interventions was related to the amount and quality of the information the teacher had about the target child (Johnson & Cartwright, 1979; Wechsler, Suarez, & McFadden, 1975). In-service training failed to incorporate an effective means of training staff how to teach children within the ongoing preschool routine (Kartub, Ownbey, Parsons, & Reid, 2000).

Incompatibility with Adult Learning Principles

Traditional training approaches also are not necessarily aligned with adult learning principles (Knowles, 1989). Teachers learn according to the same principles as their students. Multiple exposures, opportunities to practice, and active involvement in learning are all important aspects of learning for teachers and other professionals. The research on adult learning emphasizes that the following points be considered when designing professional development activities: (a) Adults will commit to learning when the goals and objectives are considered realistic and important to them. Application in the 'real world' is important and relevant to the adult learner's personal and professional needs; (b) Adults want to be the origin of their own learning and will resist learning

activities they believe are an attack on their competence. Thus, professional development needs to give participants some control over the what, who, how, why, when, and where of their learning; (c) Adult learning has ego involved. Professional development must be structured to provide support from peers and to reduce the fear of judgment during learning; (d) Adults need to receive feedback on how they are doing and the results of their efforts. Opportunities must be built into professional development activities that allow the learner to practice the learning and receive structured, helpful feedback; (e) Adults need to participate in small-group activities during the learning to move them beyond understanding to application, analysis, synthesis, and evaluation. Small-group activities provide an opportunity to share, reflect, and generalize their learning experiences; (f) Adult learners come to learning with a wide range of previous experiences, knowledge, self-direction, interests, and competencies. This diversity must be accommodated in the professional development planning; (g) The ability to transfer learning for adults is not automatic and must be facilitated. Coaching and other kinds of follow-up support are needed to help adult learners transfer learning into daily practice so that it is sustained (Speck, 1996).

Lack of Relevancy

ECE teachers need to see that the professional development learning and their day-to-day activities are related and relevant. The available training for ECE teachers does not address teachers' immediate concerns related to children's social participation and communication. They need direct, concrete experiences in which they can apply the learning in real work. Research suggests that to maximize the likelihood of a training program's success, training should include what the providers want to know; focus on

what is happening in their current, real-life situations (Kartub, Ownbey, Parsons, & Reid, 2000).

The teachers' perspectives continues to be absent in the majority of research on training preschool staff to implement social skill interventions. According to Winton (1990), the problem with traditional training approaches has to do with the fact that all training decisions are made by the trainer/instructor (Knowles, 1989). Such training often falls short of meeting learners' most pressing real-life needs and relating to their life experiences. According to Knowles (1989), individuals will learn to apply new knowledge and skills that are best related to their immediate learning needs and life experiences. Winton (1990) further stated that training efforts "are more likely to be accepted positively by staff who view training as responsive to their own needs" (p. 54).

Lack of Feasibility

Another issue is that available training does not provide teachers with facilitation or support strategies that are feasible for implementation with their extant resources. There are many variables that influence teachers' perception of feasibility. One important variable is whether or not the teacher feels the intervention can be accomplished. When implementing an intervention into a classroom, the teachers' view of the ease of the intervention implementation is extremely important. Teachers are reluctant to attempt intervention that seem complicated and require a great deal of planning and assistance (Odom, McConnell, & Chandler, 1994). Many interventions described in the research are complicated and demanding.

Difficulty with Generalization of Skills

Staff training that does not address and emphasize generalization of skills learned to the teacher's current classroom situation is another major issue associated with ineffective staff development. Most of the in-service provided to ECE teachers are not taught in the teachers' own setting that affects the teachers' ability to implement strategies within the daily routine and with the focal children the teachers are most concerned about.

Extant In-service Training Research

A number of studies have begun to address the problems that I have identified as prevalent in the traditional training research. This section is divided into three parts. The first part briefly discusses the history of social skill intervention for children with autism. The second part reviews studies focused on social and communication skills instruction for preschool children with autism. The third part reviews the current research that has begun to address in-service training issues.

Social Skill Interventions for Children with Autism

Chapter I presented the rationale for facilitating social and communication skills for young children with disabilities (including autism). This section presents research concerned with interventions to teach social and communication skills. A variety of social interventions have been designed, empirically examined, and published in the autism literature. The majority of the published interventions use behavioral methodology. This methodology involves carefully defining of the target behaviors, the antecedents and consequences of the behavior. It also involved the use of task analyses. It

involves the measurement of the acquisition of the behavior, maintenance of the behavior under more natural reinforcement conditions, and the generalization of those skills.

While earlier efforts in the field involved adult directed teaching, with demonstrated effectiveness, most of the interventions were implemented in special education or clinical settings with elementary age children. Few studies focused on preschool children. The majority of the studies reviewed included special education teachers, the researchers, related service providers, psychologists, and/or classroom support staff. Few involved ECE teachers. More and more researchers are now paying careful attention to the ecology of children's social interactions in natural settings, with a concurrent shift to a greater focus on social interactions with peers (Rogers, 2000). The field is also beginning to train preschool staff in interventions that facilitate social interactions between young children with autism and their peers.

There are basically two types of studies – those where the researcher deals directly with the target child and those where the researcher trains another adult to work with the child. The former we will refer to as primary intervention studies and the latter as secondary intervention studies.

Several literature reviews on social and communication skills have been conducted, however, only one solely examined preschool children with autism that will be discussed later. Rogers (2000) included a small section in her review of the literature on social interventions for children with autism. The author concluded that although there were many successful approaches described in the literature, they were not readily available to educators. The author emphasized a need for interventions designed for the

lay public describing techniques for including children with autism in typical group learning.

Hwang and Hughes (2000) reviewed 16 empirical studies that investigated the effects of social interventions designed to increase early social communicative skills of young children with autism ages 2-12. Positive changes were reported for social and affective behaviors. Limited generalization or maintenance of target behaviors was reported. Only 5 of their 16 studies included preschoolers. The authors concluded that there was a critical need to further investigate the effects of social interactive training programs on early social communicative skills of children with autism who are functioning at early developmental levels. The authors also emphasized a need to assess treatment fidelity which was absent from 14 of the 16 studies.

McConnell (2002) reviewed interventions to facilitate social interaction for young children with autism from ages 3 to 11. The author emphasized that there is a need to assist classroom teachers by developing, evaluating, and disseminating standardized intervention programs. The author noted that “although there is empirical support for various intervention components, the literature still requires practitioners to assume a significant burden in developing logically feasible yet sufficiently powerful package for use in the classroom” (p. 368).

Pollard (1998) reviewed empirical research designed to increase the social interaction skills of preschool children with autism. The author concluded that the majority of the seven studies addressing social skill for preschool children with autism would not be feasible to implement or generalizable. Many of the studies were conducted by a group of researchers with at least one common member of the classroom. The author

noted that the interventions described were intricate methodologies to employ and questioned the utility of such intricacies for practical application in classroom situations. The author emphasized that there is a need for future research that focuses on methods that can be employed easily in the classroom environment.

In-service Training Research

Behavioral research on staff training in developmental disabilities has resulted in an effective technology for training staff in a variety of performance skills, including basic teaching skills (Reid & Parsons, 2000). However, evaluations of the staff training technology have been primarily restricted to segregated settings such as institutions, special education classrooms (Parsons, Reid, & Green, 1996), and group homes (Demchak & Browder, 1990). Few investigations of programs for training staff to teach individuals with disabilities have been conducted in inclusive, community-based settings (Demchak & Browder, 1990). There has been a particular lack of research on training staff how to teach young children with disabilities in inclusive settings (Crow & Snyder, 1998).

The content of programs for training staff to teach in inclusive preschools must be considered in light of recommended best practices in early intervention (Crow & Snyder, 1998). For example, staff must learn to teach within the context of natural routines (Schwartz & Olswang, 1996) and in a manner that minimizes disruptions in ongoing activities (Haney & Cavallaro, 1996). An equally important criterion for staff teaching practices is that teaching strategies must be effective (Chiara, Schuster, Bell, & Wolery, 1995; Haney & Cavallaro, 1996). To date, investigations have directed little attention to

developing effective instructional strategies among support personnel in inclusive settings (Billingsley & Kelley, 1994).

Five studies were found in the literature that met the following criteria (a) the study published between 1990 and 2008 in a refereed journal; (b) the dependent variable was a child social and/or communication skill(s); (c) the dependent variable was also the teacher or preschool staff trained behavior(s); (d) the ECE teacher or preschool staff were trained to implement a social skill intervention and act as the interventionist; (e) the study was a single subject design; (f) the child participants were between the ages of 3-5; (g) the settings were located in integrated, inclusive, or community preschools; and (h) at least one of the participants was diagnosed with autism or pervasive developmental disorder (Goldstein & Cisar, 1992; Kohler, Anthony, Steighner, & Hoyson, 2001; Kohler & Strain, 1997; Schepis, Reid, Ownbey, & Parsons, 2001; Schepis, Reed & Clary, 2003)

Three of the five studies involved preschool students with autism and early childhood teachers as interventionists (Goldstein & Cisar, 1992; Kohler, et al., 2001; Kohler & Strain, 1997). The studies involved a combination of the early childhood substitute teachers, teacher's aides, supports staff or early childhood teacher as interventionists.

Schepis and colleagues (2001) evaluated a program for training 4 support staff to embed instruction within the existing activities of 5 children with disabilities in inclusive preschool. Two of the 5 children had a diagnosis of autism and the rest had a severe intellectual disability. The 4 support staff were employed as assistants to support children with disabilities. The program involved classroom-based instruction, role playing, and feedback regarding how to effectively prompt, correct, and reinforce child behavior.

Descriptions of naturally occurring teaching opportunities in which to use the teaching skills was also provided. Following classroom training, brief on-the-job training was provided to each teacher, followed by on-the-job feedback. Results indicated that each teacher increased her use of correct teaching procedures when training was implemented. Improvements in child performance accompanied each application of the staff training program.

Although the results suggested that the embedded teaching-skills training program was an effective means of training support staff to embed teaching within the ongoing routines of an inclusive preschool, three major issues were apparent.

First, although the support staff increased correct teaching, there was no inquiry as to the applicability, acceptability and social validity of the intervention. Secondly, the support staff were aware that their teaching behavior was being observed as part of the investigation. The teachers being aware of the observation being conducted is known as reactivity of assessment that can threaten the external validity of the study. Last, the child behaviors being measured were grouped together as “independent behaviors” or “no response” even though they may have involved engagement, following a routine, correctly responding to curriculum activity or tasks, or peer related interactions. Although this study was not specifically intended to solely address social interaction between children with disabilities and their peers, it was included due to the dependent variable being a social skill. Data collection did not allow for the reader to distinguish whether the correct teaching skills learned through the staff training program impacted the target children’s social skill and how many opportunities for social interaction with peers were observed and recorded. Although the increase in correct teaching behavior is promising,

this particular study does not shed light on whether a staff training program can positively impact social related skills for children with disabilities in inclusive settings.

Schepis and colleagues (2003) evaluated a program for training preschool staff to promote cooperative participation between preschoolers with and without disabilities. The training program consisted of viewing videotaped scenarios of examples of how to prompt and praise cooperative participation during different free-play situations, along with specific instructions and on-the-job feedback. The program was implemented with two support staff persons who worked with two preschoolers with severe disabilities, one with autism, one with cerebral palsy, and one with cognitive, and one with a severe cognitive disability, each in two community preschool classrooms.

Each time a staff training program was implemented, increases occurred in cooperative participation between the children with disabilities with whom a staff person worked and typically developing peers. Concurrent observations of a child whose support staff did not receive training revealed no corresponding increases in cooperative participation. A limitation of the study was that specific measures of staff behavior that were accompanied by increased child activity participation were not conducted, therefore it is unclear as to whether the trained teacher behaviors were being implemented with fidelity and whether it was the trained teacher behaviors that caused the increases in cooperative participation.

Goldstein and Cisar (1992) investigated the effects of teaching sociodramatic scripts on subsequent interaction among three triads, each containing two typical children and one child with autistic characteristics. It was unclear as to whether the teacher was the ECE teacher or ECSE teacher. Research assistants conducted the script training. The

teacher did not observe the script training. At the outset of the study, teachers were familiarized with the scripts. They were told their instructions, monitoring, and feedback procedures needed to be consistent across treatment conditions. First, it was emphasized that they were not permitted to tell the children what to do or to specify a targeted behavior. They were asked to introduce the activity, explain the three roles, and assign children to the roles. The teachers were told they had the option of prompting or praising and could vary their involvement as long as the total number of teacher interventions per session remained the same. Prompts could entail reminding children what behavior had just occurred, whose turn was next, what the theme was, and what their role was. The teachers were asked to maintain a rate of involvement of approximately one prompt or praise statement every 20 seconds (and later every 25 seconds). The teachers were told they would be given reminders if they deviated from any of these guidelines. Results indicated that after learning the scripts, all children demonstrated more frequent theme-related social behavior. These improvements in social communicative interaction were replicated with the training of three sociodramatic scripts (e.g., pet shop, carnival, magic show). These effects were maintained during the training of successive scripts and when the triads were reconstituted to include new but similarly trained partners.

Results indicated that it was not necessarily the prompting that had the positive effect on improvements in the social communicative interactions among the children, but it was attributed to the social script training the children received from the research assistant. Therefore this intervention does not demonstrate that the most effective part of the training (social script training conducted by research assistant without the teacher present) could be implemented by the classroom teacher within the day-to-day routine.

Another issue impacting the external validity of the study was the fact that once the children learned the script and enacted them repeatedly, little novel behavior was demonstrated. Also, the author notes that for several of the children, it was the typical peers' prompts and praise that encouraged the social communicative acts.

Kohler and colleagues (2001) implemented a teacher training package. The independent variable was a training package that involved training 4 teachers in integrated preschool classrooms to use naturalistic teaching tactics designed to stimulate children's play and interactions with others. The purpose of the study was to increase the social interactions of 4 children with autism. The study examined the impact a naturalistic teaching package on children's social interactions during unstructured play periods. The researchers explored the nature of teacher's implementation efforts and success (determined by increases in child social behavior) after a phase of minimal training versus daily technical assistance and support. They also examined maintenance of child and teacher behaviors after termination of technical assistance and support. The participants included 4 preschoolers with autism. The focal children were enrolled in separate classroom within a half-day integrated preschool program. Two head teachers and 2 classroom aides with 6 months to 5 years of experience in integrated programs were trained in the naturalistic strategies. A multiple baseline design was employed to examine 3 different conditions. In baseline, teachers used tactics they received in a 45 minute meeting. They were given a handout of the tactic. After discussing each tactics, a discussion was held on how the tactic might be used to address the needs and capabilities of the individual focal children. During this same meeting, teachers assisted in making decisions on the target skill for each child they would be focusing their teaching efforts

on. The significant limitation of this study was the vague coding of teacher behaviors. The coding of occurrence and nonoccurrence of trained behaviors yielded little information about the nature, frequency, and fidelity of the teachers' implementation efforts.

Kohler and Strain (1997) examined the effects of combining naturalistic teaching and peer-mediated strategies. Two experimental procedures were compared. This study occurred within a half-day integrated preschool and involved 10 children with autism, ranging in age from 3 years 2 months to 5 years 10 months and 6 teachers. It was not clear whether the teachers were ECE teachers or ECSE teachers. Due to the fact that the focus of the instruction was on Individual Education Program (IEP) objectives, it can be assumed that the teachers were ECSE teachers. In the first phase, teachers used naturalistic methods to address the IEP objectives of preschoolers with autism.

In the second phase, teachers continued to employ naturalistic teaching, but added the supplemental components of peer modeling, cooperation, and verbal exchanges. Dyads of teachers were trained before the second phase to combine the naturalistic and peer-mediated strategies by participating in a one week training and practice period. The 2 teachers met for 30 minutes every morning to do the following: (a) make decisions about specific focal children to work with in that day's practice session; (b) discuss individual IEP objectives that could be addressed in accordance with naturalistic teaching practices; and (c) plan strategies for incorporating cooperation or related forms of peer interaction into instructional episodes. The researchers participated in these meetings and provided suggestions, assistance, and related guidance. Teachers practiced conducting their planned episodes during discovery, snack, or centers on that same day. One of the

authors observed this process and provided suggestions and feedback after the session. Following the one week training period, the combined intervention phase began and research staff resumed formal observations of all sessions. However, the two teachers in each classroom continued their planning meetings on a bi-weekly basis and received weekly feedback from the first author on the percentage of instructional episodes that had involved one or more forms of peer interaction (e.g., modeling, cooperation, or verbal exchanges). This phase ranged from 15 to 26 sessions across the three classrooms.

Two dependent variables were used to examine a range of different outcome measures. The first pertained to teachers' instructional episodes for addressing children's IEP objectives, and the second focused on focal children's social interaction with peers.

A range of primary and corollary outcomes were collected to examine the effects of the two teaching procedures. Results indicated that the teachers often conducted instructional episodes in a 1:1 fashion during the naturalistic teaching phase. With training and practice, however, all 6 teachers involved peers in instructional episodes during the combined intervention condition and continued to incorporate peer mediation during the brief maintenance phase. In comparison to naturalistic tactics only, the involvement of typical peers was also associated with a substantial increase in imitation. Although it was reported that the teachers implemented the trained teaching strategies with a high degree of quality, the implementation of the tactics only produced small or modest increases in the focal children's social interactions with peers. The social validity of the intervention was not address in this study. It is unclear whether the recipients of the training found the intervention, treatment goals, procedures, and outcomes socially important and acceptable.

Shortcomings and Methodological Issues

This section discusses the shortcomings and methodological issues of the extant research and emphasizes the need for future research.

Feasibility

The majority of studies addressing social skill for preschool children with autism are not feasible to implement (Kohler, Anthony, Steighner, & Hoyson, 2001; Pollard, 1998). Many preschool staff are being asked to implement interventions that are complex, cumbersome and difficult to implement. There is a need for the field to not only design feasible intervention, but to gather the input and perceptions from the ECE teachers that are implementing the tactics (Kohler, et al., 2001; Schepis, Reid, Ownbey, & Parsons, 2001) There is also a need for researchers to more closely examine how teachers learn to incorporate tactics into practice (Kohler, et. al, 2001) There is a need for better descriptions of the interventions designed for the lay public that describes techniques for including children with autism in inclusive settings (Rogers, 2000). Future in-service training packages need to assist classroom teachers by developing, evaluating, and disseminating standardized intervention programs. The field is in need for feasible, yet sufficiently powerful package for practical use in the classroom (McConnell, 2002; Pollard, 1998).

Social Validity

Social validity is an important component that is missing in the majority of the research (Kohler, et al., 2001; Kohler and Strain, 1997; Schepis, et al., 2001). It is uncertain as to whether the recipients of the training found the intervention, treatment

goals, procedures, and outcomes socially important and acceptable. Future research should examine the social validity or acceptability of the intervention being employed.

Focus on Preschool-Age Children

A review of the literature reveals that there is limited research focusing on social skill interventions for young children in inclusive settings with autism. There is a critical need to further investigate the effects of social skill interventions of children with autism who are functioning at early developmental levels Hwang and Hughes (2000).

Fidelity of Treatment

Although one study (Kohler, et al., 2001) incorporated a fidelity check on the preschool staffs' trained behaviors, it did not measure the nature and frequency of the teachers' efforts to implement the strategies. There is a need for research that examines the teacher's ability to implement the procedures they are trained to use.

Teachers as Interventionists

A review of the literature indicates that ECE teachers are now being expected to work with children with autism in inclusive settings. ECE teachers lack training and support to adequately work with these children. Many studies have low numbers of ECE teachers involved in the interventions that leaves the issue of how practical the interventions are to implement unanswered. There is a need for more research that involves ECE teachers (Pollard, 1998).

Internal Validity

Three of the five studies reviewed could not demonstrate unambiguously that the trained teacher tactics accounted for the behavior changes. Schepis and colleagues (2001)

used broad child behavior measures (independent/no response) making it impossible to determine if the intervention had any impact on social interactions.

Schepis and colleagues (2003) failed to measure specific staff behavior making it difficult to draw conclusions that it was the teacher behaviors that were accompanied by increased cooperative participation.

Goldstein and Cisar (1992) failed to demonstrate that it was the teacher's trained behaviors that accounted for the increases in social behaviors of the target children. The social script training conducted by the research assistant without the teacher present was an extraneous factor that obscured the findings. There is a need for well designed studies that demonstrate a relationship between the trained teacher behaviors and increased social and communication skills for children with autism.

In summary, there is a need for social skill interventions for preschoolers with autism, in inclusive settings, that are practical and feasible to implement by ECE teachers. In addition, studies are needed that are well designed and can clearly demonstrate a relationship between trained teacher behaviors and student outcomes. The field is in need of studies that ensure that the trained teacher behaviors are implemented with integrity. Finally, future research is needed that demonstrates the social significance of the intervention.

Strategies to Ameliorate the Traditional In-service Training Issues

This section will suggest strategies to ameliorate the problems surrounding traditional in-service training based on the seven issues highlighted in previous sections.

Lack of compatibility with ECE theory

Practitioners designing in-service training for ECE teachers must be aware of both the differences and the similarities between the fields of ECSE and ECE. Interventions that incorporate DAP would enhance the acceptability of the interventions being employed. The following strategies should be incorporated into social skill interventions: (a) embedding intervention within the natural routine, (b) maximizing children's opportunities to make choices, (c) emphasizing and valuing children's interests, (d) emphasizing play and enjoyment, and (e) incorporating the family (Brendekamp & Copple, 1997).

Difficulty with Access

There are two strategies that may address the difficulty ECE teachers have with accessing training. One way to maximize access to training is by planning trainings that are convenient in terms of location and time. This may be addressed through on-site training and technical feedback sessions. This can reduce the amount of time teachers spend in formal workshops away from their students. Additionally, providing a brief, on-site training program would be more convenient for teachers because they may not have to purchase substitutes for an entire day or week.

Inadequacy of Training

It is extremely important to evaluate the perceptions of the recipients of the in-service training. It would be beneficial to ask the ECE teachers questions regarding the adequacy of the training, such as: How did you feel about the location of the in-service? What was your impression of the strategies you were trained to use? What information provided in the training do you was most valuable? These open-ended questions will

assist practitioners in adjusting the in-service training to address the concerns of the ECE teachers.

Incompatibility with Adult Learning Principles

Adult learning principles should be considered when designing in-service training for ECE teachers. In-service should build upon existing strengths of the teachers. In-service should also make sure to incorporate positive statements related to the implementation of the strategies taught during training sessions. Both of the components mentioned above can be done through feedback sessions. In-service training should also incorporate direct, concrete experiences in which ECE teachers can apply the learning within the context of their classroom. Opportunities must be built into professional development activities that allow the ECE teacher to practice the learning and receive structured, helpful feedback. Finally, utilizing hands on learning, on-site training, supervision, consultation, or technical assistance would be a way to incorporate adult learning principles to the in-service.

Lack of Relevancy

Practitioner designing in-service training for ECE teachers should make sure the training focuses on what is happening in the teacher's current, real-life situations and be responsive to the ECE teacher's current needs. It will be crucial to ensure, before the intervention begins, that the target goals are relevant to the ECE teachers. Involving the ECE teacher in decision making would also assist in this endeavor.

Lack of Feasibility

In-service training packages need to be feasible for teachers to implement. One way to assure the feasibility of the intervention is to conduct fidelity checks on the

trained behaviors. Another way to ensure interventions are feasible is to design intervention packages that are not too complex and cumbersome. Training packages should have practical application within the context of the ECE teachers' daily routine.

Difficult to Generalize

Assisting teachers in applying what they learn to support desired skills is one solution to maximizing generalization of skills learned in training. This can be done through on-site training, feedback and/or debriefing sessions. Teachers can ask specific questions about their particular situation and receive the needed feedback. Additionally, displaying video segments that depict and models situations similar to the teachers' classrooms with several different examples would be helpful. Teachers should be allowed a chance to apply and practice the trained skills in their current classroom with the children they work with.

In summary, the number of children being diagnosed with autism is rising dramatically. In addition, increasing numbers of children with autism are being educated in inclusive preschools. It is well established that preschool personnel typically have no formal experience or training in instructional methods for including young children with autism. ECE teachers need to know how to successfully include children with autism in these classes and be able to individualize the supports they provide.

The in-service trainings available to ECE teachers that address the topic of inclusion are limited. Specifically, there is a lack of training on specific strategies to teach children with autism. Several issues arise with traditional in-service training available to ECE teachers. Training can be expensive and difficult for teacher to access. Strategies presented are typically not compatible with ECE. The format in which teachers are

presented the training is not compatible with adult learning theory. Interventions are not feasible to implement nor do they address the teachers' immediate concerns. Finally, strategies learned at traditional in-service trainings are difficult for teacher to generalize to their own settings.

There is a need for social skill interventions for preschoolers with autism, in inclusive settings, that are practical and feasible to implement by ECE teachers. In addition, well designed studies are needed that clearly demonstrate a relationship between trained teacher behaviors and student outcomes. The field is in need of studies that ensure that the trained teacher behaviors are implemented with integrity. Finally, future research is needed that demonstrates the social significance of the intervention. This research expands upon the current literature addressing the needs outlined above. This research is designed to address each of the seven issues with traditional in-service training.

Purpose of the Study

The purpose of this study was to evaluate the effects of a brief, individualized, training system (BITS) on the interactions of ECE teachers with children with autism. Additionally, the secondary effect of child engagement (cooperative participation and communication with peers) was investigated. BITS was intended to teach ECE teachers to facilitate and support engagement of children with autism in inclusive classrooms. The program does not provide skills for behavior management. The research questions were:

- Can BITS affect ECE teachers' use of prompts and praise for cooperative participation and communication with peers?
- Does the teacher behavior (prompts and praise) affect child engagement (cooperative participation and communication with peers)?

CHAPTER III METHODS

Setting

The settings were located at three community inclusion preschools that used a co-teaching inclusion model. The co-teaching team in each classroom consisted of an Early Childhood (ECE) teacher and a special education preschool teacher as well 2 to 8 support staff. Children with and without disabilities were enrolled in each inclusion classroom. Classroom 1 was a private preschool that had its own campus and served 65 children ranging from 18 months to 5 years of age. Classroom 2 and 3 were located on a Department of Education (DOE) K-6 campus in a large residential community.

Classroom 1 was comprised of 22 children (12 boys and 10 girls). Twenty-one of the children were age four and one child was age 3. Eighteen of the 22 children were enrolled in the regular preschool and 4 of the 22 children qualified for special education services. Although 4 of the children with disabilities attended the preschool during the day, the target child was the only child with a disability enrolled in the after school program where observations were conducted.

Classroom 2 was a classroom of 20 children (8 boys and 12 girls). Twelve of the children were age 4 and 8 children were age 3. Fourteen of the 20 children were enrolled in the Head Start and 6 of the 20 children qualified for special education services and were dually enrolled by Head Start and the Department of Education.

Classroom 3 had fifteen children enrolled in the Head Start and all children qualified for special education services and were dually enrolled by Head Start and the Department of Education. Table 2 shows the demographic characteristics of the children enrolled at Classroom 1, 2, and 3. Teacher 3 was contacted on numerous occasions to

report the gender, ages, ethnicity, and communication mode of the children enrolled in her classroom. She did not respond to the researcher s attempts to gather the demographic information. However, she did report the disability categories for the children enrolled under special education.

Table 2

Child Demographics

	Classroom 1	Classroom 2	Classroom 3
Total Children	22	20	30
Enrollment			
Regular/or Head Start	18 (regular)	14 (Head Start)	15 (Head Start)
SPED	4	6	15
Dual	0	6	15
Gender			
Males	12	8	
Females	10	12	
Age			
3 years	1	8	
4 years	21	12	
5 years	0	0	
Ethnicity			
Caucasian	5	2	
Hawaiian/Part Hawaiian	6	9	
Japanese	0	0	
Mexican	0	0	
Other Pacific Islander	0	0	
Puerto Rican	0	0	
Portuguese	0	0	
Mixed	5	9	
Filipino	1	0	
Samoan	0	0	
Asian	5	0	
Disability			
Speech/Language	0	0	0
Developmental Delay	3	5	10
Hearing Impairment	0	0	0
Behavior Disorder	0	0	0
Visual impairment	0	0	1
Health Impairment	0	0	1
Orthopedic Impairment	0	0	2
Multiple Disabilities	0	0	0
Autism	1	1	2
Communication			
Speech	22	20	
Gestures	0	0	
Cries	0	0	

Teacher Participants

The participants of this study consisted of three Early Childhood Education (ECE) teachers and three preschool children with disabilities. The ECE teachers were selected based on their assignment as the designated ECE teacher to an inclusion preschool classroom and their willingness to participate in the research project. The teachers were selected for the study because they were responsible for providing assistance to the children with disabilities in the three respective classrooms. Each ECE teacher filled out a brief demographics questionnaire (see Appendix A) and participated in an interview.

Teacher 1 had her Child Development Associate credential and had 4 years experience working with preschool children at the current setting and had 1 year experience working as the head early childhood teacher. She had little to no experience working with children with autism. She had no training in autism.

Teacher 2 had her Child Development Associate credential and also took various ECE classes and workshops. She had been working at the current preschool setting for 1 ½ years and had 17 years of experience teaching Early Childhood Education. She had one year experience working with a child with autism in an inclusion setting. The only experience she had in working with children with autism came from collaboration with the Special Education teacher assigned to her classroom.

Teacher 3 had her Child Development Associate credential. She had been working at the current preschool setting for 10 years and had 20 years of experience teaching Early Childhood Education. She has 5 years of experience working with children with autism. She attended approximately 7 full-day (6 hours) DOE workshops

on autism related topics. All three teachers were female. Table 3 summarizes each teacher's education and experience.

Table 3

Teacher Education and Experience

	Degrees	Certificates or other credits	Training related to children with autism	Years at current preschool setting	Years teaching Early Childhood Education	Experience with children with autism
Teacher 1	CDA	None	None	4 years	1 year	Little to none
Teacher 2	CDA	Various ECE classes/workshops	Hands-on training from sped teacher with target child (1 st child with autism)	1 ½ years	17 years	1 year
Teacher 3	CDA	None	7 full-day (6 hr.) DOE workshops on autism related topics	10 years	20 years	5 years

The ECE teachers were given a pre-baseline communication sheet (Appendix B) that was reviewed verbally with each teacher before the study commenced. Each teacher was informed that observations would last 15 minutes during free play time. They were informed that during the 15 minutes observations, observers would be looking at interaction between the teacher, the child, and the child's peers. They were asked to do what they usually would do with the target child and to stay in the general area where the child was during the 15 minute observations. They were also told that there would be at least two observers and sometimes three for observation sessions. The teachers were also asked that the classroom aide, skills trainer, or special education teacher not interact with the child during the 15-minute observation periods. Next, they were informed that the observers nor the researcher would speak with them during the observation periods and would not interact with other children or staff when they were in the classroom. Lastly, they were informed that the researcher would not be able to provide them with any feedback during the first three observation days (baseline).

Child Participants

The target children were selected based on three criteria. First, they either had to have a diagnosis of autism spectrum disorder by a licensed psychiatrist or psychologist based on the criteria listed in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (American Psychiatric Association, 1994) or be qualified under the special education category of Developmental Delay by the Department of Education and have documentation of severe and pervasive impairments in the development of reciprocal social interaction or verbal and nonverbal communication skills and a presence of stereotyped behavior, interests, and activities. Second, the target

children had to be between the ages of three and five years old. Third, they had to be enrolled for at least half of a school day in an inclusion preschool setting.

Macy, David, and Sean's ages ranged from 3 years, 11 months to 4 years, 3 months. Two of the three children had a diagnosis of autism given by a licensed psychologist using criteria from the Diagnostic Statistical Manual of Mental Disorder (American Psychiatric Association, 1994) and the third child had noted signs of possible autism. Scores on the Vineland Adaptive Behavior Scales (Sparrow, Balla, & Cicchetti, 1984) indicated each child's standard scores for communication ranged from 75-100; socialization ranged from 74-80; daily living ranged from 86-90; and motor skills ranged from 64-85. Each child used words and vocalizations as their primary means to communicate. Two of the three were speaking in sentences and one had a limited range of sentence structures in her spontaneous speech and did not consistently speak in full sentences.

Macy was 3 years 11 months at the time of the study and was qualified for special education under the category of developmental delay and had noted delays in reciprocal social interaction, verbal and nonverbal communication skills, as well as noted stereotyped behavior, interests, and activities. At the age of 2 years, 4 months a psychological evaluation noted the following delays in social and communication skills: self absorbed; often a loner; not saying words yet; limited vocalizations; lack of eye contact; does not initiate interaction with peers; does not respond when peers approach; and becomes uncomfortable when peers approach. Stereotyped behaviors, interests, and activities that were noted included: watching her hands for periods of time, looking at people in mirrors, looking at people from the side, smells things, displayed a prolonged

interest in people's toes, hands, and hair. It was also noted that Macy was restrictive in how she played (e.g., stacking blocks a certain way, not liking unfamiliar things and avoiding new toys). The psychologist raised the question of possible autism, but noted she was unable to make any diagnosis with confidence at that point based on lack of knowledge of Macy's first 15 months of development as she was adopted from China. Macy was administered the Wechsler Preschool and Primary Scale of Intelligence, Third Edition when she was 2 years, 11 months and at that time she had a Verbal IQ of 100 and a Performance IQ of 90 placing her in the average range cognitively. At the age of 2 years, 10 months she was administered the Preschool Language Scale: Fourth Edition (PLS-4). She received a standard score of 81 in the area of auditory comprehension and a standard score of 73 in the area of expressive communication, placing her in the borderline range in the area of language. Macy was administered the Vineland Adaptive Behavior Scale (Sparrow, Balla, & Cicchetti, 1984) at the age of 2 years, 11 months. Her standard score in the area of communication was 75; socialization was 76; daily living was 90; and her motor skills were 64. Macy's Individual Education Program noted needs in developing appropriate turn taking and play skills with peers and controlling her self stimulatory behaviors. Macy has received intensive speech therapy since the age of 2 years, 10 months as well as special education and other related services. She attended the full-day preschool as well as the after school program where observations took place.

David was 4 years, 3 months at the time of the study and had a diagnosis of autistic disorder. At the age of 3 years, 10 months he was administered the Peabody Picture Vocabulary Test Form III A and received a standard score of 91. He was also administered the Receptive-Expressive Emergent Language Scale, 2nd Ed. (REEL-2) at

age 2 years, 10 months performed at the 14-20 months level on the expressive portion. In the area of language, David scored at the 20-24 month range on the Hawaii Early Learning Profile (HELP) Checklist. David received speech therapy 60 minutes a week as well as special education, occupational therapy consultation as well as one to one assistance for the majority of the day. David was administered the Vineland Adaptive Behavior Scales (Sparrow, Balla, & Cicchetti, 1984) at the age of 2 years, 10 months. His standard score in the area of communication was 100; socialization was 80; daily living was 80; and his motor skills were 100. His current Individual Education Program notes that David needed more opportunities to interact cooperatively with peers and requires assistance with using his words to initiate interactions with peers and sustain meaningful conversations during play. His plans also noted that at times when David did not get what he wanted or was asked to stop a favorable activity, he would either tantrum or flee out of the classroom or playground boundaries. He typically would seek out adults to communicate with and the IEP noted he needed to seek out peers with whom to find meaningful interactions.

Sean was 4 years, 3 months at the time of the study and had a diagnosis of autistic disorder. Sean was administered the Battelle Developmental Inventory II when he was 3 years, 0 months. His Developmental Quotient total was a standard score of 73 that fell within the borderline range. He was administered the Receptive-Expressive Emergent Language Scale, 2nd Ed. (REEL-2) when he was 3 years, 10 months. He received a standard score of 80 in the area of language ability. His receptive language standard score was 83 and his expressive language standard score was 79. In the area of language, Sean scored at the 30-36 month range on the Hawaii Early Learning Profile (HELP) Checklist.

Sean was administered the Vineland Adaptive Behavior Scales (Sparrow, Balla, & Cicchetti, 1984) at the age of 2 years, 10 months. His standard score in the area of communication was 73; socialization was 74; daily living was 86; and his motor skills were 85. His teacher reported that Sean injures adults and peers in his classroom when he is told he needs to clean up or is asked to stop something he enjoys doing. He has had several incidents where he has bitten his peers and broken skin. Table 4 summarizes the child participant information discussed above.

Table 4

Child participant characteristics

	Macy	David	Sean
Chronological Age	3-11	4-3	4-3
Clinical	Psychological	Not Available	Psychological
<i>Age when administered</i>	2-4		
<i>Scores/Notes</i>	raised the question of possible autism		299.0 Autistic Disorder
Cognitive	Wechsler Preschool and Primary Scale of Intelligence, Third Edition	Not Available	Batelle Developmental Inventory II
<i>Age when administered</i>	2-11		3-0
<i>Scores/Notes</i>	Verbal:100 Performance: 90 Average Range		Developmental Quotient: SS 73 Borderline range
Speech/Language	Preschool Language Scale: Fourth Edition (PLS-4)	Peabody Picture Vocabulary Test Form III A Receptive-Expressive Emergent Language Scale, 2nd Ed. (REEL-2) Hawaii Early Learning Profile (HELP) Checklist	Receptive-Expressive Emergent Language Scale, 2nd Ed. (REEL-2) Hawaii Early Learning Profile (HELP) Checklist
<i>Age when administered</i>	2-10	Peabody: 3-10 REEL2: 2: 2-10 HELP: 2-10	REEL2: 3-10 HELP: 3-10
<i>Scores/Notes</i>	Auditory Comprehension SS 81 Expressive Communication SS 73 Language: Borderline Range	Peabody SS: 91 REEL-2 Expressive Language: 14-20 mo HELP Language: 20-24 mo	REEL-2 Language Ability: SS 80 Receptive Language: SS 83 Expressive Language: SS 79 HELP Language: 30-36 mo
Adaptive Behavior	Vineland Adaptive Behavior Scale	Vineland Adaptive Behavior Scale	Vineland Adaptive Behavior Scale
<i>Age when administered</i>	2-11	2-10	2-10
<i>Scores/Notes</i>	Communication: SS 75 Socialization: SS 76 Daily Living: SS 90 Motor Skills: SS 64	Communication: SS 100 Socialization: SS 80 Daily Living: SS 80 Motor Skills: SS 100	Communication: SS 73 Socialization: SS 74 Daily Living: SS 86 Motor Skills: SS 85

Research Design

A nonconcurrent multiple baseline design across participants (Barlow & Herson, 1988; Kennedy, 2005; & Watson & Workman, 1981) was used to quantify the effects of a teacher training program on teacher behavior and subsequently on the cooperative participation and communication of 3 young children with autism.

Watson and Workman (1981) distinguished between two types of multiple baseline design (across participants): concurrent and nonconcurrent. The concurrent multiple baseline design requires at least two participants' baselines to be evaluated in the same general time period. Concurrent multiple baseline designs across individuals begin with the observations of performance of the same behavior for each participant. When the behavior of all participants is stable, intervention is applied to one participant while baseline conditions and observations continue for the others. When behavior change occurs for the first participant, intervention is implemented for the second participant and so on until all participants receive the intervention. A functional relationship between the dependent and independent variables of each participant is demonstrated when each participant's behavior changes when the intervention is introduced. In summary, in the traditional multiple baselines the provision of intervention is staggered across participants.

The nonconcurrent multiple baseline design (also referred to as a 'natural' multiple baseline design) differs from the concurrent designs in that participants are observed consecutively rather than concurrently. The nonconcurrent multiple baseline design is essentially a series of A–B replications. The participant's graphs are vertically aligned and visually inspected similar to a concurrent multiple baseline design. Thus,

demonstration of experimental control relies on comparisons between the baseline and intervention phases within a participant (Harvey, May, & Kennedy, 2004).

Replication of experimental effects across phases at different points in time rules out many threats to internal validity (Campbell & Stanley, 1966). Maturation, test-retest sensitivity, and instrumentation changes are controlled for because the baseline-to-intervention changes are staggered over time. Any changes that occur in longer baseline phases would signal that other controlling variables produced the change in behavior, or the absence of an effect following intervention would suggest that the intervention did not influence the dependent variables.

The nonconcurrent multiple baseline design across participants was selected because of the difficulty collecting data in three different settings (Harvey, May, & Kennedy, 2004). In preschool, there is a small window of opportunity to observe a child in free play. The morning block typically consists of (a) free play, (b) diapering/toilet-training/hand-washing, (c) music and movement, (d) circle time, (e) art activities, (f) outdoor play/large motor activities. The free play period may be at the same time every morning or rotated with other activities throughout the day. Using a nonconcurrent multiple baseline makes it feasible for two observers to collect data on all 3 children.

A primary limitation of the nonconcurrent multiple baseline design is the inability to identify history effects that might be coincidental with application of an intervention. For example, if a three-tier multiple baseline across participants was established so that one participant participated each month, it is possible that a newly introduced curriculum might influence one tier of the multiple baseline, but not the other tiers. Due to the fact that the interventions were conducted in 3 different classrooms with 3 different teachers,

the threat of history effects was not an issue because baseline was taken before the event occurred or if the event occurred during baseline, the intervention did not begin until the baseline was stable. Additionally, because the tiers were not conducted contemporaneously, any historical event would not be reflected in the 2nd or 3rd tier. Lastly, the threat of observer effects was controlled by the fact that the interventions were carried out in 3 different classrooms with different teachers.

Observation Procedures

Data were collected using a partial interval recording procedure. Fifteen-minute periods were divided into 10-second intervals. Observers began observation at least 5 minutes after free play began. Observers positioned themselves where they could see the target child and the teacher. They used an RCA Cassette Recorder with a double earphone jack and an audio tape that contained voice reminders to signal when to look for the target behaviors and when to record. They used one ear piece each so that they could hear interaction in the classroom. The observers watched each target child and the teacher for 5-seconds and then used the next 5-seconds for scoring. Thus, 90 intervals were scored for each child and teacher dyad on each visit.

Dependent Variables

There were two major observation categories: child behaviors and teacher behaviors. There was one behavior in the child behaviors category which was child engagement. Engagement was divided into two categories: cooperative participation and communication. Child behavior categories and definitions are located in the Observer Training Manual in Appendix C.

There were three teacher behaviors in the teacher behaviors category each with, sub categories. The first was teacher prompt, which could be descriptive or general. The second was teacher praise, which could be non-specific or specific. The last behavior was teacher proximity. Descriptive prompting and specific-praise will be the only teacher behaviors discussed in the result section. General prompting and non-specific praise were important to record in order to monitor whether they were using any prompts or praise at all. They will not be reported because general prompting and non-specific praise were not behaviors taught to the teachers. It was important to record proximity because if the teacher was not near the child, the teacher could not be expected to prompt or praise. However, teacher proximity is not reported in the results section as all three teachers were within proximity to the target child the majority of the time. Teacher behavior categories and definitions are also located in the Observer Training Manual located in Appendix C.

Interobserver Agreement

Before data collection began, each observer was required to review a training manual (see Appendix C) that included behavior definitions, data collection procedures, practice scenarios, and technical questions and answers. The researcher reviewed the contents of the training manual thoroughly with the observers. The observers had the opportunity to watch 15-20 video clips of scenarios and received feedback on their scoring. Following the training each observer watched a teacher and a child with autism in an actual classroom for 15 minutes during free play time. They continued to conduct observations until they both met the inter-rater reliability criterion for training that was set at 85% agreements across all seven behavior categories. The observers were retrained

if reliability dropped below 80%. Observers were naïve to what training was conducted and when the intervention phase began.

Two observers collected interval data simultaneously for 78% of the total number of observation periods across the three different preschools and for all condition phases. The observers rotated based on personal schedules that dictated when observers were available for data collection days.

A point-by-point method for calculating interval percent agreement (agreements divided by agreements plus disagreements multiplied by 100) was used to obtain the mean level of agreement for teacher and child behavior categories. Reliability criterion for data collection was set at 80%. Interrater reliability was consistently high across all behavior categories. Interobserver agreement percentages for cooperative participation averaged 94% (range, 73% to 100%), communication averaged 94% (range, 81% to 100%), descriptive prompting averaged 93% (range, 77% to 100%), and specific praise averaged 97% (range, 98% to 100). Two observers were used as much as possible (78% of all observations). In order to control for observer drift, the observers received continuous training and feedback regarding the accuracy of their observations from the researcher after each observation session. Following each observation session the researcher would either address questions, review behavior definitions, or review practice scenarios. The researcher also periodically assessed interobserver agreement between the two observers (4 % of all observations). Interrater reliability between the researcher and each observer averaged 96% (range, 88% to 100%) for observer 1 and 96% (range, 91% to 100%) for observer 2.

Brief, Individualized, Training System (BITS)

Before the study began, each teacher was given a handout with information that included important pre-baseline communication points. A copy of the Pre-baseline Communication Handout is located in Appendix B. The purpose of the pre-baseline communication was to:

- ensure the ECE teacher is near the child,
- let the ECE teacher know when observers will come in and rules of their behavior,
- set up procedures for communication between the researcher and the ECE teacher,
- inform the ECE teacher that they will be asked to participate in a 90 minute training session and three feedback sessions, and
- answer any questions.

BITS was conducted in three phases. A detailed description of each phase is located in Appendix D. The researcher is referred as the “trainer” in the following section.

Phase 1: Review and Discuss Interventions Strategies

A written handout was given to each teacher that highlighted that autism affects development in the areas of social interaction, communication skills, and behavior. Also listed were risks children with autism face if social and communication skills are not addressed at an early age. Handout 1 is located in Appendix E.

Handout 2 contained the child behavior definitions and examples for cooperative participation and communication. For cooperative participation, an example with and

without a play object was included. Examples were provided for verbal and nonverbal communication acts. Handout 2 is located in Appendix F.

Handout 3 contained three scenarios of common interactions during free-play activities. Handout 3 is located in Appendix G. The common scenarios included the target child: (a) not in an interest center or is in an interest center without a peer, (b) and a peer are in an interest center but are not participating cooperatively in an activity, and (c) and a peer are cooperatively participating in an activity in an interest center. Last, five strategies promoting cooperative participation and communication in each of the three scenarios was discussed. The strategies included how to: (a) use the teacher's general knowledge of types of toys, interest centers, and peers that the child has shown previous interest in, whenever possible, (b) provide verbal/nonverbal prompts to the peers and/or child with autism to suggest cooperative play activities, (c) present descriptive praise to the peer and/or child with autism as they begin to cooperatively participate or communicate in an activity, (d) fade physical presence as the children begin to participate together, and (e) maintain cooperative participation and communication.

Handout 4 contained written definitions of the teacher behaviors being observed which were (a) descriptive prompting, (b) general prompting, (c) specific praise, and (d) non-specific praise. Each behavior had 1-2 written examples of the behavior. Handout 4 is located in Appendix H.

Phase 2: Video Demonstration

Scenarios. Preschool teachers were shown video segments depicting scenarios and strategies to promote peer engagement. The video segments illustrated free-play time in two different preschool settings. Both settings illustrated a preschool child diagnosed

with autism and four typically developing preschool children. The first portion of the videotape illustrated two different examples of each scenario. Two examples were depicted for Scenario A through C. Examples 1 and 2 for Scenario A portrayed Myles and Carter (preschoolers with autism) not in an interest center with a peer or in an interest center without a peer (e.g., Myles was spinning the wheels of his train 4 feet away from his peers who were building a train track). Scenario B illustrated Myles and Carter in an interest center with a peer, but not actively participating in an activity cooperatively (e.g., Carter was pushing a car around the perimeter of the carpet with no eye contact with peers while his peers played cooperatively with a village set). Scenario C illustrated Myles and Carter cooperatively participating in an activity in an interest center with peers (e.g., Myles and peer were sharing sequins from the same jar to build a collage together).

Strategies. The second half of the training video tape consisted of the preschool teacher or trainer demonstrating the strategies outlined on the training handout. The following outlines each strategy and gives one example of how the trainer or teacher in the video illustrated the strategy. Strategy 1: Use your general knowledge of types of toys, interest centers, and peers that the child has shown previous interest in (e.g., Knowing the child with autism loves trains, the teacher suggested that the peers get out a train set with Myles). Strategy 2: Provide verbal/nonverbal prompts to the peers and/or child with autism to suggest cooperative play activities (e.g., The adult handed a stethoscope to a peer and prompted the peer by saying, “Why don’t you place the stethoscope on Carter’s ears and see if Carter can hear your heart beating.”). Strategy 3: Provide descriptive praise to the peer and/or child with autism as the peer and child with autism begin to cooperatively participate in an activity (e.g., When Carter and his peer

begin to cooperatively complete the puzzle together, the trainer told the pair that she liked the way they were completing the puzzle together as a team). Strategy 4: Fade your physical presence as the children begin to participate together (e.g., the trainer left the play center after verbally reinforcing Carter and his peer for working to complete the puzzle together). Strategy 5: Intermittently provide prompts and descriptive praise to maintain cooperative participation (e.g., the trainer returns to the train center after she praised the pair 30 seconds prior. She praised them again on how she was proud that they were playing so nicely together).

While viewing each video segment, the trainer discussed the scenarios and strategies and how they could be applied to increase the target child's engagement. For example, the trainer would pause the DVD at the segment in which Myles was lying on the ground spinning the wheels of his train as his peers were playing with a train set nearby. She would point out that this was an opportunity for staff to prompt the typical peers to ask Myles to join them in building the track by possibly giving Myles the one piece needed by his peers for completion of that structure.

To individualize the training for each teacher, the trainer used notes from baseline observations to highlight examples of when the teacher used descriptive prompting and specific praise. For example, during baseline observations, the trainer noted that Teacher 1 used the following descriptive prompt to elicit a cooperative play act as well as to communicate with the target child's peer: The trainer listed the following scenario on a power point slide and highlighted the descriptive prompts.

A peer came over to the table and said "I want to build." You prompted Macy by saying, "Say Hi, can I build a house with you?" You looked towards the peer and asked, "Do you want to play with Macy? You again prompted the peer to ask the Macy by saying, "Ask Macy."

Each teacher's training contained 5 to 8 situations in which the teacher used descriptive or general prompts during baseline observations and at least one example of the teacher using specific or non-specific praise. Following the presentation of the examples in which the teacher was already using prompting and praising, the trainer displayed situations in which the teacher could have used prompting or praising to encourage cooperative participation or communication between the target child and his/her peer. For descriptive prompting, each teacher was given 6-18 actual scenarios that occurred during baseline observations in which they might have been able to use a descriptive prompt. For example, Teacher 3 was observed during this play scenario:

Teacher 3: "What's in the door?" (To Sean – dinosaur was at the door.)
Teacher 3: "I am going to knock at your door." "Oh no what happened to the door?" "Go through the door Sean." (Tapped Sean's block door with dinosaur.
Teacher 3: "Isaac, hey, we are not banging down Isaac's door."
Sean is holding his dinosaur and makes a growling sound.
Teacher 3: "I got another one Sean." "Are you going to let me in?"
Teacher 3: "Hey John, do you want to play with us, too?"
Peer: No response, but stayed and watched intently.
Teacher 3: "Let me in or I'll huff and I'll puff and I'll blow your house down. (Directed to Sean) One peer is holding a tiger and another watches the interaction between you and Sean.

After each possible opportunity was reviewed, the teacher was asked how they thought they could use descriptive prompting to encourage the target child or his peer to cooperate or communicate with each other in that particular situation.

Following the descriptive prompting scenarios, possible opportunities, and the examples of when the teacher used praising during baseline, the trainer presented 1 to 3 actual observed situations in which the teacher may have been able to use specific praise in order to encourage a cooperative or communicative act to occur or to continue. For example, Macy was observed during the following situation in Classroom 1:

A peer was putting on an apron she brought from home. Macy appeared interested by walking up close to the peer and attempting to help her put on the apron by grabbing the two ties in the back of her and helping her velcro it with your help.

After each possible opportunity was reviewed, the teacher was asked how he or she thought praise could be used to encourage the target child or his peer to cooperate or communicate with each other in that particular situation.

Following the presentation and video segments, the trainer answered questions posed by the teachers and encouraged them to use the strategies modeled and discussed to increase cooperative play and communication between the target child and his/her peers.

Phase 3: Debriefing and Feedback

Teachers received feedback (5 to 15 minutes) following each of the first three free-play sessions. Each feedback session was taped using a dual cassette recorder. The complete transcriptions of the feedback sessions are located in Appendix I. Feedback included the following:

1. A positive statement related to the implementation of the intervention strategies.
What do you think went right?
2. Solicitation of input from teachers regarding their thought processes when implementing strategies. Possible question include: How did you select the activity? How did you decide when to provide praise and prompts? Do you have any ideas for improvement?
3. Suggestions for using the strategy more effectively (if necessary).
4. Response to questions posed by teachers.

Social Validity

Teachers were asked open-ended questions to attempt to evaluate the social validity of the training and intervention (see Appendix J). Interviews were conducted within a week of the last data point. The answers to the questions were used to evaluate the significance of the goals of the intervention, the social appropriateness of its procedures, and the social importance of its effects. The teachers were provided a copy of the questions when the interview took place. Questions were posed by the trainer in a location that was convenient for the teacher.

Intervention Fidelity

The fidelity of the intervention was evaluated using a checklist that contained 29 components of the intervention training package (see Appendix K). Each training session was audio taped. A professional outside the field of teaching listened to each training session and recorded whether or not the components were addressed across each training session. The observer checked “yes” if the trainer has incorporated the components in the training. The percentage of “included components” was computed by dividing the number of components checked “yes” by the total number of components and multiplied by 100. Fidelity was considered satisfactory if at least 26 of the 29 component were included in the training across all three teachers.

Criteria for Beginning Intervention and Discontinuing Data Collection

Teacher prompts were used to determine when to move from baseline to the intervention phase. The total percent of intervals where the teacher had used either a descriptive or general prompt was calculated for each observation by adding the total number of intervals in which the teacher used descriptive and general prompting and

divided this by the total number of intervals within the observation period. After each observation period, the total percentage of intervals that the teacher used prompting was plotted on a graph. The baseline was terminated and the intervention phase commenced when, (a) there were two observations of 0-10% baseline, or (b) data points were flat or decreasing. If the prompting percentage was above 75% for three consecutive days, the trainer reevaluated whether the teacher required intervention. It was pre-determined that data collection would be discontinued following three data points (approximately 1-2 weeks) after the last technical feedback sessions. If the brief training was to have an effect on teacher behavior it was expected to occur within this time frame.

Human Subjects Clearance

The University of Hawai`i, Institutional Review Board provided approval for the study. The school district and the school principals granted permission for the research. Parents/care-providers gave informed consent for the target students and each teacher gave informed consent to participate. The consent forms are located in Appendix L.

CHAPTER IV RESULTS

Data for the three teachers and the children are presented separately. These descriptions are followed by a graph showing how the variables related to one another. Recall that the intervention had three phases. In Phase 1, the teacher was given the rationale for increasing engagement. Three play scenarios were reviewed and five strategies promoting engagement were discussed. In Phase 2, the teacher viewed video depicting each scenario and strategy discussed in Phase 1. The trainer used notes from baseline observations to highlight examples of when the teacher used descriptive prompting and specific praise. Phase 3 provided a feedback session after each of three days observation. Each feedback session lasted 5-15 min and included the following components: a positive statement related to strategy implementation, ways to use the strategy more effectively, address questions from the teachers, and an expression of gratitude for the teacher's support in promoting child engagement. The intervention package (Phases 1, 2, and 3) is referred to as a brief, individualized, training system (BITS). Phases 1, 2, and 3 were followed by a post-intervention condition. The results from the social validity interviews are presented next followed by the fidelity of training results.

Teacher Behaviors

Figure 1 presents the percentage of intervals when teachers provided descriptive prompting and specific praise during each of the three conditions (baseline, feedback, and post-intervention). The next section addresses each teacher's behavior separately.

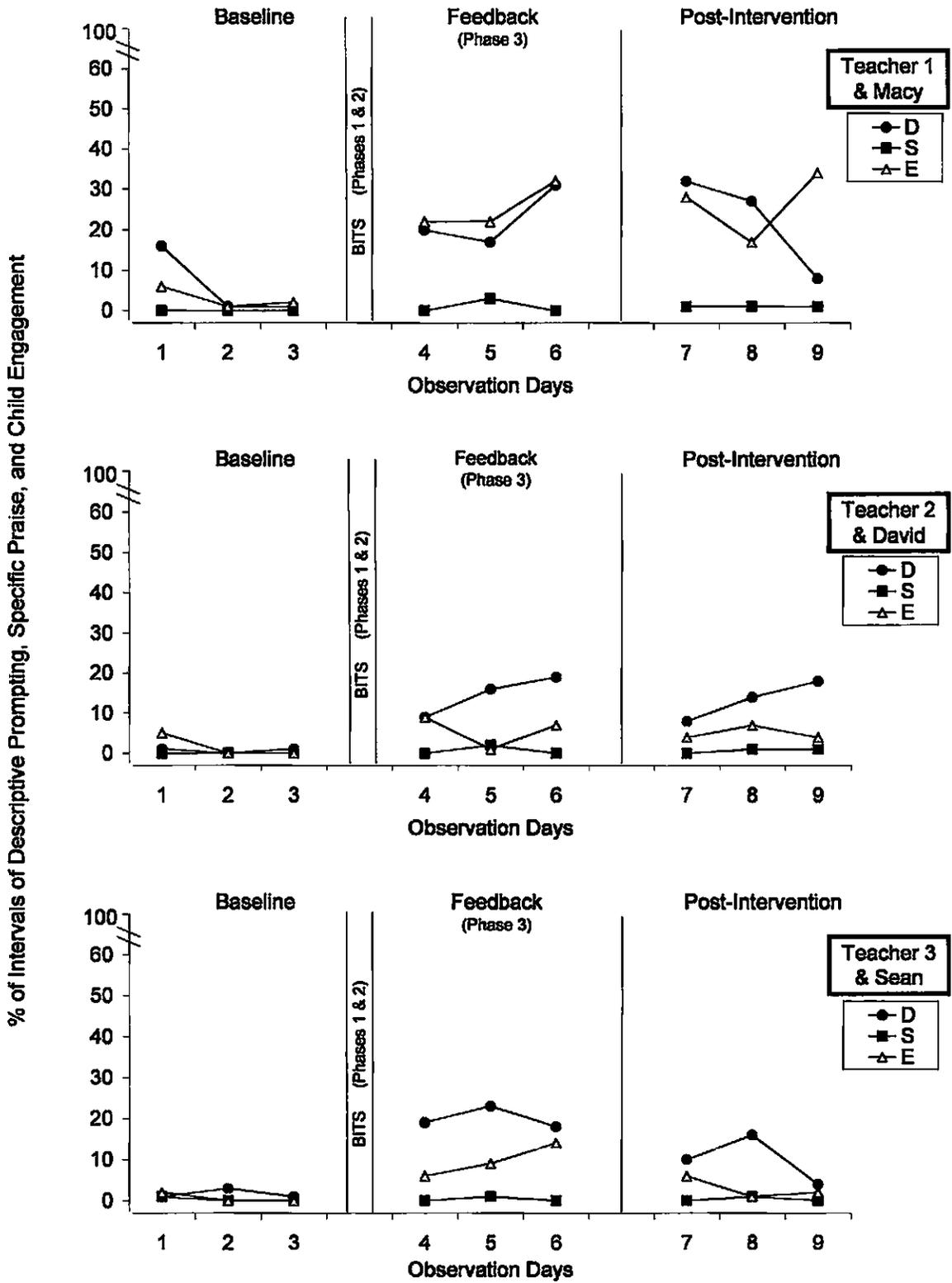


Figure 1. Percentage of intervals when teachers provided descriptive prompting and specific praise and child engagement.

Descriptive Prompting and Specific Praise

Teacher 1. In the baseline condition, descriptive prompting for Teacher 1 averaged 6.0% (range, 1% to 16%). In the feedback condition, descriptive prompting increased to an average of 22.67% (range, 17% to 31%). The level change from the last data point in the baseline condition to the first data point in the feedback condition was 19%. Descriptive prompting remained stable at an average of 22.33% (range, 8% to 32%) in the post-intervention condition. In the baseline condition, there was a decreased trend (Slope = -2.27/Intercepts = +18.09). In the feedback condition, there was an increased trend (Slope = +2.57/Intercepts = -23.62). The trend was decreasing (Slope = -2.16/Intercepts = +93.54) in the post-intervention condition. The percentage of non-overlapping data points was 100%. This means that there were no common data points between the baseline and feedback conditions. The feedback condition showed an effect size of 1.43 compared to the baseline. The effect size for the post-intervention condition compared to baseline was 1.24.

In the baseline condition, specific praise for Teacher 1 averaged 0.0% (range, 0% to 0%). In the feedback condition, specific praise increased to an average of 1.0% (range, 0% to 3%). The level change from the last data point in the baseline condition to the first data point in the feedback condition was 0%. Thus, there was no level change. During the post-intervention condition, specific praise remained stable at 1.0% (range, 1% to 1%). In the baseline condition, there was a flat trend (Slope = +0/Intercepts = 0). In the feedback condition, there was a decreased trend (Slope = -0.21/Intercepts = +4.86). The trend was flat during the post intervention condition (Slope = 0/Intercepts = +1). The percentage of non-overlapping data points was 33.3%. This means that 33.3% of the data

points between the baseline and feedback conditions did not overlap. The feedback condition showed an effect size of 0.82 compared to baseline. The effect size for post-intervention compared to baseline was 1.83.

Teacher 2. In the baseline condition, descriptive prompting for Teacher 2 averaged 0.67% (range, 0% to 1%). In the feedback condition, descriptive prompting increased to an average of 14.67% (range, 9% to 19%). The level change from the last data point in the baseline condition to the first data point in the feedback condition was 8%. During the post-intervention condition, descriptive prompting decreased slightly to an average of 13.33% (range, 8% to 18%). In the baseline condition, there was a decreased trend (Slope = -0.08/Intercepts = +0.92). In the feedback condition, there was an increased trend (Slope = +1.16/Intercepts = -3.86). The trend was increasing (Slope = +3.29/Intercepts = -110.43) in the post-intervention condition. The percentage of non-overlapping data points was 100%. This means that there were no common data points between the baseline and feedback conditions. The feedback condition showed an effect size of 1.68 compared to baseline. The effect size for the post-intervention condition compared to baseline was 1.66.

In the baseline condition, specific praise for Teacher 2 averaged 0.0% (range, 0% to 0%). In the feedback condition, specific praise increased slightly to an average of 0.67% (range, 0% to 2%). The level change from the last data point in the baseline condition to the first data point in the feedback condition was 0%. Thus there was no level change. During the post-intervention condition, specific praise remained stable at an average of 0.67% (range, 0% to 1%). In the baseline condition, there was a flat trend (Slope = +0/Intercepts = 0). In the feedback condition, there was an increased trend (Slope

= +0.11/Intercepts = -1.02). The trend was increasing (Slope = +0.36/Intercepts = -12.79) in the post-intervention condition. The percentage of non-overlapping data points was 33.3%. This means that 33.3% of the data points between the baseline and feedback conditions did not overlap. The feedback condition showed an effect size of 0.82 compared to baseline. The effect size for the post-intervention condition was compared to baseline was 1.30.

Teacher 3. In the baseline condition, descriptive prompting for Teacher 3 averaged 1.67% (range, 1% to 3%). In the feedback condition, descriptive prompting increased to an average of 20.0% (range, 18% to 23%). The level change from the last data point in the baseline condition to the first data point in the feedback condition was 18%. In the post-intervention condition, descriptive prompting decreased to an average of 10.0% (range, 4% to 10%). In the baseline condition, there was a very slight increased trend (Slope = +0.03/Intercepts = +1.44). In the feedback condition, the trend was decreasing (Slope = -0.64/Intercepts = +33.07). The trend was decreasing (Slope = -0.69/Intercepts = +27.54) in the post-intervention condition. The percentage of non-overlapping data points was 100%. This means that there were no common data points between the baseline and feedback conditions. The feedback condition showed an effect size of 1.80 compared to baseline. The effect size for the post-intervention condition compared to baseline was 1.39.

In the baseline condition, specific praise for Teacher 3 averaged 0.33% (range, 0% to 1%). In the feedback condition, specific praise remained at 0.33% (range, 0% to 1%). The level change from the last data point in the baseline condition to the first data point in the feedback condition was 0%. Again, there was no level change. During the

post-intervention condition, specific praise remained stable with an average of 0.33% (range, 0% to 1%). In the baseline condition, there was a slight decreased trend (Slope = -0.1/Intercepts = +1.01). In the feedback condition, there was a decreased trend (Slope = -0.07/Intercepts = +1.79). The trend line was increasing (Slope = +0.08/Intercepts = -1.62) in the post-intervention condition. The percentage of non-overlapping data points was 0%. This means that 0% of the data points between the baseline and feedback conditions did not overlap. The feedback condition showed an effect size of zero compared to baseline. The effect size for the post-intervention condition compared to baseline was zero.

There was increased descriptive prompting during the feedback and post-intervention condition for all three teachers when compared to baseline. The mean average of increase from the baseline to feedback conditions across all three teachers was 16.33% (range, 14.00% to 18.33%). The mean average of increase from the baseline to post-intervention conditions across all three children was 12.44% (range, 8.33% to 16.33%). There was a slight increase in specific praise during the feedback condition for two of the three teachers compared to baseline. During the post-intervention condition, two of the three teachers maintained the same level of specific praise achieved in the feedback condition.

Child Engagement

Engagement

Child engagement was separated into two categories (cooperative participation and communication). Figure 1 presents the percentage of intervals of child engagement.

After presentation of the child engagement, the two categories (cooperative participation and communication) will be considered separately.

Macy. During the baseline condition, Macy's engagement averaged 3.00% (range, 1% to 6%). In the feedback condition, engagement increased to an average of 25.33% (range, 22% to 32%). The level change from the last data point in the baseline condition to the first data point in the feedback condition was 20%. During the post-intervention condition, Macy's engagement increased slightly to an average of 26.33% (range, 17% to 34%). In the baseline condition, there was a decreased trend (Slope = $-0.66/\text{Intercepts} = +6.53$). In the feedback condition, there was an increased trend (Slope = $+2.14/\text{Intercepts} = -13.24$). The trend was decreasing (Slope = $-0.11/\text{Intercepts} = +29.81$) in the post-intervention condition. The percentage of non-overlapping data points was 100%. This means that there were no common data points between the baseline and feedback conditions. The feedback condition showed an effect size of 1.73 compared to baseline. The effect size for the post-intervention condition compared to baseline was 1.67.

David. In the baseline condition, David's engagement averaged 1.67% (range, 0% to 5%). In the feedback condition, engagement increased to an average of 5.67% (range, 1% to 9%). The level change from the last data point in the baseline condition to the first data point in the feedback condition was 9%. During the post-intervention condition, David's engagement decreased slightly to an average of 5.00% (range, 4% to 7%). In the baseline condition, there was a decreased trend (Slope = $-1.35/\text{Intercepts} = +6.53$). In the feedback condition, there was a decreased trend (Slope = $-0.58/\text{Intercepts} = +14.93$). The trend was increasing (Slope = $+0.21/\text{Intercepts} = -3.07$) in the post-

intervention. The percentage of non-overlapping data points was 66.7%. This means that 66.7% of the data points were not overlapping between the baseline and feedback conditions. The feedback condition showed an effect size of 1.03 compared to baseline. The effect size for the post-intervention condition compared to baseline was 1.19.

Sean. In the baseline condition, Sean's engagement averaged 0.67% (range, 0% to 2%). In the feedback condition, engagement increased to an average of 9.67% (range, 6% to 14%). The level change from the last data point in the baseline condition to the first data point in the feedback condition was 6%. During the post-intervention condition, Sean's engagement decreased to 3.00% (range, 1% to 6%). In the baseline condition, there was a decreased trend (Slope = -0.19/Intercepts = +2.02). In the feedback condition, there was an increased trend (Slope = +2.64/Intercepts = -44.07). The trend was decreasing (Slope = -1.15/Intercepts = +32.23) in the post-intervention condition. The percentage of non-overlapping data points was 100%. This means that there were no common data points between the baseline and feedback conditions. The feedback condition showed an effect size of 1.61 compared to baseline. The effect size for the post-intervention condition compared to baseline was 1.05.

In summary, engagement increased during the feedback and post-intervention conditions compared to baseline. The mean average of increase from the baseline to feedback conditions across all three children was 11.78% (range, 4.00% to 22.33%). The mean average of increase from the baseline to post-intervention conditions across all three children was 9.66% (range, 2.33% to 23.33%).

Cooperative Participation and Communication

Figure 2 presents the percentage of intervals cooperative participation and communication occurred.

Macy. In the baseline condition, cooperative participation for Macy averaged 2.00% (range, 0% to 4%). In the feedback condition, cooperative participation increased to an average of 41.33% (range, 37% to 48%). The level change from the last data point in the baseline condition to the first data point in the feedback condition was 33%. During the post-intervention condition, Macy's cooperative participation fell slightly to 39.67% (range, 22% to 58%) during the post-intervention condition. In the baseline condition, there was a slight increased trend (Slope = +0.07/Intercepts = +1.63). In the feedback condition, there was an increased trend (Slope = +2.21/Intercepts = +1.48). The trend was increasing (Slope = +0.61/Intercepts = +19.69) in the post-intervention condition. The percentage of non-overlapping data points was 100%. This means that there were no common data points between the baseline and feedback conditions. The feedback condition showed an effect size of 1.80 compared to baseline. The effect size for the post-intervention condition compared to baseline was 1.60.

During the baseline condition, communication for Macy averaged 4.00% (range, 0% to 10%). In the feedback condition, communication increased to an average of 9.00% (range, 4% to 16%). The level change from the last data point in the baseline condition to the first data point in the feedback condition was 7%. During the post-intervention condition, Macy's communication increased to an average of 13.33% (range, 10% to 18%). In the baseline condition, there was a decreased trend (Slope = -0.66/Intercepts = +6.53). In the feedback condition, there was an increased trend (Slope = +2.14/Intercepts

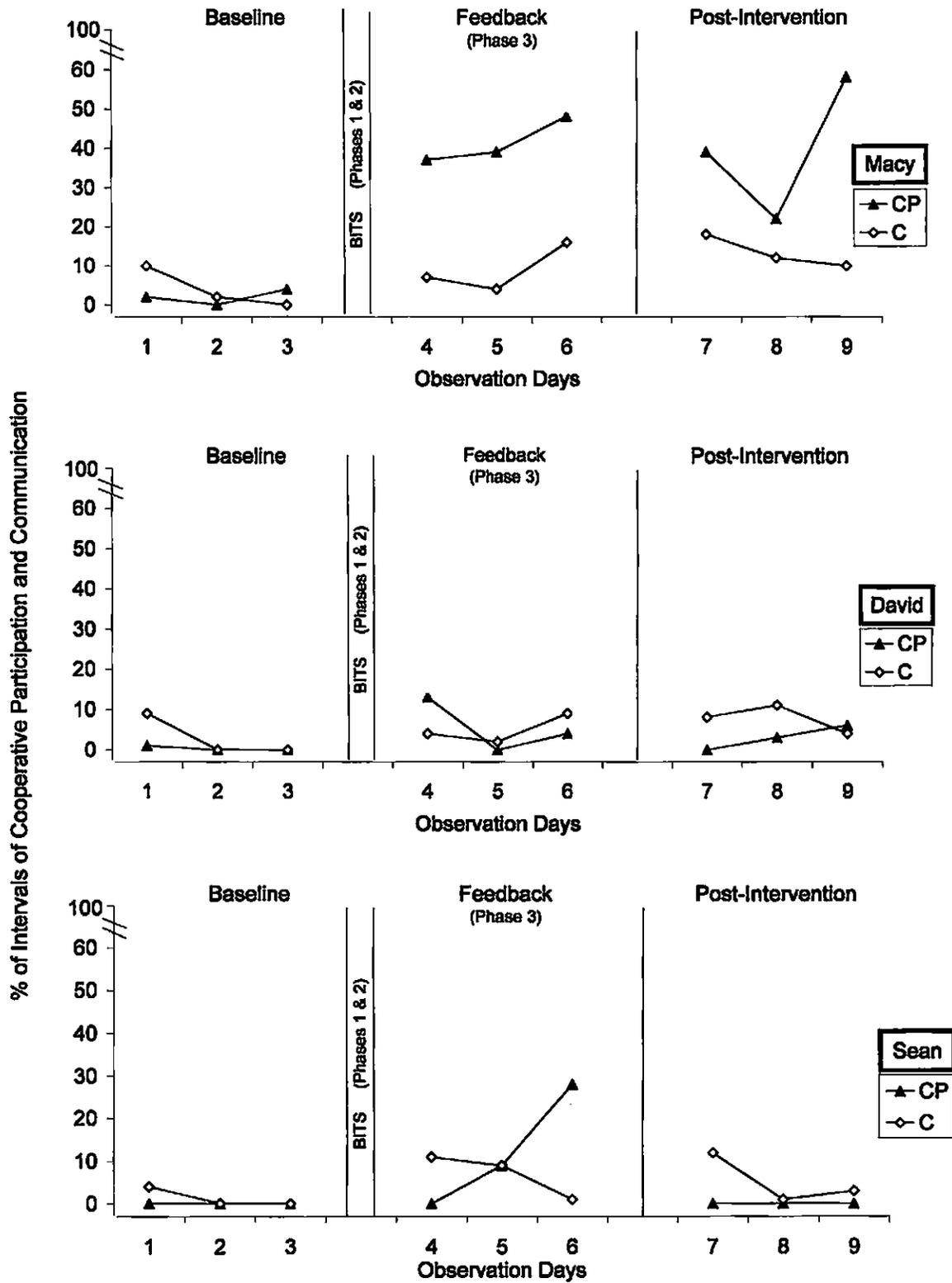


Figure 2. Percentage of intervals when cooperative participation and communication occurred.

= -13.24). The trend line was decreasing (Slope = -0.11/Intercepts = +29.81) during post-intervention condition. The percentage of non-overlapping data points was 100%. This means that there were no common data points between the baseline and feedback condition. The feedback condition showed an effect size of 0.85 compared to baseline. The effect size for the post-intervention condition compared to baseline was 1.40.

David. In the baseline condition, cooperative participation for David averaged of 0.33% (range, 0% to 1%) In the feedback condition, cooperative participation increased to an average of 5.67% (range, 0% to 13%). The level change from the last data point in the baseline condition to the first data point in the feedback condition was 13%. During the post-intervention condition, David's cooperative participation did not remain stable and fell to a 3.00% average (range, 0% to 6%) in the post-intervention condition. In the baseline condition, there was a slight decreased trend (Slope = -0.27/Intercepts = +1.23). In the feedback condition, there was an increased trend (Slope = -1.39/Intercepts = +27.98). The trend was increasing (Slope = +1.93/Intercepts = -69.64) in post-intervention condition. The percentage of non-overlapping data points was 66.7%. This means that 66.7% of the data points between the baseline and feedback condition did not overlap. The feedback condition showed an effect size of 1.04 compared to baseline. The effect size for the post-intervention condition compared to baseline was 1.10.

During the baseline condition, communication for David averaged 3.00% (range, 0% to 9%). In the feedback condition, communication increased to an average of 5.00% (range, 2% to 9%). The level change from the last data point in the baseline condition to the first data point in the feedback condition was 3%. During the post-intervention condition, David's communication increased to an average of 7.67% (range, 4% to 11%).

In the baseline condition, there was a decreased trend (Slope = -2.42/Intercepts = +11.08). In the feedback condition, there was an increased trend (Slope = +0.29/Intercepts = +0.37). The trend was decreasing (Slope = -0.93/Intercepts = +42.64) in the post-intervention condition. The percentage of non-overlapping data points was 0%. This means that 0% of the data points did not overlap between the baseline and feedback condition. The feedback condition showed an effect size of 0.48 compared to baseline. The effect size for the post-intervention condition compared to baseline was 0.99.

Sean. In the baseline condition, Sean's cooperative participation averaged 0% (range, 0% to 0%). In the feedback condition, cooperative participation increased to an average of 12.33% (range, 0% to 28%). The level change from the last data point in the baseline condition to the first data point in the feedback condition was not immediate, but did show a systematic increase over time. Sean's cooperative participation did not remain stable and dropped to a 0% average (range, 0% to 0%) during the post-intervention condition. In the baseline condition, there was a flat trend (Slope = +0/Intercepts = 0). In the feedback condition, there was an increased trend (Slope = +9.36/Intercepts = -177.93). The trend remained flat (Slope = 0/Intercepts = +0) in the post-intervention condition. The percentage of non-overlapping data points was 66.7%. This means that 66.7% of the data points between the baseline and feedback conditions did not overlap. The feedback condition showed an effect size of 1.09 compared to baseline. The effect size for the post-intervention condition compared to baseline was zero.

In the baseline condition Sean's communication averaged 1.33% (range, 0% to 4%). In the feedback condition, communication increased to an average of 7.00% (range,

1% to 11%). The level change from the last data point in the baseline condition to the first data point in the feedback condition was 10% increase. Sean's communication decreased during the post-intervention condition to 5.33% (range, 1% to 12%). In the baseline condition, there was a decreased trend (Slope = -0.39/Intercepts = +4.04). In the feedback condition, there was a decreased trend (Slope = -3.43/Intercepts = +76.71). The trend was decreasing (Slope = -2.58/Intercepts = +70.62) in post-intervention condition. The percentage of non-overlapping data points was 66.7%. This means that 66.7% of the data points did not overlap between the baseline and feedback conditions. The feedback condition showed an effect size of 1.18 compared to baseline. The effect size for the post-intervention condition compared to baseline was 0.88.

In summary, both cooperative participation and communication increased during feedback and post-intervention conditions compared to baseline. Cooperative participation increased across all three children in both feedback and post-intervention conditions compared to baseline. The mean average of increase from the baseline to feedback conditions across all three children was 19% (range, 5.34% to 39.33%). The mean average of increase from the baseline to post-intervention conditions across all three children was 13.47% (range, 0% to 37.67%). Communication increased across all three children in both feedback and post-intervention conditions compared to baseline. The mean average of increase from the baseline to feedback conditions across all three children was 4.22% (range, 2.00% to 5.67%). The mean average of increase from the baseline to post-intervention conditions across all three children was 6.00% (range, 4.00% to 9.33%).

Conclusion

The data suggest that increased teacher descriptive prompting was accompanied by increased child engagement. Table 5 shows the mean percentages of teacher descriptive prompting and child engagement for each dyad. The following section summarizes how the teacher and child variables relate to one another for each teacher-child dyad.

Teacher 1 and Macy (Dyad 1). Teacher 1's descriptive prompting averaged 6.00% in the baseline condition and increased to an average of 22.67% in the feedback condition. During the baseline condition, engagement for Macy averaged 3.00% and then increased to an average of 25.33% in the feedback condition. Teacher 1's descriptive prompting increased 16.67% in the feedback condition, that was accompanied by a 22.33% increase in Macy's engagement.

Teacher 2 and David (Dyad 2). Teacher 2's descriptive prompting averaged 0.67% during the baseline condition and averaged 14.67% in the feedback condition. Engagement for David averaged 1.67% during the baseline condition compared to 5.67% in the feedback condition. Teacher 2's descriptive prompting increased 14.00% in the feedback condition, that was accompanied by a 4.00% increase in David's engagement.

Teacher 3 and Sean (Dyad 3). Teacher 3's descriptive prompting averaged 1.67% during the baseline condition and averaged 20.00% in the feedback condition. Sean averaged 0.67% engagement during the baseline condition and increased to an average of 9.67% in the feedback condition. Teacher 3's descriptive prompting increased 18.33% in the feedback condition that was accompanied by a 9.00% increase in Sean's engagement.

Table 5

Mean Percentages of Descriptive Prompting and Child Engagement for Each Dyad

	Baseline	Feedback	Post-Intervention
DYAD 1			
Teacher Descriptive Prompting	6.00%	22.67%	22.33%
Child Engagement	3.00%	25.33%	26.33%
DYAD 2			
Teacher Descriptive Prompting	0.67%	14.67%	13.33%
Child Engagement	1.67%	5.67%	5.00%
DYAD 3			
Teacher Descriptive Prompting	1.67%	20.00%	10.00%
Child Engagement	0.67%	9.67%	3.00%

Social Validity

The major reason for interviewing the teachers after the study was to evaluate (a) the significance of the goals of the intervention, (b) the social appropriateness of the procedures, and (c) the social importance of the effects. However, the researcher additionally hoped to gain some insight concerning the teachers' viewpoints as to the initial social skills of the target children and the teachers' role in facilitating social skills. Further, the researcher was interested in the teachers' impression of the training and their suggestions for future training. Each interview session was held at a location convenient for the teacher and recorded using a dual cassette tape recorder. Sessions were later transcribed. The researcher asked questions. Each teacher had a copy of the questions during the interview. The questions and the complete transcription are in Appendix M. This section summarizes the teachers' responses to each of the questions.

Question 1: Would you be able to talk about the differences, if any, you have seen in the target child's cooperative behavior and communication since the intervention?

All three teachers noted that the target child in their class was cooperating more with his/her peers by the end of the study. Table 6 summarizes the teachers' responses.

Table 6

Summary of Teachers' Responses to Question 1

Teacher 1	Teacher 2	Teacher 3
<ul style="list-style-type: none"> • Macy's peers learned how to work with her. • Her peers seemed to change their expectations for her. • She thought this helped Macy learn to be more social. 	<ul style="list-style-type: none"> • David seemed more willing to seek out peers. • She attributed this to her frequently suggesting that he ask his friends for help. • Over time, communicating with his peers seemed to become more familiar. 	<ul style="list-style-type: none"> • Sean, who had initially been physically aggressive with his peers, was now passing blocks to peers and approaching them as play partners.

Question 2: From your experience, talk about how the target child's behavior differs/is the same as your other children who are his/her age.

Two teachers described their target child as functioning cognitively at a level above same-age peers. All three teachers described their target child as delayed socially as compared to peers. Two teachers felt that characteristics of autism would not be apparent to an outside observer. Table 7 summarizes the teachers' responses.

Table 7

Summary of Teachers' Responses to Question 2

Teacher 1	Teacher 2	Teacher 3
<ul style="list-style-type: none"> • Macy was not as verbal and socially mature as same-age peers. • Macy had to be prompted to communicate with peers and to play appropriately with play items. 	<ul style="list-style-type: none"> • Described David as indistinguishable from his peers behaviorally or cognitively. • David's only delay was in the area of fine motor skills and his social skills. • David was friendly with everybody, though he did not have a 'best friend' or 'pair up' with specific peers. • Her greatest concern was his social skills. 	<ul style="list-style-type: none"> • An outside observer would not readily identify Sean as having characteristics of autism. • The main difference between Sean and his peers is that he engages in more solitary play. • She considered him comparable to peers in academics and communication.

Question 3: What differences if any has the intervention made in the target child's acceptance?

There was total consensus in the responses to this question. All three teachers thought that the intervention made a difference in acceptance by peers. Table 8 summarizes the teachers' responses.

Table 8

Summary of Teachers' Responses to Question 3

Teacher 1	Teacher 2	Teacher 3
<ul style="list-style-type: none"> • The other children started coming around more often when she began to interact more with Macy. • Macy became more accepting of the play overtures of her peers. • Peers seemed to accept Macy and approach her more often to get her to play. • Peers were more willing to approach Macy due to the consistency in implementing the strategies. 	<ul style="list-style-type: none"> • David's peers were always willing to play with him. • She had heard peers say such things as, "but he (David) doesn't know." • She would correct them by saying, "No, he does know... you just need to make sure he's paying attention when you talk to him and make him look at you." • Her prompting of communication helped in that David talked more. • The more he initiated conversation, the more comfortable his peers seemed to feel with him. 	<ul style="list-style-type: none"> • She was not aware that Sean did not interact appropriately with peers. She simply had not thought about it. • Her main focus before the training was Sean's aggressive behaviors towards his peers. • She noted changes in the way peers respond to Sean after the intervention. • They now give him a chance to interact. • She said it is "phenomenal" that children who seemed to be afraid of him are now ready to play with him.

Question 4: What did you learn that you did not already know about prompting and praising?

Two teachers said that their training in early childhood education did not condone praising, but both teachers found praise useful after the intervention. The third teacher noted she already knew about prompting and praising. Table 9 summarizes the teachers' responses.

Table 9

Summary of Teachers' Responses to Question 4

Teacher 1	Teacher 2	Teacher 3
<ul style="list-style-type: none"> • She knew about prompting and praising, but that the training helped her understand the child better and think about how to facilitate interactions. 	<ul style="list-style-type: none"> • She knew about praise, but did not want to create “praise junkies.” 	<ul style="list-style-type: none"> • She was taught that praise was not appropriate. • When it was first introduced in the training, her first thought was “Oh ya, how’s this gonna go over?” • Over time however, she came to view it as a “win-win strategy” –a way to make peers feel “warm and cuddly” so they would want to play with the target child. • She came to see both children benefit from praise and that it works. • The same was true of prompting; she said that she didn’t realize that she was already using prompts though she did not use that term. • After the training, she saw that the prompting worked well and thought, “Why weren’t we doing that before?”

Question 5: What was your impression of the training?

All three teachers had positive responses to the training, especially the one-to-one interactions with trainer, and feedback sessions. One teacher indicated that what she liked was that it was relevant to the child in her classroom. Previous training had been more general. Two of the teachers said that they found praise to be helpful with the particular child they were working with. All three teachers liked training, feedback, and training materials. Table 10 summarizes the teachers’ responses.

Table 10

Summary of Teachers' Responses to Question 5

Teacher 1	Teacher 2	Teacher 3
<ul style="list-style-type: none"> • She liked the one-to-one interactions with the trainer because she could ask specific questions. • She felt that the time frame was appropriate. • She like the fact that the training was comprehensive. • She especially liked reflecting on what worked and what didn't work. 	<ul style="list-style-type: none"> • She acknowledged that her training was long because she liked to talk. However, she liked that part of the training contending that the more she talks, the more she learns. • The feedback sessions were non-intrusive and accommodating to her schedule. • The time frame was appropriate. • Training was not only useful for the target student, but could be useful for any future students with autism. 	<ul style="list-style-type: none"> • She especially liked the immediate feedback. • The training was very clear and easy to apply. • The location of the training made a difference in being able to stay focused on the information.

Question 6: What was your impression of the strategies?

Three of the teachers found the strategies useful. Two teachers said they shared the strategies with their classroom team members at a team meeting and encouraged them to use the strategies. Table 11 summarizes the teachers' responses.

Table 11

Summary of Teachers' Responses to Question 6

Teacher 1	Teacher 2	Teacher 3
<ul style="list-style-type: none"> • She liked the strategies noting that if one didn't work, you could always try something else. • For example, if the target child did not want to interact with a particular peer, she would try a different peer. • She especially liked the concepts determining to serve as a focus of engagement and then fading out when engagement begins. 	<ul style="list-style-type: none"> • The strategies were important. • She shared the strategies with her school team and encouraged them to apply prompting. To encourage the target child to ask peers for help. 	<ul style="list-style-type: none"> • She would continue to incorporate the strategies.

Question 7: Would you mind addressing the concept of the ease of implementation of the intervention strategies?

Only teacher 1 described the strategies as a challenge in the beginning. All of the three teachers found the strategies easy to apply. Table 12 summarizes the teachers' responses.

Table 12

Summary of Teachers' Responses to Question 7

Teacher 1	Teacher 2	Teacher 3
<ul style="list-style-type: none"> In the beginning it was a chore to figure out the target child's interests and to get interactions going. 	<ul style="list-style-type: none"> She said the strategies were all easy to implement and that she would use them with all of her students. 	<ul style="list-style-type: none"> The strategies made sense and were doable. The strategies could be easily applied to the particular child she was working with, but they could also try applying it with a more severe child with autism. The steps were very simple which made it easier to embrace.

Question 8: What would you suggest for future training of teachers to facilitate cooperative participation and communication?

Two teachers noted that ECE teachers needed more training in order to work with children with autism. Table 13 summarizes the teachers' responses.

Table 13

Summary of Teachers' Responses to Question 8

Teacher 1	Teacher 2	Teacher 3
<ul style="list-style-type: none"> Suggested that teachers should learn to become more involved with the child play rather than just sitting and watching. Suggested they learn how to use engagement. 	<ul style="list-style-type: none"> She would encourage teachers to try these strategies. 	<ul style="list-style-type: none"> Receptiveness is key to future training.

Question 9: What information was most valuable?

The teacher's responses to this question can be summarized by these points: (a) information on how and why to prompt an praise, (b) feedback about what went well and what needed improvement, and (c) information about what is involved in peer communication and participation.

Question 10: How do you think you will use this in the future?

All of the teachers said they would continue to use their new skills. They also emphasized that they would use the training materials in the future. Table 14 summarizes the teachers' responses.

Table 14

Summary of Teachers' Responses to Question 10

Teacher 1	Teacher 2	Teacher 3
<ul style="list-style-type: none">• If she had another child with autism in her class she would refer back to the training information to work with him.	<ul style="list-style-type: none">• She would use the training information as a resource and was sure she would have an opportunity to use it again.	<ul style="list-style-type: none">• She wanted to continue onward to help Sean relate to peers.

Question 11: Do you have any other comments, recommendations, thoughts, ahas?

The following points summarize teacher recommendations of the three teachers: (a) use of video recording to tape teacher-child use to discuss during the feedback sessions, (b) keep all feedback positive, and (c) continue to maintain an unbiased perspective.

In summary, responses to questions contributed information as to (a) the significance of the goals of the intervention, (b) the social appropriateness of its procedures, and (c) the social importance of its effects. The findings are summarized

below. The discussion section addressed the teachers' responses in relation to these questions.

Intervention Fidelity

Fidelity of the intervention was evaluated using a checklist that contained 29 components of the intervention training package (see Appendix J). Fidelity was considered satisfactory. Results indicate the trainer successfully completed 100% of all 29 components for each teacher who was trained.

CHAPTER V DISCUSSION

The primary goal for this study was to evaluate the effects of a brief, individualized, training system (BITS) on the interactions of Early Childhood Education (ECE) teachers with children with autism. Additionally, the secondary effect of child engagement (cooperative participation and communication with peers) was investigated. The research questions were:

- Can BITS affect ECE teachers' use of prompts and praise for cooperative participation and communication with peers?
- Does the teacher behavior (prompts and praise) affect child engagement (cooperative participation and communication with peers)?

It is important to reiterate that BITS is intended to teach ECE teachers to facilitate and support engagement of children with autism in inclusive classrooms. The program does not provide skills for behavior management.

There was a relationship between teachers' use of descriptive prompting and child engagement. Descriptive prompting increased for all three teachers after the feedback condition. There was a concurrent increase on child engagement. Data points during the baseline conditions did not overlap data points during the feedback conditions. This argues for a functional relation between BITS and descriptive prompting. Teacher praise also increased, but to a lesser extent. The following will summarize and discuss the results. The teacher-child dyads will be discussed first followed by a discussion of limitations and directions for future research. Praise is not discussed separately as use of praise was virtually the same for all three teachers. One finding was that all of the

teachers provided relatively little praise. The lack of praise will be addressed in sections on limitations and directions for future research.

Dyad 1

Teacher Descriptive Prompting

The data suggest that training had the greatest effect on Teacher 1. Her descriptive prompting was the highest during the feedback condition (mean of 25.33%) compared to Teacher 2 and 3. She was the only teacher whose descriptive prompting maintained during the post-intervention condition. The level change from the last data point in the baseline condition to the first data point in the feedback condition was the largest (19%). The training emphasized the importance of using descriptive prompts with children. The data system did not permit differentiation as to whether descriptive prompting was directed towards the target child or peers. However, the researcher's notes indicated that Teacher 1 tended to prompt peers to engage with the target child more than Teachers 2 or 3. Additionally, Teacher 1 seemed to have the most natural prompting style. For example, when she prompted she did so with a calm and quiet demeanor. She did not say the target child's name repeatedly. She would make the suggestion to communicate or cooperate sound exciting to the target child and peers.

With one exception, there was little variability within conditions or across the teachers. The exception was Teacher 1. Her use of descriptive prompting in the baseline and post-intervention condition varied more than the other teachers. After baseline, Teacher 1 indicated that she already knew about prompting. This may explain the relatively high percentage of prompts before intervention. On Day 9, descriptive prompting for Teacher 1 fell to 8%. One explanation for this could be that the teacher did

not need to use higher rates of descriptive prompting because the target child was engaged 34% of the intervals (the highest percentage of engagement for all 9 days). During the social validity interview teacher 1 explained that she intentionally faded back because she noticed that the target child was engaged with a peer. This indicates that Teacher 1 was able to apply strategy 4, which was to fade physical presence as the children begin to participate or communicate together.

Child Engagement

Macy had the highest percentage of engagement during both the feedback and post-intervention conditions, although her engagement during baseline was nearly identical to that of the other two participants, she also had a significantly higher percentage of cooperative play during both conditions. Macy had many interests. She was the only target child who spent the majority (4 out of 9) of time in the dramatic play center where social interaction typically occurs.

In conclusion, changes in child engagement were concurrent with changes in descriptive prompting during the feedback condition. On the first day of baseline, Teacher 1's descriptive prompting was relatively high (16%). Teacher 1 said she already knew about prompting. On the last day of the post-intervention condition, the teacher's descriptive prompting decreased and engagement increased to 34%. The explanation for this comes from the proximity data (recorded, but not charted). The teacher moved to another part of the room when Macy became involved in a cooperative play activity. She later confirmed in the social validity interview that she intentionally faded her physical presence as the children began to participate and communicate with one another. She was the only teacher who faded her physical presence.

Dyad 2

Teacher Descriptive Prompting

Teacher 2's descriptive prompting increased during the feedback condition. There was also a slight increase in trend during the post-intervention condition. However, the mean was slightly lower. Because David was alone at the computer center for most of baseline observations, the trainer has few examples of child engagement to draw from for Phase 2 of the training. The trainer was dependent on baseline observation to individualize the training and present situations for discussion on how the teacher could use prompting and praising.

Teacher 2's descriptive prompting increased during the feedback condition. The data system did not permit differentiation as to whether descriptive prompting was for cooperative participation or communication. However, the researcher's notes indicate most of Teacher 2's descriptive prompts were prompts to communicate.

Child Engagement

David's engagement increased the least from the baseline condition to the feedback condition and decreased slightly during the post-intervention condition. David tended to choose activities that were not the most conducive for cooperative play to occur. For example, David chose the art center, an activity characterized by independent work, for 3 out of the 6 observations during the feedback and post-intervention conditions. This happened to be on all three days of the feedback condition.

In conclusion, Teacher 2 was also the only teacher who demonstrated an increasing trend for both feedback and post-intervention phases. David's engagement fluctuated more than the other participants during the feedback and post-intervention

phases. This may have been due to the types of solitary-type play activities that he had selected during the observation periods.

Dyad 3

Teacher Descriptive Prompting

Teacher 3's descriptive prompting increased during the feedback condition to a mean of 20.00% compared to Teacher 1 (22.67%) and Teacher 2 (14.67%). Her use of descriptive prompting fell to a mean of 10.00% during the post-intervention condition. Possible explanations are discussed in the section entitled Child Engagement. It is interesting to note that Teacher 3 said that she had not even thought of facilitating engagement with peers before BITS. She considered Sean to be a social child, but later realized after training that he was only social with adults.

Child Engagement

Engagement decreased the most during the post-intervention condition for Sean. Engagement averaged 2% on the last day of the post-intervention condition. Sean chose to go to the lego center. Initially no peers were in the center. Later the researcher noted that there was one peer that was roaming in and out of the center. The teacher spent the majority of the observation interacting with Sean on her own and did not use descriptive prompting to promote his engagement with peers. The teacher was asked after the social validity interview why she did not invite the peer who was roaming from center to center to join Sean so he had a peer with whom to interact. She said that the peer that was roaming happened to be another volatile child and that pairing him with Sean would have been a trigger for aggression between both of them. She explained that she did not invite peers who were involved in activities to leave for another center. The philosophy of the

teaching staff was to not interrupt play and to honor the child's choice of center selection. Therefore she did not actively seek a play partner out and consequently, Sean chose to play in a center where interactions with peers could not take place. Thus, engagement was low because there was no peer present.

Social Validity Discussion

Recall that the major reason for interviewing the teachers after the study was to evaluate the teachers' perceptions regarding the importance of (a) the goals of the intervention, (b) the social appropriateness of the procedures, and (c) the social importance of the effects. As noted in Chapter IV, the researcher hoped to gain some insight concerning the teachers' viewpoints as to the initial social skills of the target children and their own role in relation to facilitating social skills. Further, the researcher was interested in the teachers' impression of the training and their suggestions for future training. As to the three major social validity questions, all three teachers considered the intervention to be significant, socially appropriate, and useful with the target children.

Did the teachers consider the intervention significant?

It is evident from the teacher's interviews that all three teachers considered the intervention to be significant. They came to see the importance of addressing social skills for young children with autism and their own role in facilitating these skills. They shared the strategies with their teams because they considered them useful and important. All three teachers described their target child as delayed socially relatively to peers and one teacher specifically notes that her target child's delay in social skills were important to her. One teacher indicated that behavior was her top priority, but after the training she

realized how important it was to encourage engagement between the target child and his peers.

Did the teachers consider the procedures socially appropriate?

It is evident from the teacher's interviews that all three teachers considered the procedures to be socially appropriate. All three of the teachers found the strategies to be useful with the target children. Two teachers said the strategies were important. All of the three teachers found the strategies easy to apply. All of the teachers said they would continue to use their new skills.

Did the teachers consider the effects to have social importance?

It is apparent from the teacher's interviews that all three teachers considered the effects to have social importance. All three teachers noted that their target child cooperated and communicated more with his/her peers by the end of the study. All three teachers thought that the intervention made a difference in their target child's acceptance by peers. Teachers called this acceptance "phenomenal" and "exciting". Teachers said that peers became more comfortable with the target children and began to initiate play and embrace them. All three indicated that increased engagement and acceptance from peers were important outcomes.

This information is especially useful because previous research in this area has not considered social validity (Garfinkle & Schwartz, 2002; Goldstein et al., 1992; Hancock & Kaiser, 2002; Haring & Lovinger, 1989; Hwang & Hughes, 2000; Kohler et al., 2001; Kohler & Strain, 1997; McGrath et al., 2003; Odom & Strain, 1986; Strain & Danko, 1995; Zanolli et al., 1996).

Limitations and Directions for Future Research

Data System

The data system did not provide data as to whether prompts were directed to the target child or peers or whether prompts were specific to elicit cooperative participation or communication. These data would have been useful to examine the relationship between the types of descriptive prompting and child engagement. Future research may want to differentiate between prompting to cooperate versus communicate as well as examine who the descriptive prompt was directed towards.

Terminology Use in Training

The training system used terms such as praise and prompts that are typically associated with ECSE. Recall that teacher praise was minimal compared to descriptive prompting for all three teachers. Two of the three teachers indicated that they were not taught that praising was appropriate in early childhood education. It would be interesting to examine whether the teachers would be more receptive to implementing the praise strategy if a different term was used, such as “positive feedback”. Future training may also want to consider using early childhood terminology such as, “descriptive suggestion” compared to descriptive prompting. This may affect the teachers’ acceptance of and use of the strategies. Future research should incorporate ECE terminology into the BITS to examine the effects.

Environmental Variables

There is a need to be sure that teachers select intervention activities that include peers. Teachers should have been encouraged to ensure that the target child was involved in an activity that had peers present. David chose the computer center for 3 of the 9 observations where he played independently on his own computer. Two of the observation days he spent most of the observation at the art center coloring by himself. Sean chose a center where no peers were present on one of the days. Future research should consider incorporating a discussion on activity selection to ensure that activities selected encourage interaction with peers.

Training Content

Training should provide more information regarding the difference between language and communication and developmental milestones in language use. It was surprising that both Teacher 2 and 3 described their target children as being comparable to same-age peers in the area of communication. Their opinion as to age-level functioning in the area of communication seemed to be based on the fact that the children were able to express basic wants and needs. This is surprising considering the fact that communication for children this age is so much more than simply expressing basic wants and needs. At this age, children can communicate a range of information beyond expressing basic wants and needs (McCormick, 2006). This has important implication for future training because teachers may not feel that intervention to address communication is warranted if they believe children to be on target for developmental milestones.

This study raises a number of issues for further investigation. For example, did the teachers' continue to use prompting and praising strategies after the study, and if so,

how did they affect child behavior? Also, future research should examine the benefit of BITS for training daycare providers. Also of interest would be comparison of the BITS with traditional group training typically offered to ECE teachers.

Implications for Practice

One of the most pressing problems faced by community preschools is preparation of ECE teachers for inclusion of children with disabilities (Bruder, 1998; Burke, McLaughlin, & Valdivieso, 1988; Crowley, 1999; De Bord, 1993;). Young children with autism are among the most challenging due to their significant delays in communication and social skills as well as stereotypical behaviors. Recall that the major problems with traditional in-service training were that the training was (a) difficult to access, implement, and generalize; (b) not relevant to the children that teachers worked with on a daily basis; (c) not specific to social and communication interventions; and (d) incompatible with adult learning principles. BITS addresses these problems. Evaluations of the staff training technology have been primarily restricted to segregated settings such as institutions, special education classrooms (Parsons, Reid, & Green, 1996), and group homes (Demchak & Browder, 1990). Few investigations of programs for training staff to teach individuals with disabilities have been conducted in inclusive, community-based settings (Demchak & Browder, 1990). This research contributes to the limited studies that were conducted in inclusive settings (Goldstein & Cisar, 1992; Kohler, Anthony, Steighner, & Hoyson, 2001; Kohler & Strain, 1997; Schepis, Reid, Ownbey, & Parsons, 2001; Schepis, Reed & Clary, 2003). This research also adds important components identified as lacking in the current literature such as: (a) addressing social validity, (b) focusing on the communication and social skills of preschool-age children, (c) using teachers as

interventionists, (d) assessing for fidelity of treatment, (e) aligning training to be compatible with adult learning principles and early childhood theory, (e) making training accessible for teachers, (f) having training that is relevant and feasible for teachers to implement and that can be generalized to their classroom. The results of this study suggest that BITS could be included as part of the pre-service curriculum for ECE teachers. Also BITS could be provided as a part of pre-service and in-service training for ECSE. It is a useful vehicle for ECSE teachers to use when preparing ECE teachers to support children with autism in inclusive classrooms.

Conclusion

There is substantial research supporting inclusion of children with autism and individualizing their services (Guralnick, 2001; McCormick, 2006). One main issue is the need to develop strategies that special education professionals can use to assist ECE teachers to interact with children with autism in ways that facilitate peer engagement. This brief and individualized professional development approach is in marked contrast to traditional in-service training which is expensive, difficult to access, and so broad that it could be termed a “shotgun approach.”

This research suggests that in a relatively brief amount of time (one 90 minute training session and three feedback sessions involving a maximum of 15 minutes per session), it is possible to train ECE teachers to use effective strategies (e.g., prompts and praise) to increase the engagement of children with autism with their peers. There was a relationship between teachers’ use of descriptive prompting and child engagement. Descriptive prompting increased for all three teachers after the training. This increase in

prompting appeared to have an effect on child engagement as all three children demonstrated gains.

Appendix A

Teacher Questionnaire

- 1) Name: _____
- 2) Degrees:
- 3) Certificates or other credits?
- 4) Please describe any training (if any) dealing with children with autism:
- 5) Years at current preschool setting: _____
- 6) Years teaching Early Childhood Education: _____
- 7) What kind of experiences have you had with a child or children with autism?
- 8) How many of the children have Individual Education Programs (IEP's) through the Department of Education? _____

Enrollment:

How many students are dually enrolled in Head Start and Special Education (SPED): ____

How many are enrolled under Head Start? _____

How many children meet the criteria for special education? _____

Speech/Language _____

Developmental Delay _____

Hearing Impairment _____

Behavior Disorder _____

Visual Impairment _____

Health Impairment _____

Multiple Disability _____

Autism _____

Communication:

Speech:

Gestures:

Cries:

Age:

3 years _____

4 year _____

5 years _____

Gender:

Males:

Females:

Ethnicity:

Caucasian:

Hawaiian/Part Hawaiian:

Japanese:

Mexican:

Other Pacific Islander:

Puerto Rican:

Portuguese:

Mixed:

Other: _____

Appendix B

Pre-Baseline Communication with ECE Teacher



- Two to three observers will be looking at interactions in the classroom.
- Observers will begin as soon as consent is received and observation dates are set up between the researcher and classroom staff.
- During the 15 minutes observation I will be observing interaction between you, the child, and the child's peers so I would appreciate if you would:
 - Do what you usually do with the child
 - Stay in the general area where the child is
- I will ask the aide, skills trainer, or special education teacher to please not interact with the child during the 15-minute observation the periods.
- Neither the observer(s) nor the researcher (me) will speak with you during the observation periods and we will not interact with other children or staff when we are in the classroom.
- I will not be able to provide you with any feedback during first three observation days (baseline).
- I will share all of the data with you (and any others you wish) when the study is complete.
- We need to set up some communication procedures so that I know if you or the target child are absent or if there is something different in the daily schedule. (I don't want the observer(s) to get here and find out that either you or the child are not here or there is an field trip or something.) What is the best way for me to check in with you? What is the best time to reach you?

- After the baseline observation sessions, I will ask you to participate in a 75 minute training session. We can be flexible as to where the training is held and of course, I will schedule it at a convenient time for you. However, I do need for it to be within the first week of completion of the initial three observations. I realize that it is asking a great deal of you as a busy teacher to set aside 75 minutes of time. I would like to give you a special treat – a \$25 gift certificate for the best restaurant in Honolulu—Le Guignol.

Appendix C

Observer Training Manual Overview

The data collection system contains two major observation categories:

- 1) **Child Behaviors**
- 2) **Teacher Behaviors**

There are two behaviors in the child behaviors category.

- 1) **Child Behaviors**

- A) *Cooperative Participation*: Target child and a typically developing peer are engaging in a mutual activity that clearly displays a common purpose with or without a play object.
- B) *Communication*: Communication involves the target child making a verbal or nonverbal communicative act while engaged in a mutual activity with a peer with or without a play object.

There are three behaviors in the teacher behaviors category, two of which contain two sub categories,

- 2) **Teacher Behaviors**

- A) **Teacher Prompt**

- a. *General Prompt*: Providing a cue (verbal or nonverbal) to the peer or target child to encourage cooperative participation or communication. (If general prompt is directed to the peer, it must be in relation to the target child)
- b. *Descriptive Prompt*: Suggesting or showing verbally or nonverbally a peer or target child exactly what to do to cooperate or communicate with each other. (If descriptive prompt is directed towards the peer, it must be in relation to the target child)

- B) **Teacher Praise**

- a. *Non Specific Praise*: General approval of the target child or peer's engagement in cooperative participation or communication with each other. (Non-specific praise directed towards the peer must be in relation to the target child)
- b. *Specific Praise*: Specific verbal or nonverbal approval to the peer or target child that names and/or compliments a cooperative act or communicative act with each other. (Specific praise directed towards the peer must be in relation to the target child)

- C) **Proximity**

- a. Teacher is approximately within 6 feet of the target child and
 - is able to see the target child peripherally or
 - is physically contacting the child

GENERAL DEFINITIONS:

Free-play: Children have access to multiple activities, materials, and spaces in the classroom. Children may freely choose activities to participate in with minimal supervision and monitoring from teachers or aides.

CHILD BEHAVIORS:

You will be recording 2 child behaviors, 1) Cooperative Participation and 2) Communication

Coding Definitions:

1) Cooperative Participation (CP): Target child and a typically developing peer are engaging in a mutual activity that clearly displays a common purpose with or without a play object.

Put a slash mark through the coded letters CP if the target child is engaging in cooperative participation with a play object.



Examples of (CP) with play object (SLASH)

- ~~CP~~ Target child is hammering a peg with a toy hammer while peer holds the peg
- ~~CP~~ Target child hands a piece of a track to a peer who is building a track for a train
- ~~CP~~ Target child and peer are sharing paints and painting on the same paper together
- ~~CP~~ Target child is rolling a ball to his peer.

Do not slash through the coded letters CP if the target child is not physically manipulating an object in a manner in which the object was intended to be manipulated while jointly engaging with another child.



Examples of (CP) with a play object (NO SLASH)

- CP** Target child throws his toy car on the floor after peer handed him the car.
- CP** Peer is handing a block to the target child, but the target child's back is turned and is spinning the wheels of his car.
- CP** Target child is taking an object away from the peer.

Put a slash mark through the coded letters CP if the target child is engaging in cooperative participation without a play object.



Examples of (CP) without a play object (SLASH)

- ~~CP~~ Target child is marching to a song with a group of peers while holding hands with a peer.
- ~~CP~~ Target child is imitating peers actions as they sin "Itsy Bitsy Spider"
- ~~CP~~ Peers are chasing the target child on the playground and the target child is looking behind at the peers and smiling.
- ~~CP~~ The target child approaches a peer and gestures to the peer that he want to play bunnies by approaching the peer, jumping like a bunny and saying, "bunny?"

Do not slash through the coded letters CP if the target child is not engaging in cooperative participation without a play object.



Examples of non cooperative participation without a play object (NO SLASH)

- CP** Target child is walking towards his peer, but is not making eye contact and it is unclear as to the target child's intent.
- CP** Peers are playing "Ring Around the Rosie's". The target child is watching from across the room.
- CP** The target child and the peer are sitting next to each other listening to a song playing in the background, but not acknowledging each other.

Examples of NOT physically manipulating an object in a manner in which the object was intended to be manipulated while jointly engaging with another child:

- CP** Mouthing a toy car
- CP** Tilting to the side and gazing at the wheels of the car
- CP** Taking a baby doll and throwing it
- CP** Holding an action figure, but staring out into space for the whole interval
- CP** Peers are completing a puzzle, but target child is sorting the puzzle pieces by size

Note: If target child is in proximity to her peers that are engaged in a mutual activity that share a common purpose, the target child must be doing one of the following in order for it to count as CP:

- Manipulating an item that is associated with the common purpose of an activity in a manner in which the object was intended to be manipulated
- Telling someone she is going to go get an item that is associated with the common purpose of an activity
- Saying "Ok" to the suggestion to go get an item that is associated with the common purpose of an activity

Examples and non examples of activities that involve a common purpose

Common Purpose	No Common Purpose
Sitting next to each other playing with blocks. The peer says, "let's get all the people out of the bin." Target child begins to take the people out with her peer.	Playing next to each other playing blocks
Target child pours water into her peer's cup her peer is holding	Manipulating similar objects at the water table
Sitting in the reading/book center reading the same book together.	Sitting in the reading/book center reading separate books
Target child is playing in the home center and is putting on an apron. A peer comes next to her and grabs the chef hat and puts it on. Target child and the peer are facing each other.	Playing in the home center. Target child is dressing up into an apron. No one else is dressing up. Target child is playing in the home center and is putting on an apron. A peer comes next to her and grabs the chef hat and puts it on. Target child and the peer are not facing each other.

Building a tower, putting all the fishes in the "sea", singing a song, completing a puzzle, sharing paints to complete the same painting, holding hands and playing ring around the rosies, looking at the same book together, putting items into the play refrigerator, dressing up in the home center to play house, playing musical instruments in the music center together, playing the computer together by completing a game and taking turns using the mouse, pointing out interesting things in the science center to each other	
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Other Questions and Answers regarding CP

Question: If the target child appears to be imitating the actions of peers (e.g. all three children are pouring water from a cup into a funnel at the water table) would this count as CP?

You cannot guess if they are imitating each others actions or not. Target child clearly appeared to be "in her own world" by displaying no eye contact with peers, wandering off on two occasions, going back and forth from the animals to the water with no interactions with her peers. If the teacher said watch what ____ (peer) is doing, can you do that? And then Target child imitated, then you can count it as CP, but you have to know for sure.

Parallel play is not counted a CP: Target child is playing next to a peer using the same, similar or separate materials and are not engaged in a mutual activity that displays a common purpose.

Examples:

Peer and target child are painting together side by side using the same paints. (common purpose is sharing paints) (CP)

Target child and peer are playing together at the sand table using separate tools.
(if there is no common purpose in sight then this would be parallel play)
(CP)

Target child and peer are playing with the same materials at the sand table. The target child is pouring water into her funnel and the peer is pouring water into her funnel. No eye contact is being made. (CP)

Peer is holding the funnel as target child is pouring sand in it.

The teacher says to the target child, "Watch what Joey does" (referring to Joey catching water from the funnel into his cup). Target child imitates the action. (CP)

Target child and two peers are playing with similar materials at the water table, the teacher says, "Look Sally wants to play, too." The target child looks at the peer and smiles.]

Coding Definitions:

2) Communication (C): Target child making a verbal or nonverbal communicative act while engaged in a mutual activity with a peer with or without a play object.

Verbal communication involves the target child communicating with words that is clearly directed to a peer through one of the following means:

- Verbally requesting an object or from peer
- Verbally requesting to engage in a desired activity
- Verbally requesting for peers assistance, interaction, or affection
- Making a declaration or comment to peer
- Protesting
- Asking a question to the peer
- Answering a question posed by the peer

Put a slash mark through the coded letters C if the target child makes a verbal communicative act with a peer while engaged in a mutual activity with or without a play object.



Example of Verbal (SLASH)

~~C~~ Target child and peer are completing a puzzle together. The peer asks the target child what he wants to do after they complete the puzzle. The target child answers, "Blocks!"

Non Verbal Communication involves communication without words and clearly directed to a peer through one of the following means:

- Gestures (e.g., conventional movements such as pointing, waving, nodding, shrugging shoulders)
- Showing affection by patting peer, holding hands, hugging another child.
- Physical proximity (e.g., positioning oneself close to peer or desired object)
- Facial Expression (e.g., smiles, frowns, wrinkles forehead, pouts, shows surprise)
- Showing-giving-taking object (e.g., holding up object facing peer, handing object to peer, taking object from peer)
- Enactment (e.g., looks at peer to recreate chase)
- Simple speech-sign-written words (e.g., one or two words/short phrases spoken, signed or expressed through augmentative communication system)

Put a slash mark through the coded letters C if the target child makes a verbal or nonverbal communicative act with a peer while engaged in a mutual activity with or without a play object.



Example of Nonverbal I (SLASH)

-  Target child approaches a peer in the home center and hands the peer a picture indicating that the target child wants to join them.

No Slash for (CP) or I if the target child is:

- involved in a self-care activity
- transitioning from one activity to another

TEACHER BEHAVIORS:

You will be recording three teacher behaviors, 1) prompts, 2) praise, and 3) proximity.

Prompts may be general (G) or descriptive (D).

Coding Definitions:

1) Prompts

General Prompting (G): Providing a cue (verbal or nonverbal) to the peer or target child to encourage cooperative participation or communication. (If general prompt is directed to the peer, it must be in relation to the target child)

Put a slash mark through the coded letters G if the teacher gave a general prompt.



Examples include:

Verbal:

- ~~G~~ "Aaron also likes blocks."
- ~~G~~ "Have you noticed Kathy is in the home center?"
- ~~G~~ "Jo wants to play blocks."

Nonverbal:

- ~~G~~ Teacher directs the target child to their visual schedule where a picture of Sally and the home center are located indicating that it is time to play with Sally in the home center.
- ~~G~~ The teacher hands a block to the target child and signs "help". She then points in the direction of two boys building a tower in the building center.

Descriptive Prompting (D): Suggesting or showing verbally or nonverbally a peer or target child exactly what to do to cooperate or communicate with each other. (If descriptive prompt is directed towards the peer, it must be in relation to the target child)

Put a slash mark through the coded letters G if the teacher gave a descriptive prompt.



Examples include:

Verbal:

- D** The teacher gives a stethoscope to a student that the target child previously showed interest in and suggested to the peer, "Why don't you give it to Carter and help him place it on his ears and see if he can hear your heart beating?"
- D** The teacher tells a student that the target child loves to play with mechanical toys and suggests, "Carter is so interested in mechanical toys, why don't you two work together to screw the bolts on the wood piece?"
- D** The teacher hands a block to the target child and suggest in front of his peers, "You are building such an amazing tower; maybe Myles can help you make it a little higher?" "Can Myles help you build the tower?" The teacher hands the block to the target child and verbally prompts him by saying: "Myles Joey said you can help him build the tower, can you put this on top?"

Note: Key words might include the following:

- "Say...."
- "Look..."
- "Ask..."

Nonverbal:

- D** The teacher directs the target child to a visual list of pictures indicating to the child to say peer's name and ask, "May I have a turn?"
- D** The teacher places a picture of a Lego structure already built between the target child and signs the words finish and together to the both of them.
- D** The teacher uses physical guidance to direct the target child to hold hands with a group of peers beginning to play London Bridges.

Note: Hand over hand prompting to communicate will ALWAYS be a descriptive prompt.

Coding Definitions:

Praise may be non specific (NS) or specific (S).

2) Praise

Non Specific Praise (NS): General approval of the target child or peer's engagement in cooperative participation or communication with each other. (Non-specific praise directed towards the peer must be in relation to the target child)

Put a slash mark through the coded letters NS if the teacher gave non specific praise.

NS

Examples include:

Verbal:

- *Teacher says to the peer, "Great job!" in relation to taking the piece of fruit from the target child.*
- *Teacher says to the target child, "Way to go." In relation to the target child getting in side the tent with his peer.*
- *Teacher says to the peer, "Good boy!" in relation to the peer taking the target child's hand to lead them to the puzzles.*
- *Teacher says to the target child, "Nicel" in relation to the target child tapping the peer's shoulder for a turn in looking at the sensory toy.*

Nonverbal:

- *Teacher pats a peer on the back in relation to the peer showing the target child how to stir the soup in the home center.*
- *The teacher gives the target child a "thumbs up" in relation to the target child putting the last puzzle piece in a puzzle he was working on with a peer.*
- *The teacher gives a big smile to the peer for holding the car while the target child pumped gas.*

Specific Praise (S): Specific verbal or nonverbal approval to the peer or target child that names and/or compliments a cooperative act or communicative act with each other. (Specific praise directed towards the peer must be in relation to the target child)

Put a slash mark through the coded letters S if the teacher gave specific praise.



Examples include:

Verbal:

- *Teacher tells peer: "I like the way you helped Jimmy (target child) build the castle together!!"*
- *"You two are cooperating together by sharing the glitter to make your picture!"*
- *"That's great how you (peer) are holding the bucket for your friend (target child) so she can put all the scarves in!"*
- *Teacher says to peer: "You did a fantastic job building the train track together. Myles (target child) gave you the pieces out of the bin and you figured out where they went...you work so well together! I like that!!"*
- *"I like the way you asked Joey to share!"*
- *"Wow! You smiled at your friend!"*
- *"You used your words to tell your friend you wanted the car. I like that!"*

Nonverbal:

Teacher points to a picture representing sharing legos and pairs this with a pat on the target child's back.

3) Proximity

Proximity (P): Teacher is approximately within 6 feet of the target child and

- is able to see the target child peripherally or
- is physically contacting the child

Put a slash mark through the coded letters P if the teacher is within proximity of the target child.



Examples:

- *The target child is faced away from the teacher. The teacher is behind the target child physically guiding him back to the sand play area.*

- *The teacher is sitting with the target child and peers in the block corner. The target child is within 6 feet of the teacher, but turned away from the teacher, lying on the ground stacking blocks. The teacher can see him to her right without having to turn around.*

Non Examples:

- *The target child is within 1 foot of the teacher, but behind the teacher. The teacher has to turn around to see the child's face.*
- *Teacher is within 6 feet of target child, but cannot see the child's face as he is behind the easel painting.*

Data Collection Procedures

- 1) At the top of the data sheet you will see the following. Fill out the highlighted sections upon arrival to the classroom.
 - a. Date
 - b. Target Child
 - c. Observer
 - d. School
 - e. Teacher

Example:

Date: <i>2-20-07</i>	Target Child: <i>Joey Smith</i>	Observer: <i>Sally Rogers</i>	School: <i>Millant Head Start</i>	Teacher: <i>Joan Lee</i>	Total Observation Time:	
					Start Time:	End Time:

- 2) Review the behaviors and definitions.
- 3) Make sure that your fanny pack, tape, tape player, batteries, extra batteries, and a pencil are available.
- 4) Locate the child and the teacher.
- 5) Fill in the start time on the data sheet.
- 6) When free play begins, start the tape and begin recording.
- 7) You will look for 5 seconds and then record for 5 seconds. Be sure to keep your head down during the 5 seconds you are recording the behaviors.
- 8) If target behavior occurs at least 1x during the 5s interval make a slash mark (/) through the behavior code for that behavior in the 5 second recording time.
- 9) If behaviors did not occur during the 5 second interval, leave the box containing the behavior code blank. No slash mark means the behavior did not occur during the 5 seconds.

Example:

Intervals		1 min					
		1	2	3	4	5	6
Child	Behavior	CP	CP	CP	CP	CP	CP
		C	C	C	C	C	C
Teacher	Prompt	G	G	G	G	G	G
		D	D	D	D	D	D
Teacher	Praise	S	S	S	S	S	S
		NS	NS	NS	NS	NS	NS

- 10) Continue the same procedures as near to 15 minutes as possible.
- 11) At the end of the 15 minutes, turn off the tape player and record the end time and total time.
- 12) Be sure to list any unusual circumstances in the comments or notes sections (e.g., child was sick today. He had a cough, runny nose and a fever; target child was tantrumming for first 15 minutes; there were fewer children today). Please also note the toy/toys or specific activity/activities that target child was engaged with. Use the back of the data sheet if you want to add other comments about the day.

Data Sheet

Date:	Target Child:	Observer:	School:	Teacher:	Total Observation Time:	
					Start Time:	End Time:

Intervals	1 min						2 min						3 min						
	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	
Child Behaviors	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	
	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	
Teacher	Prompt	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
		D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
	Praise	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Proximity	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Notes:																			

KEY
Child Behaviors
Cooperative Participation (CP)
Communication (C)
Teacher Behaviors
General Prompt (G)
Descriptive Prompt (D)
Specific Praise (S)
Non-Specific Praise (NS)
Proximity (P)

Intervals		4 min						5 min						6 min					
		1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
	Child Behaviors	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP
		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Teacher	Prompt	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
		D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
	Praise	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Proximity	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Notes:																			

Intervals		7 min						8 min						9 min					
		1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
	Child Behaviors	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP
		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Teacher	Prompt	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
		D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
	Praise	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Proximity	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Notes:																			

Intervals		10 min						11 min						12 min							
		1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6		
Child Behaviors		CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP		
		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C		
Teacher		Prompt		G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
				D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
		Praise		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
				NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		Proximity		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Notes:																					

Intervals		13 min						14 min						15 min							
		1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6		
Child Behaviors		CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP		
		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C		
Teacher		Prompt		G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
				D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
		Praise		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
				NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		Proximity		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Notes:																					

Comments:

Comments: (Indicate an unusual circumstances i.e. child was sick today. Note toys and activities used)

Practice

Child Behavior:

CP	C	Target child is taking an object out of peer's hands and walks to the other side of the room.
CP	C	Target child is holding the cooking pan while peer is pretending to stir.
CP	C	Target child is looking through the pages of the book while allowing peers to point to pictures.
CP	C	Target child is rolling a ball to his peer.
CP	C	Target child and peers are putting something away together during cleanup.
CP	C	Target child hand his diaper to his peer during toileting.
CP	C	Peer is handing a block to target child and target child's back is turned away.
CP	C	Peer and target child are painting together side by side using the same paints.
CP	C	Target child and peer are playing together at the sand table using separate tools.
CP	C	Target child and peer are playing together at the sand table.
CP	C	Peer is holding the funnel as target child is pouring sand in it.
CP	C	Target child is smiling as two peers are singing "Itsy Bitsy Spider".
CP	C	Target child is imitating peers actions as they sing "Itsy Bitsy Spider".
CP	C	Target child is walking over to the sensory center where his peer is
CP	C	Staff is prompting target child to say please to his peers to indicate he wants to play with the bumble ball.
CP	C	Target child and peer are drawing on the same paper together.
CP	C	Peer runs outside and target child follows him.

CP	C	Target child grabs peers hand and drags him to the bubble center.
CP	C	Staff is suggesting to the peer to help target child turn on the train.
CP	C	Peer turns on the train for target child and hands it to him.
CP	C	Target child is painting on an easel. Her peer is painting on another easel next to her. Target child looks at her peer and points to her picture.
CP	C	The teacher just said, "Let's set the table." Target child is standing at the table <u>looking</u> at a milk carton. Her peers are coming to and from the table with items to set the table with.
CP	C	The teacher just said, "Let's set the table." Target child is standing at the table <u>holding</u> a milk carton that is on the table. Her peers are coming to and from the table with items to set the table with.
CP	C	The teacher just said, "let's build a tower". Target child is sitting in front of the teacher looking at the blocks that the peers are beginning to use to build a tower.
CP	C	The teacher just said, "let's build a tower". Target child is sitting in front of the teacher looking at the blocks that the peers are beginning to use to build a tower.
CP	C	Target child's peers are building a train track and Target child is holding the train, facing at least one of the peers. She is singing to herself and holding the train up in the air as she sings. She is not making eye contact with her peers.
CP	C	Target child was sorting dominos. Her peer was stacking dominoes next to her, but building a house with them. Target child is standing up and looking at her dominoes from different vantage points.
CP	C	The target child and her peer are sitting next to each other at a table and playing with the same blocks. The teacher says, "Let's build a school." To Target child. Target child begins to manipulate the blocks. The teacher says to Target child, "Good balancing.". The peer is manipulating the blocks
CP	C	Target child is reading a book with her peer. They are both holding the book. Target child is zoning out by looking up into the air.
CP	C	Target child is in the home center. Her peers are next to her feeding their babies. Target child had a baby, too, but is not feeding it. Instead she is holding the baby by the arm and watching them feed their babies.
CP	C	Target child is in the home center. Her peers are next to her feeding their babies. Target child had a baby, too, but is not feeding it. Instead she is cuddling the baby and giving the baby kisses, but is turned away from her peers.

CP	C	Target child is in the home center. Her peers are next to her feeding their babies. Target child had a baby, too, but is not feeding it. Target child is holding the baby and a spoon, but is not feeding her baby. She is sitting next to her peers.
CP	C	Target child and her peers are standing all the people up in a block. Target child is off to the side (partially facing her peers) using the same people, but lying hers on their backs and saying "night, night" each time she lies one down.
CP	C	Target child and her peers are standing all the people up on a block. Target child is using the same people, has one in hand but is not stacking the people in the house. She is holding it to her mouth and looking at the ground.
CP	C	Target child and her peers are at the block center together. Her peers are standing all the people up on a block. Target child is facing them and pulling people out of a bin, naming them and putting them back in the bin.
CP	C	A peer is stirring something in a bowl. Target child is standing next to her not holding any items.
CP	C	A peer is stirring something in a bowl. Target child is standing next to her not holding any items. The peer says, "I need some butter." Target child immediately turns to go to the refrigerator.
CP	C	A peer is stirring something in a bowl. Target child is standing next to her not holding any items. The peer says, "I need some butter." Target child , says "ok" and immediately turns to go to the refrigerator.
CP	C	A peer is stirring something in a bowl. Target child is standing next to her not holding any items. Target child asks with teacher prompting, "Do you want butter." The peer looks up at Target child.
CP	C	Several children are building a house together (the teacher suggested it) some are putting up the walls, others are placing people inside, and Target child is getting people out of the bin, looking at them, and placing them on blocks and in the house.
CP	C	Target child is at the water table taking animals back and forth from the table to the water. Her peers are pouring water into their funnels, picking up water animals and having them swim, and watching the water run out of their funnels.

Teacher Prompts

G	D	The teacher asks a peer, "Can you give the action figure to Jimmy (target child). I think he wants to play with you."
G	D	The teacher says to the peer, "How about you give it to Mike (target child) first and you can play with it next."
G	D	The teacher points to a picture of an icon indicating to the target child to go tap his peer on the should, look at him, and ask, "Can I play?"
G	D	The teacher asks a peer, "Do you want to play with Sally (target child)?"
G	D	The teacher tells a peer, "I think Jo (target child) would love to help you on the computer, can you go ask him to join you and take turns on the computer?"
G	D	The teacher asks a peer, "Can you give some of you beads to Kelly (target child)?"
G	D	The teacher uses physical prompting to guide the target child to the water play area where his peers are playing with boats.
G	D	The teacher signs to the target child, "share" indicating that he needs to take turns with his peer using the kaleidoscope.
G	D	The teacher tells a peer, "Cody (target child) looks like he needs some help."
G	D	The teacher asks a peer, "What could you play together with Jason (target child)?"
G	D	The teacher is physically holding the target child in her lap where previously the teacher was prompting the target child to hand groceries to his peer.
G	D	The teacher prompts the peer by saying "look at him (target child)" in relation to the peer attempting to ask the target child: "Do you want to play robots?"
G	D	The teacher says to the peer, "show him how to use it" in relation to showing him how to use the wisk to stir.
G	D	Teacher says to the peer, "Aaron (target child) also likes blocks."
G	D	The teacher gives a stethoscope to a student that the target child previously showed interest in and suggested to the peer, "Why don't you give it to Carter (target child) and help him place it on his ears and see if he can hear your heart beating?"
G	D	Teacher directs the target child to his visual schedule where a picture of Sally (peer) and the home center are located indicating that it is time to play with Sally in the home center.
G	D	The teacher uses physical guidance to direct the target child to hold hands with a group of peers beginning to play London Bridges.
G	D	Teacher says to the target child, "Jo (peer) wants to play blocks."

G	D	The teacher hands a block to the target child and suggest in front of his peers, "You are building such an amazing tower, maybe Myles (target child) can help you make it a little higher?" "Can Myles help you build the tower?" The teacher hands the block to the Myles and verbally prompts him by saying: "Myles Joey said you can help him build the tower, can you put this on top?"
G	D	The teacher prompts the target child to say "my turn" to the peer who is now holding the ball.
G	D	The teacher hands a block to the target child and signs "help". She then points in the direction of two boys building a tower in the building center.
G	D	Teacher says to the peer, "Have you noticed Kathy (target child) is in the home center?"
G	D	The teacher uses hand over hand prompting to place the target child and peers hands together to form a circle and begins singing ring around the rosies.
G	D	The teacher prompts the peer to stand up in the home center, but there is no definite cooperative activity going on.
G	D	The teacher prompts the child to go to his visual schedule to check the next icon which is bathroom.
G	D	The teacher physically prompts the target child to take his hands out of his mouth at the water table. The target child and peer were playing with separate tools and were not engaged in a cooperative act.
G	D	Teacher says "how about let's cook?" to peer and target child.
G	D	The teacher says to the peer, "I don't think he likes that." In relation to the target child ignoring the peers attempt to hand him the baby doll.
G	D	The teacher says to the peer, "I don't think he likes that, let's try soething else." In relation to the target child ignoring the peers attempt to hand him the baby doll.
G	D	The peer is attempting to hand the target child a fruit in the home center. The teacher says to the peer: "say here Connor" (target child).
G	D	The peer takes the carrot out of the shopping cart. The teacher prompts the target child to ask his peer : "Look, another carrot, say I want one"
G	D	The peer takes a block from the target child. The teacher says to the peer, "hold on, let Max (target child) give it to you.

Teacher Praise

S	NS	Teacher pats a peer on the back in relation to the peer showing the target child how to stir the soup in the home center.
S	NS	Teacher says to the peer, "Great job!" in relation to taking the piece of fruit from the target child.
S	NS	The teacher gives the target child a "thumbs up" in relation to the target child putting the last puzzle piece in a puzzle he was working on with a peer.
S	NS	Teacher says, "I knew you two (target child and peer) could work together to complete the puzzle."
S	NS	Teacher says, "It looks like Mike (target child) and Jimmy (peer) are working as a team to make a tall tower."
S	NS	The teacher gives a big smile to the peer for holding the car while the target child pumped gas.
S	NS	Teacher says to the target child, "Thank you for helping your friend (peer) set the table for the tea party."
S	NS	Teacher says, "Meg (target child), you are showing you are a good friend (peer) by helping Myra find the clothes for dress up."
S	NS	Teacher says, "Wow, nice." To a peer for asking the target child for items from the refrigerator so they could make dinner.
S	NS	Teacher says to the peer, "Good boy!" in relation to the peer taking the target child's hand to lead them to the puzzles.
S	NS	Teacher says, "Good helping." To a peer for helping another peer complete a puzzle. The target child is playing something else.
S	NS	Teacher says, "OOH, I like it when you two play together so nicely." To the target child and peer for making a fence for their horses.
S	NS	The teacher is playing with the target child and says "very good" when he hands her the bus.
S	NS	Teacher says, "Thank you for working like a team." In relation to the peer and target child shooting baskets in the hoop.
S	NS	The peer says to the target child, "put in" in relation to putting the vegetable in the bowl to cook soup. The teacher looks at peer and smiles.
S	NS	The target child puts the food in the bowl after the peer prompts him, the teacher says to the target child, "Yael!"
S	NS	The peer says to the target child, "Look, you have the bananas." The teacher says to the peer, "Oooh that was a nice sentence!"
S	NS	The target child is putting circular blocks on his arms. The peer says to the teacher, "look he wants to be a robot!" The peer says, "robot". The teacher says to the peer, "That is great you noticed what Lee (target child) was pretending to be!"
S	NS	The target child taps the peer on the shoulder indicating that he wants a turn with the sensory toy. The teacher says to the target child, "good asking."

Proximity

yes	no	Teacher is within 6 feet but talking to another peer. She can still see the back of the target child.
Yes	no	Teacher is within 6 feet but turned away from the target child.
Yes	no	The teacher is within 6 feet and facing the target child, but prepping some materials.
Yes	no	The teacher is within 6 feet and facing the target child, but talking with another teacher.
Yes	no	The target child is faced away from the teacher. The teacher is behind the target child physically guiding him back to the sand play area.
Yes	no	The teacher is sitting with the target child and peers in the block corner. The target child is within 6 feet of the teacher, but turned away from the teacher, lying on the ground stacking blocks. The teacher can see him to the right without having to turn around.
Yes	no	The target child is within 1 foot of the teacher, but behind the teacher. The teacher has to turn around to see the child.

Technical Questions and Answers

Q: What if target child leaves the room to go into another area?

A: Stop the tape, do not take any data and wait until child returns.

Restart the tape when the child returns to the play area.

Q: What if there is a fire drill?

A: Stop the tape, exit the class with the children, and begin when children return to the play arena

Q: What if child begins to tantrum and throws objects?

A: Continue taking data. Let the staff handle the situation. Do not interact with child. At no time should you interact with the staff or children. You should "fade into the woodwork". Be sure to note in the comment section why there were no (CP) or I because of tantrumming. You need to wait out the 15 minutes of observation.

Q: What if I have to go to the bathroom?

A: You better not.

Q: What if child goes to the bathroom?

A: Stop tape and data collection and restart the tape when he returns.

Q: What if target child is not present when I arrive?

A: Call and tell researcher.

Q: What if I cannot see the child when the interval hits because they are on the other side of a center?

A: You must situate yourself so you can see the child at all times and be unobtrusive as possible.

Q: What if the teacher decides to change the time of free-play and takes the children out to ride the racers because it is a sunny day?

A: Ask teacher when she is planning to have free-play. If you have to leave before free-play, call the researcher (954-1250).

Q: What if my tape player stops working?

A: Stop if you have no timer. Call the researcher.

Q: What if the Early Childhood Education Teacher is not there?

A: First ask if she will be returning soon? If not, call the researcher and do not take any data that day.

Q: What if another adult is working with the target child during data collection.

A: Stop the tape, ask the adult to fade back and remind the teacher that you are taking data today. Restart the tape and resume data collection. Be sure to note if the teacher appeared occupied etc. and was not interacting with the target child or his/her peers in the comment section.

Q: What if a preschooler comes up to you and hands you a toy or attempts to start a conversation?

A: You should "fade into the woodwork". At no time should you interact with the children. Do not make eye contact. Ignore the child. If possible get up and move to another area where you can still see the target child and teacher.

Q: What if there is a substitute teacher?

A: Do not take data. Call the researcher.

Appendix D

A Brief, Individualized, Training System (BITS)

Phase 1 **Overview**

- A) Discuss the rationale for increasing cooperative participation and communication of children with autism with their typically developing peers and talk about each of the bulleted points (Handout 1).
- B) Introduce the three scenarios of common situations where interactions may occur between preschoolers during free-play activities listed on handout (Handout 2).
- C) Introduce five strategies to promote cooperative participation and communication listed on handout (Handout 2).
- D) Provide definition of cooperative participation and communication (Handout 3).

Phase 2 **Video Segments**

Preschool teachers will be shown video segments depicting scenarios and strategies to promote cooperative participation. The video segments illustrate free-play time in two different preschool settings. Both settings illustrate a preschool child diagnosed with autism and 4 typically developing preschool children.

Play the video segments depicting the three scenarios of common situations where interactions may occur between preschoolers during free-play activities listed and have teachers refer to handout 2.

Part 1 **Scenarios:**

The first portion of the videotape illustrates two different examples of each scenario. Two examples are depicted for Scenario A through C. Myles and Carter are the target children with a diagnosis of autism. Nash, Carolyn, and Daniel are the peers.

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Scenario A:

Target child is not in an interest center or is in an interest center without a peer.

Segment Description (A/1):

Myles is playing with a miniature toy fire engine by himself. He sits up and spins the wheels. He lays his head down on the ground and looks at the side of the fire engine while moving it forward. Meanwhile two peers are setting up a wooden train track together.

Segment Description (A/2):

Carter is takes a Kleenex out of a Kleenex box, wipes his face and places the Kleenex back in the box. One peer is 1 foot away playing with a toy house and wooden miniature people. Approximately 6 feet away two other peers are playing on the carpet together. Carter walks from the Kleenex box to a table with craft items, picks a piece up and then places it back.

.....
Scenario B:

Target child and a peer are in an interest center but are not participating cooperatively in an activity.

Segment Description (B/1):

Carter pushes a plane around the perimeter of the carpet while his peers play cooperatively with a village set. He is turned away from his peers and makes no eye contact.

Segment Description (B/2):

Myles is lying down next to his peers and the toy train set. He has a train in his hand and moves it across the floor while gazing at it. He makes no eye contact with peers. His peers are building a train track with facilitation from the teacher.

.....
Scenario C:

Target child and a peer are cooperatively participating in an activity in an interest center.

Segment Description (C/1):

Myles and a peer are sharing sequins from the same jar to build a collage together.

Segment Description (C/2):

Myles holds the hands of his peers while they sing "Ring Around the Rosies" and spin in a circle. Myles makes eye contact with his peers throughout the song and watches them fall. He falls too when prompted by the teachers.

Part 2 Strategies

The second half of the training video tape consists of video segments that demonstrate each of the five strategies listed in handout two in scenarios A, B, and C.

Segment A/1:

This segment illustrates Strategy 1, (using knowledge of child's interests) for Scenario A, (target child is not in an interest center or is in an interest center without a peer).

Segment Description (A1):

The teacher approaches two peers and says, "Buddy why don't we get the train out. Myles (target child) might like to play with the train with us, okay? Do you want to get a floor mat and then you can get the train? The two peers begin to head towards the floor mat.

Segment A/2:

This segment illustrates Strategy 2, (providing verbal prompts to the peers/child to suggest cooperative play activities) for Scenario A, (target child is not in an interest center or is in an interest center without a peer).

Segment Description (A/2):

The teacher has a figure in her hand and says to a peer, "Let's go play something over here. Do you want to go give this one (Ninja Turtle action figure) to Carter and have him come play? We can do something over here." The teacher holds up the action figure and the peer touches his figure to the teachers gesturing to play together. The teacher gives a second descriptive prompt. "Can you go give this (action figure) to Carter? I think he wants to play." The peer walks over to Carter and says, "Hey, look? Do you want this?" He gestures for Carter to take the action figure by moving it towards him. Carter stops what he was doing and faces his peer, but then turns away from him and walks to another center. The teacher verbally reinforces the peer and says, "That was a nice try. I like the way you were trying".

Segment A/1-3:

Segment A/1-3 should be A/1-2. This segment illustrates Strategy 1, (using knowledge of child's interests) and 2, (providing verbal prompts to the peers/child to suggest cooperative play activities). Strategy 1 and 2 are used in Scenario A, (target child is not in an interest center or is in an interest center without a peer).

Segment Description (A/1-3):

The teacher is sitting with a peer. Carter is in another interest area, playing on his own. The teacher suggests that the peer take the train (Carter's favorite toy) to Carter. She says, "Nash, can you go and give this (train) and say, 'come play?'" Nash continued

playing. The teacher says again, "Go give it (train) to Carter and say, 'come play with me?'" as she point in the direction of where Carter is playing. The teacher gives further prompts by saying "Grab his hand and tell him to come play o the tracks." The peer approaches Carter from behind and says, ""I'll show you Carter, look...Carter?" Carter walks away from Nash while making high pitched vocalizations that are unintelligible. Nash follows him and says, "Carter.....Carter.....Carter?" The teacher physically prompts Carter to turn and face Nash. She points to Nash who is now standing in front of Carter and says to Carter, "Look, Nash is talking to you." Nash hands the train to Carter and Carter reaches out and takes it. The teacher models for Carter how to respond to the peers sharing by saying, "Oh, thank you!" Carter looks at the train set on the Carpet. Nash sits down to continue playing with the train set. The teacher prompts Carter to sit down by first verbally stating, "Come sit down." Carter does not respond. The teacher then pairs a gestural prompts by pointing to the ground states again, "sit down." Finally, the teacher gently physically prompts Crater to sit and play with his peer by turning him so he can sit down. The teacher asks, "Do you want to come sit over by me? Come here, come sit down." Carter sits down in the teachers lap near Nash and the train set. The teacher praises Carter by saying, "There you go." The teacher models sound the children can make while playing trains by saying, "Choo choo." Nash sits down on the floor nearer to the train set. His peers states, "There has to be more tracks." Carter looks towards the tracks. The teacher says, "Oh nol I have more tracks in the box. Do you want to get them out?" Nash nods yes. Carter plays parallel to Nash.

Segment A/1-3:

Segment A/1-3 illustrates Strategy 1,(using knowledge of child's interests); 2, (providing verbal prompts to the peers/child to suggest cooperative play activities); and Strategy 3, (presenting descriptive praise to the peer and/or target child as they begin to cooperatively participate in an activity) for Scenario A,(target child is not in an interest center or is in an interest center without a peer).

Segment Description (A/1-3):

The teacher approaches a peer and puts a play stethoscope (an object the targeted child, Carter showed interest in) over her ears and says, "Do you know what this one does? You put this on your ears and you listen to your heart... boom boom, boom boom." The peer looks shows interest in the play object. Carter approaches the teacher and reaches for the stethoscope as the peer states, "I want to try it!" The teacher responds, "You want to try it?" The teacher hands the stethoscope to the Daniel and says, "How about you give it to Carter first and you do it second. Can you give it to Carter?" Carter begins to walk away when he sees the stethoscope is given to his peer. The teacher prompts, "Let Carter try it." Carter immediately turns back around and reaches for the end of the stethoscope that the peer is holding. The teacher prompts Daniel to play cooperatively by saying, "Give it to Carter, put it around his neck...ooh careful...there you go." The teacher asks Carter, "Now, can you listen to his heart?" The teacher takes the end of the stethoscope and places it on the peer's heart. Carter looks at Daniel. The teacher says, "Boom boom, boom boom." Carter places the stethoscope back on his ears. The teacher prompts Carter to take turns by saying, "Can you give it to Daniel? She gives a gestural prompts by pointing to Daniel. The teacher again verbally prompts Carter by saying, "Can you give it to Daniel Carter?" The teacher points at Daniel again and says, "Give to Daniel. Daniel's turn." Carter attempts to take the stethoscope off his neck. The teacher verbally praises him by saying, "Good sharing! I like the way you are sharing." The teacher physically prompts Carter to give the stethoscope

to Daniel. When Carter allows the stethoscope to be given to Carter without resistance the teacher praises him by saying, "Good job!" Carter makes some unintelligible sounds and turns away from the group. Another peer (Nash) approaches and asks, "Can I try?" Daniel now has the stethoscope and Carter is turned away from him, but is still near Daniel. The teacher prompts Daniel to engage with Carter by saying, "Can you listen to Carter's heart? Let's see if he is alive? Can you put it on Carter?" The teacher physically prompts Carter to turn around and face his peer and says, "Carter, come here. Put it on your heart." Daniel reaches out to place the stethoscope on his heart. Carter takes the end of the stethoscope while Daniel continues to hold it and places it on his heart. The teacher makes a heart sound, "boom boom, boom boom." Carter then pushes the stethoscope away and walks to another area. The teacher excitedly reinforces Daniel by saying, "He's alive!!!" She directs them to an area to check to see if the animals are alive.

Segment A/2-3:

Segment A/2-3 illustrates Strategy 2, (providing verbal prompts to the peers/child to suggest cooperative play activities) and Strategy 3, (presenting descriptive praise to the peer and/or target child as they begin to cooperatively participate in an activity) for Scenario A, (target child is not in an interest center or is in an interest center without a peer).

Segment Description (A/2-3):

Myles is lying on the ground looking at the wheels of a truck near the train area. His peers are playing together in an area 4 feet away. They are playing with a village set. The teacher prompts one of the peers to get Myles to come play with them by saying, "Can one of you guys go give this to Myles to bring over to the mat?" She gestures to Buddy to take the truck. She again prompts, "Can you go give this to Myles?" Another teacher prompts Buddy by saying, "Invite him (Myles) to come play with you.. he's right there." She points over to Myles. Buddy takes the truck over to Myles and says, "Myles." Buddy places the car in front of Myles' face. Myles sits up a little from lying down and looks at the truck Buddy brought over. The teacher prompts Buddy to ask Myles to come by modeling, "Come." She then physically and verbally prompts Myles to get up off the floor by saying, "Myles, let's go over here...let's drive it (truck)." She lightly pulls him to sit up. She prompts Buddy to encourage Myles to come play by asking Buddy, "Can you show him how to drive it over here?" Buddy comes closer to Myles. The teacher states again, "Show him how to drive it over to the mat." Buddy drives the car and the teacher models the sound the car makes. Myles looks up and independently walks over to the play area where Buddy and another peer are located. Once they are all in the same area playing with the same village set, the teacher praises Myles and Buddy by saying, "Good job, I like the way you are playing together." She gently rubs Buddy's back and verbally praises him specifically by saying, "Thank you for asking Myles to come join us. I like the way you are working together."

Segment A/2-4:

Segment A/2-4 illustrates Strategy 2, (providing verbal prompts to the peers/child to suggest cooperative play activities); Strategy 3, (presenting descriptive praise to the peer and/or target child as they begin to cooperatively participate in an activity); and Strategy 4, (fading physical presence as the children begin to participate together) for Scenario A, (target child is not in an interest center or is in an interest center without a

peer).

Segment Description (A/2-4):

Nash is in the puzzle area working on a puzzle. The teacher physically prompts Carter over to the puzzle area and says, "Look at this!" When Nash allowed Carter to come in and manipulate the puzzle, the teacher rubbed Nash's back and praised him by saying, "I like the way you are sharing! Can you show him how to do it?" Carter and Nash begin to put the puzzle pieces together. The teacher praises them verbally by saying, "Oh, I like the way you are completing it all together!" The teacher prompts Nash to show Carter where a piece goes by saying, "Can you show him where this goes?" The teacher fades back as Carter and Nash continue to play cooperatively to complete the puzzle together.

Segment A/2-5:

Segment A/2-4 illustrates Strategy 2, (providing verbal prompts to the peers/child to suggest cooperative play activities); Strategy 3, (presenting descriptive praise to the peer and/or target child as they begin to cooperatively participate in an activity); Strategy 4, (fading physical presence as the children begin to participate together); and Strategy 5, (intermittently providing prompts and descriptive praise to maintain cooperative participation and communication for Scenario A, (target child is not in an interest center or is in an interest center without a peer).

Segment Description (A/2-5):

The teacher inquires to the peers, "Have you two played with this toy before? Would you like to come play with Myles...." Buddy responds with "Yal" The teacher continues by saying, "...and show him how to do it? Look at this one Myles!" Buddy takes the car and begins to play. Myles plays parallel to the peers but is turned away from them. The teacher moves the box of cars nearer to the peers and the play set. Myles sits near the basket, closer to the peers and begins to use manipulate cars on the same town station his peers are playing with. The teacher praises the cooperation by saying, "I like the way you are playing with Myles, keep up the good work. I will come check back on you later." She comes back and states again, "I like the way you are sharing." Buddy and his peer play cooperatively. Buddy states, "I need a tow." His peer responds, "Okay, I am coming." Myles is focused on a single car and its features, but is still playing with the same materials as his peers. The teacher returns and gives specific prompts as to how they can play cooperatively with Myles by saying, "Can you show Myles how this one goes down the elevator?" Buddy begins to explain to the teacher how it works. The teacher then tries to engage Myles by imitating sounds of cars. Myles remained in the interest area, but was not engaged with his peers. The teacher turns the village set around so Myles was situated next to Buddy. The teacher prompts Buddy to show Myles how to get gas for his car by saying, "Can you show Myles how to get gas? Look Myles gas.... Shhhhhh shhhhhh" Myles begins to stand up. The teacher used physical guidance to keep in the in the area. Myles gets up and begins to play with another item near his peers, but not associated with what they were doing. In the mean time Buddy explained how to get gas. The teacher verbally praised Buddy by saying, "Thank you, I like the way you showed Myles how to do that! Is he all filled up to go on a trip now?" Buddy responded, "Yal"

Segment B/2-3:

Segment B/2-3 illustrates Strategy 2, (providing verbal prompts to the peers/child to suggest cooperative play activities) and Strategy 3, (presenting descriptive praise to the peer and/or target child as they begin to cooperatively participate in an activity) for Scenario B, (target child and a peer are in an interest center but are not participating cooperatively in an activity).

Segment Description (B/2-3):

Myles, Buddy and a peer are playing in the train area. The teacher asks Buddy, "Can you turn it on for him (Myles) or ask him if he would like to turn it on?" Buddy turns it on and Myles tries to grab the train. Buddy pulls it away from Myles and takes a turn letting it go down the train set hill. The teacher prompts Buddy by saying, "Let him do it... careful... careful... it's Myles turn...give him a chance Buddy... it's okay you already had a turn. Buddy allows Myles to take a turn. "I like the way you showed him, that was really nice Buddy, thank you." The teacher pats buddy on the leg and makes eye contact with him and praises him by saying, "that was nice Buddy."

Segment B/3-5:

Segment B/3-5 illustrates Strategy 3, (presenting descriptive praise to the peer and/or target child as they begin to cooperatively); Strategy 4; (fading physical presence as the children begin to participate together); and Strategy 5 (intermittently provide prompts and descriptive praise to maintain cooperative participation and communication) for Scenario B, (target child and a peer are in an interest center but are not participating cooperatively in an activity).

Segment Description (B/3-5):

Buddy hands two cars to Myles. Myles is facing Buddy and takes the cars. The teacher praises Buddy by saying, "Good sharing Buddy, I like the way you are sharing with Myles. Thank you that was so nice." She then verbally prompts them by saying, "Now you can put the train on the train tracks." Buddy states, "Hey they are both yellow!" The teacher responds, "Yes, they are both yellow." The teacher fades back and then comes back to verbally prompt Buddy by saying, "Show him how to turn it (train) on." Buddy turns it on and attempts to get Myles attention by placing the train in front of his face. Myles makes no eye contact and does not reach for the train and continues to lay on the floor. Myles sits up and the teacher comes back over and praises Myles by saying, "Myles, I like the way you are cooperating with Buddy... it is so nice to see you playing with him... thank you. She pats Myles on the back.

Segment B/3-4:

Segment B/3-4 illustrates Strategy 3, (presenting descriptive praise to the peer and/or target child as they begin to cooperatively); and Strategy 4; (fading physical presence as the children begin to participate together) for Scenario B, (target child and a peer are in an interest center but are not participating cooperatively in an activity).

Segment Description (B/3-4):

Carter and a peer are stacking blocks together. The teacher provides verbal praise to the both of them by saying, "I like the way you are working together." She leaves the two of them to continue working cooperatively. Carter and his peer continue to stack the blocks.

Segment C/3:

Segment C/3 illustrates Strategy 3, (presenting descriptive praise to the peer and/or target child as they begin to cooperatively) for Scenario C, (target child and a peer are cooperatively participating in an activity in an interest center).

Segment Description (C/3):

Myles and his peer are sharing sequins to create an art project. Myles begins to sing. The teacher says, "I like the way you are singing Myles... can you put the sequins on?" The teacher provides descriptive praise to Carolyn by saying, "Carolyn, I liked the way you showed Myles how to use the glitter glue, can you show him how to use the sequins?"

Segment C/3:

Segment C/3 illustrates another example of Strategy 3, (presenting descriptive praise to the peer and/or target child as they begin to cooperatively) for Scenario C, (target child and a peer are cooperatively participating in an activity in an interest center).

Segment Description (C/3):

Myles and two peers are playing with the train set together. The teacher praises the peers by saying, "I like the way you are sharing the train set with Myles and you are showing him how to use the train... that's nice."

Segment C/4:

Segment C/4 illustrates Strategy 4, (fading physical presence as the children begin to participate together) for Scenario C, (target child and a peer are cooperatively participating in an activity in an interest center).

Segment Description (C/4):

The teacher prompts Myles to hold hands with his peers and prompts them to begin the song by singing, "Ring around..." She fades her presence as they begin to play cooperatively.

Segment A-C/1-5:

Segment A-C/1-5 illustrates Strategy 1, (using knowledge of child's interests); 2, (providing verbal prompts to the peers/child to suggest cooperative play activities); and Strategy 3, (presenting descriptive praise to the peer and/or target child as they begin to cooperatively participate in an activity); Strategy 4, (fading physical presence as the children begin to participate together); and Strategy 5, (intermittently provide prompts and descriptive praise to maintain cooperative participation and

communication); for Scenario A, (target child is not in an interest center or is in an interest center without a peer); Scenario B, (target child and a peer are in an interest center but are not participating cooperatively in an activity); and Scenario C, (target child and a peer are cooperatively participating in an activity in an interest center);

Segment Description (A-C/1-5):

The teacher is talking with Nash outside of an interest area. Nash is manipulating some toys on the carpet behind them. The teacher says, "Did you know that Carter really likes mechanical things? I think he might really like this screw driver. Could you show him how to do it and share with him together? You could hold this while he gets it out. Do you want to know how this works?" The teacher models how to unscrew the bolts. She asks Nash, "Can you help him take these out, he might like this? Do you want to try? Shall we sit at the table? Let's go see if Carter likes it, okay? He likes mechanical things; he might be a builder when he grows up. Are you going to be a builder when you grow up?" Nash responds by saying, "I am going to be a um pilot." The teacher says, "A pilot, you are going to need to know how to do these things then." She prompts Nash to take one of the screw driver sets over to Carter. She says, "Take one of these over to Carter and see if he wants to come over and sit on the floor and play with them with you." Nash walks over to Carter who is playing examining the soap dispenser. Nash says, "Carter, you like mechanical things." The teacher physically guides Carter to walk with Nash back to the floor. She prompts Nash by saying, "Show him how to do it." Nash tells Carter, "I'll show you how to do this." Carter is now sitting in the same area as Nash, but is turned away from him and playing with another item. The teacher tells Nash, "Before you tell him how to do it, you need to get his attention okay? How do I know you are listening to me?" Nash looks at the teacher. The teacher says, "You look in my eyes right? That's what you need to do with Carter." Carter walks near to Nash. The teacher physically prompts him to remain in the area and hand Carter the screw driver and bolt. Carter looks at the materials Nash is playing with. The teacher physically and verbally prompts Carter to sit down. When he sits down the teacher praises him by saying, "Good job." The teacher uses hand over hand to assist Carter in screwing the bolt. Carter gets up and walks away. The teacher takes the screw driver over to Carter and asks him, "Do you want to try again?" as she hands him the screwdriver. She points to the area she would like him to go. Carter walks over and sits down and begins screwing the bolt with Nash next to him. Nash immediately says, "Carter look." The teacher fades back as they begin to play cooperatively. Carter leaves after a few minutes and the teacher comes back to Nash to praise him by rubbing his back and saying, "I liked way you were playing together and showing him how to do all that. That was very cooperative." Daniel now sits down to play with the materials. The teacher prompts Carter to come back to the area by handing him a screw and saying, "Carter, look, where does that go? Can you come sit down with Daniel?" Carter begins manipulating the materials again and the teacher praises both Carter and Daniel by saying, "I like the way you are building together. The teacher then prompts them by saying, "Can you show Carter how to screw that in? Maybe one of you can hold it?"

Part 3

Discussion/Questions

While viewing each video segment, discuss the scenarios and strategies and how they can be applied to increase participation of the target child.

Example:

Pause the DVD at the segment in which Myles is lying on the ground spinning the wheels of his train as his peers were playing with a train set nearby. Point out that this was an opportunity for staff to prompt the typical peers to ask Myles to join them in building the track by possibly giving Myles the one piece they needed to complete it.

Following the video segments and discussion, answer questions posed by the teacher and encouraged them to use the strategies modeled and discussed to increase cooperative play.

Phase 3

Feedback

Feedback by the trainer has the following components. It occurs for three sessions for 5-15 minutes. The following is covered during the feedback session:

1. A positive statement related to the implementation of the intervention strategies.
2. Solicitation of input from teachers regarding their thought processes when implementing strategies. Possible question include: How did you select the activity? How did you decide when to provide praise and prompts?
3. Suggestions for using the strategy more effectively (if necessary).
4. Response to questions posed by teachers

Appendix E

Hand Out 1



The Importance of Targeting Social Development and Communication Skills

Autism is a complex developmental disability that impacts development in the areas of social interaction and communication skills.

- Social Interactions
 - Inattention to others / disengaged
 - Lack of age-appropriate peer relationships
 - Lack of joint attention
 - Limited social initiations or imitations
 - Lack of social or emotional reciprocity
 - Have a hard time putting themselves in "other people's shoes"
 - Lack of varied, spontaneous make-believe play imitative play
 - Lack of spontaneous seeking to share enjoyment, interests, or achievements with other people
 - Lack of eye contact

- Communication
 - Delayed or no language
 - Immediate or delayed echolalia
 - Little understanding or use of nonverbal language
 - Inability to sustain a conversation if they do have language
 - May have atypical pitch, rate, rhythm volume of speech
 - Repetitive use of language or idiosyncratic language

Children with Autism also display unusual behaviors which may effect their ability to interact with others.

- Restricted Repetitive and Stereotyped Patterns of Behavior, Interests and Activities
 - Stereotypic motor mannerisms
 - Preoccupation with parts of objects
 - May have strong reactions to changes in their environment or to routines
 - May have preoccupations with an interest that is abnormal in its intensity or focus

Risks for Children with Autism

Children with autism are at risk for having:

<p>Difficulty gaining and maintaining employment.</p>	
<p>Delinquencies or dropping out of school.</p>	
<p>Mental health problems later in life.</p>	
<p>Poor interpersonal relationships with family members and friends.</p>	
<p>Developing symptoms of anxiety, aggression, depression, and substance abuse</p>	
<p>Being bullied or teased</p>	



What is Cooperative Participation and Communication?

Handout 2

Cooperative Participation:

Target child and a typically developing peer are engaging in a mutual activity that clearly displays a common purpose with or without a play object.



Examples of cooperative participation with a play object

- Target child is hammering a peg with a toy hammer while peer holds the peg
- Target child hands a piece of a track to a peer who is building a track for a train
- Target child and peer are sharing paints and painting on the same paper together
- Target child is rolling a ball to his peer.



Examples of engagement without a play object

- Target child is marching to a song with a group of peers while holding hands with a peer.
- Target child is imitating peers actions as they sing "Itsy Bitsy Spider"
- Peers are chasing the target child on the playground and the target child is looking behind at the peers and smiling.
- Target child approaches a peer and gestures to the peer that he wants to play bunnies by approaching the peer, jumping like a bunny and saying, "bunny?"



Communication:

Communicating involves the target child making a verbal or nonverbal communicative act while engaged in a mutual activity with a peer with or without a play object.



Communicating - Verbal or Nonverbal:



Communicating involves the target child making a verbal or nonverbal communicative act while engaged in a mutual activity with a peer with or without a play object through one of the following means:

- Verbally requesting an object from a peer
- Verbally requesting to engage in a desired activity
- Verbally requesting for peer's assistance, interaction, or affection
- Making a declaration or comment to peer
- Protesting
- Asking a question to the peer
- Answering a question posed by the peer



Example of Verbal Communication:

Target child and peer are completing a puzzle together. The peer asks the target child what he wants to do after they complete the puzzle.

The target child answers, "Blocks!"

Non verbal communication:

Communicating without words and clearly directed to a peer through one of the following means:

- Gestures (e.g., conventional movements such as pointing, waving, nodding, shrugging shoulders)
- Showing affection by patting peer, holding hands, hugging another child.
- Physical proximity (e.g., positioning oneself close to peer or desired object)
- Facial Expression (e.g., smiles, frowns, wrinkles forehead, pouts, shows surprise)
- Showing-giving-taking object (e.g., holding up object facing peer, handing object to peer, taking object from peer)
- Enactment (e.g., looks at peer to recreate chase)
- Simple speech-sign-written words (e.g., one or two words/short phrases spoken, signed or expressed through augmentative communication system)



Example of Nonverbal Communication:

Target child approaches a peer in the home center and hands the peer a picture indicating that the target child wants to join them.



Appendix G

Handout 3

Scenarios

<p>Target child is not in an interest center or is in an interest center without a peer.</p>			
<p>Target child and a peer are in an interest center but are not participating cooperatively in an activity.</p>			
<p>Target child and a peer are cooperatively participating in an activity in an interest center.</p>			

Strategies

<p>Use the staff person's general knowledge of types of toys, interest centers, and peers that the child has shown previous interest in, whenever possible.</p>			
<p>Provide descriptive verbal/nonverbal prompts to the peers and/or target child to suggest cooperative play activities or communicate with each other.</p>			
<p>Present specific praise to the peer and/or target child as they begin to cooperatively participate in an activity or communicate with each other.</p>			
<p>Fade physical presence as the children begin to participate or communicate together.</p>			
<p>Intermittently provide descriptive prompts and specific praise to maintain cooperative participation and communication.</p>			

Appendix H

Handout 4

Teacher Behavior Definitions and Examples

Teacher Behavior	Definition	Examples
General Prompt	Providing a cue (verbal or nonverbal) to the peer or target child to encourage cooperative participation or communication.	<p>Verbal:</p> <ul style="list-style-type: none"> ■ Teacher says to the peer, "Aaron (target child) also likes blocks." ■ Teacher says to the peer, "Have you noticed Kathy (target child) is in the home center?" ■ Teacher says to the target child, "Jo (peer) wants to play blocks." <p>Nonverbal:</p> <ul style="list-style-type: none"> ■ Teacher directs the target child to his visual schedule where a picture of Sally (peer) and the home center are located indicating that it is time to play with Sally in the home center. ■ The teacher hands a block to the target child and signs "help". She then points in the direction of two boys building a tower in the building center.
Descriptive Prompt	Suggesting or showing verbally or nonverbally a peer or target child exactly what to do to cooperate or communicate with each other.	<p>Verbal:</p> <ul style="list-style-type: none"> ■ The teacher gives a stethoscope to a student that the target child previously showed interest in and suggested to the peer, "Why don't you give it to Carter (target child) and help him place it on his ears and see if he can hear your heart beating?" ■ The teacher tells a student that the target child loves to play with mechanical toys and suggests, "Carter (target child) is so interested in mechanical toys, why don't you two work together to screw the bolts on the wood piece?" ■ The teacher hands a block to the target child and suggest in front of his peers, "You are building such an amazing tower, maybe Myles (target child) can help you make it a little higher?" "Can Myles help you build the tower?" The teacher hands the block to the Myles and verbally prompts him by saying: "Myles Joey said you can help him build the tower, can you put this on top?" ■ The teacher prompts the target child to say "my turn" to the peer who is now holding the ball. <p>Nonverbal:</p> <ul style="list-style-type: none"> ■ The teacher directs the target child to a visual list of pictures indicating to the child to say peer's name and ask, "May I have a turn?" ■ The teacher places a picture of a lego structure already built between the target child and signs the words finish and together to the both of them. ■ The teacher uses physical guidance to direct the target child to hold hands with a group of peers beginning to play London Bridges.

Handout 4

Teacher Behavior Definitions and Examples

Teacher Behavior	Definition	Examples
Non-Specific Praise	General approval of the target child or peer's engagement in cooperative participation or communication with each other.	<p>Verbal:</p> <ul style="list-style-type: none"> ■ Teacher says to the peer, "Great job!" in relation to taking the piece of fruit from the target child. ■ Teacher says to the target child, "Way to go." In relation to the target child getting in side the tent with his peer. ■ Teacher says to the peer, "Good boy!" in relation to the peer taking the target child's hand to lead them to the puzzles. ■ Teacher says to the target child, "Nice!" in relation to the target child tapping the peer's shoulder for a turn in looking at the sensory toy. <p>Nonverbal:</p> <ul style="list-style-type: none"> ■ Teacher pats a peer on the back in relation to the peer showing the target child how to stir the soup in the home center. ■ The teacher gives the target child a "thumbs up" in relation to the target child putting the last puzzle piece in a puzzle he was working on with a peer. ■ The teacher gives a big smile to the peer for holding the car while the target child pumped gas.
Specific Praise	Specific verbal or nonverbal approval to the peer or target child that names and/or compliments a cooperative act or communicative act with each other.	<p>Verbal:</p> <ul style="list-style-type: none"> ■ Teacher tells peer: "I like the way you helped Jimmy (target child) build the castle together!!" ■ "You two are cooperating together by sharing the glitter to make your picture!" ■ "That's great how you (peer) are holding the bucket for your friend (target child) so she can put all the scarves in!" ■ Teacher says to peer: "You did a fantastic job building the train track together. Myles (target child) gave you the pieces out of the bin and you figured out where they went...you work so well together! I like that!!" <p>Nonverbal:</p> <p>Teacher points to a picture representing sharing legos and pairs this with a pat on the target child's back.</p>

Appendix I

Feedback Session Transcriptions

Teacher #1 Feedback Session #1 8-23-07

Teacher: It's not a lot of work... it's just more...like a lot of 1:1. Because she moved away a lot and I would have to bring her back. Once I got Johnny to start to talk with her (Macy)... then it was like.....(laugh)

Trainer: I saw a lot more eye contact between Macy and her peers when you said things like... "Look at ...

Trainer: "What do you think went right?"

Trainer: "What did you do that you thought fit the strategies? Some of the prompting that you did or...the praise that you did.. you now the fading back... I saw that."

Teacher: "More so finding her interests. Like putting the bread and stuff like that. Oh Johnny said his dog needs food. Let's tell Johnny we'll give him food. Just basically finding what she's more interested in and trying to work around that.

Teacher: Or, having her to more do cooperative play by saying, oh my friends want milk and getting them more involved and praising them for getting involved.

Trainer: So is that how you selected some of the activities?

Teacher: More her interests and also listening to what others were wanting. So then I would ask her to see if she would kind of respond to somebody else's needs rather than what she wants.

Trainer: "Tell me about the sushi. That was awesome. Tell me about... how your feeling about when she came over and....(laugh)

Teacher: (Laugh) "She was quick to kind of 'ah ah' when she saw everyone coming after it, but...You know she was by the refrigerator playing with it... 'You know like.. Sushi....Oh Macy, let's ask your friends if they want any sushi'"... and I don't think she realized how many of them were going to go after it (laugh) and she kind of....

Trainer: "What were one of the prompts that you did when you saw that she kind of fading back and was like...'ok there's too many people.'

Teacher: "Oh, well, I went behind her."

Trainer: "That was great. That was a hand over hand prompt and then she stayed a little bit longer and she started looking at the kid's faces. She was like, oh that was kind of fun, but too many people. You were like making comments like 'oh I have this one' and all the girls were like 'Oh'. You know, the more positive experiences she has like that she going to be excited to do it again."

Teacher: "And I know she started to talk and play with Johnny for a little bit longer."

Trainer: "That was a long run there. Is that the one with the dog food?"

Teacher: "Ya, And I think.. and I think she kind of like stopped at that. I think Johnny realized that she wasn't responding to him so...(laugh)... he's kind of like ok. (laugh)"

Trainer: "I though you did a really good job of still commenting on Johnny so you did not lose him for the next time... because you got some more interactions with him later."

Teacher: "Ya"

Trainer: "So you still made comments about his dog...."

Teacher: "To kind of keep him there... "[unintelligible]

Trainer: "You used this strategy during the doggy one [pointed to fading strategy]... do you remember this? When you faded?"

Teacher: "Oh, when I had them going together and went back."

Trainer: "Ya that was great! You also incorporated this one [pointed to worksheet indicating strategy 5-intermittent prompts/praise] already and you were like, ok they are going, they are putting food... feeding the doggy...you faded back... and then you realized.. ok they lost it. Then you started to look for other opportunities... what else can we do.. I think she (Macy) lost interest there. That was awesome! Then you went back to this strategy here and you thought 'ok something fell apart here... she's not interested anymore. Let's just try something else.'"

Teacher: "That's when the sushi came in (laugh).

Trainer: "Ya"

Trainer: "Tell me about the book. That was a good one."

Teacher: "Well, only because she was looking at her book there. You know the girls were reading their books there. So I said, 'Oh, let's bring the books on over to the other girls and let's... [unintelligible]

Trainer: "That was great!"

Teacher: "And so I knew she would sit on the chair [laugh] so I kind of pushed the chair over by everyone."

Trainer: "That was great!" Now they were reading a book about princesses and she was kind of reading her own... what would be one way....I think there was a lot of girls around...

Teacher: "That and her interest is not so much into princesses yet. She has not really gotten the concept

Trainer: "Would she be willing to hold the book while they.. or would she want to have control over it?"

Teacher: "I mean... if I was with her, she probably would hold a book, but if she's holding the book and they are crowding around her then she'd move away."

Trainer: "Ok." Tell me about the apron. That was great."

Teacher: "Um, well that was what she wanted to do...so you know I just watched her struggle with it..'help...help'..I was like, you can ask him for help...maybe one of them could help...."

Trainer: "Do you remember last time... you were like do you need help and then a boy came up...this time they were quick to come over and you kind of faded back a little bit, you kind of showed them how to wrap it, but you let them do it."

Trainer: "At the beginning they were around the table... I think all the girls were putting food on the table and Macy was putting food on the table...."

Teacher: "And it kind of drifted off.... Just more so trying to get her familiar...'ok there's other people here."

Trainer: "She liked the milk cartons. She likes taking things out and putting them back together."

Teacher: "The milk cartons are actually something new. She usually just sits by the bread baskets."

Trainer: "That's right."

Teacher: "She usually gets the handles and flicks them like this..."

Trainer: "Oh, ok. Or she stacks them up high."

Teacher: "Ya. Her things are like stacking or flicking."

Trainer: "What are some things that we could maybe do next time with those baskets.. knowing that she likes to put things in... name items...and gravitate to that area.. what's an activity that maybe another peer would like or that might get the interaction going?"

Teacher: Long pause

Trainer: "Maybe having her have a friend to fill up the basket and taking it somewhere? Or naming the items with a friend?"

Teacher: "She's really good at naming."

Trainer: "And asking... what's this and what's that, right?"

Teacher: pause

Trainer: "Do you have any questions. You used a lot of the strategies. And I actually I wrote down here that you had some like... really good for the praise part. You gave a lot of smiles, pats on the back, but then you had some specific praise, but I didn't have time to write it down... do you remember what it was?"

Teacher: "To Sidney... I think it was Scarlet

Trainer: "With an interaction that was going on. You did make a couple compliments of 'I like the way you...or that was great how you...thank you for helping...so that was great.' Alright,,, that's it. That was great! Any questions?"

Teacher: "Is that mine... referring to the strategy handout."

Trainer: "This is the same one you had all along. It's just a quick reference. We will see you tomorrow at 3:00 then. Thanks!

Teacher #2
Feedback Session #1
8-24-07

Tape Broken (Trainer's recollection of the feedback session)

The trainer sat at a table in the back so that she could get the teacher's undivided attention. It appeared that the teacher was short staffed as she kept looking over her shoulder and prompting children to clean up or play in certain areas. The trainer asked if she would like to move to the floor where the children were playing blocks so that she could monitor them. She immediately said, "yes, that would be better." Children continuously came up to the trainer and teacher and interrupted the feedback session. The trainer waited as the teacher addressed each child's concerns and questions.

The trainer inquired as to how the teacher felt about today's session.

Teacher stated that it is still a chore. When asked to expand on this, she stated that it is a lot of work to try to figure out what she is interested in and come up with ideas to facilitate a cooperative activity. She stated that the peers are not used to interacting with Macy because Macy never responds to them.

Trainer noted that she saw a lot more specific praising to Macy and her peers for playing cooperatively. The trainer suggested to continue this praising and it will encourage her peers to try again if Macy does not respond to them.

Teacher said she first tried to get Macy to play at the doll house with her peers. She said Macy was not interested so she tried to look for something else.

The teacher shared that she used strategy #1 by choosing action figures and blocks that Macy enjoyed playing with. She suggested to peers to build a house together.

The trainer complimented the teacher for prompting two girls to come and place their babies by Macy's.

The trainer asked the teacher if she had any questions.

Teacher #1
Feedback Session #3
8-28-07

Teacher: Having others invite to play with her because I noticed she wasn't quite interested in the table toys and we tried to get her but as she was not interested in the table toys and she's always interested in the block people so I asked her to ask others if they wanted to go ahead and play. And the invitation worked, you know there were a couple of kids that wanted to play with her which is a good thing. Um, that's always the best, when I can find someone that wants to do the same thing that she does. That's good.

Trainer: Right.

Teacher: And a lot of redirecting on her focus points on talking to that individual child. A lot of redirecting... "Oh look at him. He's talking to you." And a lot of repetition...having her ask questions along with saying thank you when they do comply with what she is asking.

Trainer: I heard a lot of positive praise when they tried to interact with her or played with something together. I heard a lot more today, so that was really good.

Teacher: That, you know.. I mean...it kind of keeps them staying in there a little bit more, you know, and when others see that then they, "Oh I want to play." Then they kind of go in there [unintelligible]

Trainer: That was perfect.

Teacher: Ya.

Trainer: I noticed that you did...you tried on these ones when you noticed you were losing her interest...she was not quite into it. Is that why you switched to the block people that she usually likes?

Teacher: Ya.

Trainer: And then found somebody else to join in. Then you had a whole crowd there and then what I liked was that it wasn't just playing the blocks, there was a common purpose. So you said, let's stack all the people. So everybody had, they had a thing that they were doing together.

Teacher: And also, trying to build a structure. I wanted her to get a little bit closer in building with Quin. And Quin had asked, "Macy, will you build you're here." And I said, "Look at Quin, look at Quin. Quin wants you to build this..."

Trainer: He initiated it. I didn't here that one.

Teacher: He did that as well...ya. And so you know, and when she is running out of blocks, I asked her, "Do you need more blocks?" She said, "Yes." "Okay, let's go ask a friend." So there is still more verbal.

Trainer: I noticed one time. Usually you have to tell her exactly what to do, but you said something like "ask a friend." It looked like she was getting up and leaving, but she went over...

Teacher: She actually went over and asked with a loud voice! [laughing]

Trainer: That was cute...[laugh] Right to his face...[unintelligible]

T: And he responded, too. That was really nice.

Trainer: Ya that was awesome! Alright! Well I saw a lot of great... I saw a lot more communication today and I think it was because a lot of your descriptive prompting..."Ask...ask...ask..." And then you saw that she did it on her own.

Teacher: Ya.

R: That was awesome! That was fun to see and I liked the robot one, too where it was like she was kind of playing parallel. She built something, but then you gave a...

Teacher: I didn't want to pull the dominoes out of her [unintelligible] so I had her ask Brennan, "Can I play with you." And I asked Brennan, "Would it be okay if Macy played with you?" Ya.

Trainer: Oh good.

Teacher: So I said, "Okay, if you want to play with Brennan, we've got to put away the dominoes." Otherwise, if I would have just taken it away it might be a little more...[unintelligible]

Trainer: I see. And she did, she started building...and it gave her something to do after she built it.

Teacher: Well after I told her, "Oh look at um, who was sitting next to me..."

Trainer: The one with the hat.

Teacher: Well, I told him, "Look at Brennan's ship, Brennan built a ship." And that's when Quin said, "Well, I built a robot." I said, "Wow! Look, Quinn built a robot." And then she built a robot. And I go..."Wow, go take it to Quin and show it to Quin."

Trainer: Ya, that was perfect. There was a connection there.

Teacher: A little bit of interacting with them, but still not her interest point.

Trainer: Ya.

Teacher: We tried to work with that.

Trainer: That was great. I noticed, too the intermittent, you know like okay they are working and then you kind of noticed that she was losing interest...you kind of came back.

Teacher: Ya.

Trainer: Did you see any opportunities of maybe fading back a little bit or did you feel like she needed your prompt...proximity there.

Teacher: The time that I did fade back was when Ashton joined in and he wanted to build so I said, "Well you can sit here."

Trainer: Ya I noticed that, You moved him in and you kind of faded back.

Teacher: As for the table toys, as for the fading away, I think if I did that, I think that she would have kept walking off. Ya.

Trainer: Good.

Trainer: Okay....that's all! That's so great. Are there any questions? Is it still a chore or...?

Teacher: It's getting easier. It is.

Trainer: Okay...awesome.

Teacher #2
Feedback Session #1
9-20-07

Teacher: I think I was more comfortable, you know.

Trainer: Because you know why we were here?

Teacher: I kind of had a better feel, you know of...I don't want to say expectations, but you know, kind of what you were looking for and stuff so...

Trainer: How did you select the activity when they were at the block center?

Teacher: Um, feeding off the other children you know, once they took out an activity and you know, it's something they enjoyed doing yesterday with them, too. So they were playing together. I got a lot of good observations (unintelligible) yesterday because there was a lot of cooperative play and a lot of language and problem solving and stuff. I kind of had a feeling that he would go back to that center today because he had such good engagement yesterday.

Trainer: I saw a lot of positive comments about letting the kids know about his interest, too. Like, "David likes to play fire trucks." You know, suggesting this is his interest. I noticed that when David was disengaged, that you started singing songs, was that... (unintelligible) being David's interest?

Teacher: Sometimes.

Trainer: I noticed right when you started singing he was like...oh.. and came back and played.

Teacher: Yah, he loves to sing and music is good. It's appropriate for all of them. You know, anytime I don't have somebody's attention, if I sing rather than say it, then they turn around and look at me.

Trainer: How did you decide giving some of the prompting that you did to get him to engage with other kids... in the block center...building the road?

Teacher: Based on experience I guess. You know watching what he already does and how he builds the train tracks...what his strengths are...you know then it gave him an activity to do that...you know and it's good for the other children to know what he is good at, too so then they are more likely to invite him in if they are struggling with something. Then, they'll call on that later. Like if they are having trouble with something, then they call him to come help.

Trainer: I heard a lot of great prompting. There was like a situation, a part when he went to the girls to his road away from everybody else. I thought how you handled that was awesome. You said, "Can you build a road for us?" And then you said, "You are kind of far from us." To try to get him to come to the group. And then you kind of suggested, "Are you going to be able to carry it? And then that was when he was like, "Hmm, no." and then he started to bring it over. Um, I saw really good other things. A lot of um, a lot of prompting. I have here...using your words. You know, when kids were

interacting...using your words..."It looks like he wants to help," so you know, remember when he was changing...

Teacher: When I was driving the car up his leg [laugh].

Trainer: Oh ya, ya, ya.

Teacher: Cuz he sat close to me where I could like...I was already driving it on the road and then he put himself close to where I was so I just drove it up his leg.

Trainer: Right.

Teacher: and then up his head.

Trainer: And then when he switched centers which is something you let them do already.

Teacher: Ya it's free choice.

Trainer: but then that was like his interest.

Teacher: Uh huh.

Trainer: So he switched. I really like how when he got the...to the coloring center...that's kind of like an independent thing that that they kind of do on their own...

Teacher: Uh huh.

Trainer: I thought you did a really great job of suggesting like, "Maybe you can ask him for some stamps...Maybe you can offer some to Lexi." Um, "She would like some stamps." [unintelligible] and then saying, "David was asking if you wanted stamps," you know, drawing attention to him.

Teacher: That he's speaking to her, yah.

R: ..."You can offer your friends...scissors," they all had some, but...those were great opportunities that he could have an interaction. Did you have any other ideas...now that you can step back...that you could have tried or...

Teacher: You know, I am kind of in the moment when I am with them so I think that based on what I feel that I have gained from what we talked about...that I already practice.

Trainer: Right.

Teacher: You know, I kind of think I am in the moment when I do it so I don't know if I would have done it any differently. I want to have faith in myself you know, based on what I already know through my own...and what we shared, too.

Trainer: Do you think [unintelligible] these are things that you've naturally been doing all along?

Teacher: ...and it's a testament to what I picked up just from being in an inclusion setting with a DOE class. So even if it wasn't something that I was um... more consistently doing, it's things that I do in the setting period, because I want...that's my purpose...to teach them language and problem solving because they don't come in with it. A lot of times they don't. So yah, just something that you practice anyway. I think that I, that I'll learn to be more in tune because I think that's what I learned from working with you and having the training. Is that, I guess...in my idea of what inclusion is...I am not singling them out or adding excessive attention...you know, that I am allowing their...the peer interaction to be spontaneous and not so prompted by me.

Trainer: Right.

Teacher: But in the beginning, there was more prompting. It's just the stage that he's at. There's less of it so I don't feel myself pulling back and he does a lot of that on his own. So, but that's day to day, too...like how we talked about some days, and like with any of the children, there's days when they are more isolated and kind of cruising on their own and other days, it's a whole social day and the whole day they want to do something with someone else...yah.

Trainer: What did you think of about...when he went to go show his picture to every adult in the room?

Teacher: Yah, that's David. If he is proud of his...he was looking for Mr. Michael.

Trainer: Does he show it to his peers ever or does it depend on the day, like you said?

Teacher: Yah, sometimes he will show it to them. He does like adult approval.

Trainer: Right.

Teacher: So he will go to all of the adults and show them...so you are right...that's another good thing I could say...

Trainer: "You know why don't you go show"... yah. Like you did with the scissors..."Can you show him how to hold it," instead of you showing him...you told the peer, "show him how to hold it." That was awesome...then he was looking at the peer. That would have been a good thing to prompt him with, too is like, "Why don't you show your friends your work."

Teacher: I think I know, too sometimes with him you know, when you are looking for acknowledgement and the peers don't always give him that, but you know, it's a good thing for him to realize that you may not always get that, "Oh good work!" You know, cuz it's you know, the peers would kind of look, "um" they don't always say anything so he's kind of always looking for that acknowledgement and but um, you know, that's a good experience for him to have, too...that it's not always words, but just showing is enough that whether or not they have feedback, you know...yah, but just showing...yah, so. Thank you for that suggestion.

Trainer: Ya, you know, I have got suggestions and ideas from you. Um let's see. You used a lot of...I mean strategies like, like you said, these are strategies you use...[unintelligible]...um...with the picture you made a lot of comments of what he was

doing and everything. You used a lot of general prompting because that's what he needed. He takes the general prompt and is able to take it from there.

Teacher: Yah.

Trainer: [unintelligible]

Teacher: That's an advanced...that's because of where he's at. It wasn't like that in the beginning...but, but...the time you are coming in and how much he's progressed...he's a lot...on the majority of the days...he's like that...[teacher stops to talk to a student]

Trainer: So you just made me have an 'a ha' about some days when he's not engaged or maybe depending on what he ate or something, that he might need more prompting, and there might be days that you can just do general prompting and you fade back.

Teacher: And that's true for any of them.

Trainer: Yah.

Teacher: Yah, and there's dynamics at home when his Dad is away, you know, he...he...kind of regresses because his Dad's in the coast guard, so when Dad's out on a boat, we know, because when he comes in, we know because his disposition changes.

Trainer: Right.

Teacher: And this is the same for any other children. Whatever their dynamics at home are...it has an effect on them...if they don't sleep...if they wake up too early in the morning if they're just a grumpy day. Sometimes it's a mood thing.

Trainer: Right.

Teacher: It's not an autistic thing; it's just because of the child and the family dynamics.

Trainer: Right.

Teacher: So...

Trainer: Well, that's it. Do you have any questions? That was fun watching.

Teacher: Ya...no...ya...it was good [laugh]. Yesterday was really great, too. It would have been a really good observation day. Uncle Bill was in there facilitating play and you know, if there is enough staffing for us...that usually we try...that the busier centers that need that more social because you know, it's...it's all of them still need that cooperative play influence.

Trainer: Right.

Teacher: And also [laughs- stops to talk to a student].

Trainer: I'll let you get back to your class.

T: Thank you.

[Began talking about scheduling]

Teacher #2
Feedback Session #2
9-27-07

Teacher: You know the experience of hammering and stuff. It's not my idea.

Trainer: I love the coconut though because I wouldn't think that it would be like.....soft.

Teacher: It's a really good thing...once it goes in a tinny bit then the nail stays and they can move their hand and after a while we can ... today's the first day. But after they get used to it then it's an activity...then they'll do math thing because then they will start counting how many nails are inside.

Trainer: Oh, good!

Teacher: So it's fine motor, hand-eye coordination...yah.

Trainer: Cool! Awesome idea.

Trainer: Alright! I saw a lot of great descriptive suggestions that you gave that were really good. How did you select the activities today?

T: He did. Child initiated. Yah.

Trainer: So I just went through a couple of these. ..let's see....centers. Do you always... you know... you are looking for opportunities for him to have an interaction right? ...communication or something. Like "Do you just want to use red? Can you ask a peer for the black one?" And that was great because he was able to explain himself. "I'm not going to use black, I'm going to wait and use it for my astronaut.

Teacher: Um Hum

Trainer: He got to explain himself...um....passing and sharing things. Um.

Trainer: It sounds like his scissor skills have improved.

Teacher: Um Yah! I was real....that's why I had to draw because before it was And I mean this is.... This is just like a week because it was hand over hand. You know he'll still put the scissor the wrong...so if I correct it. But that's why [laughs] I had to call Miss Dorothy [laughs] yah. Because the cutting was always a really hard one it was always HOH. That's a fine motor skill that was really slow in coming. So the fact that he cut all four sides and stayed on the line was really great. You can tell when I am really impressed. I have to call all the teachers to see it.

Trainer: Exactly

Trainer: The peer... there was one opportunity that a peer showed you her picture. How would he respond if you said, "Show David your picture?"

Teacher: Sometimes he will...if he's really engaged on what he's doing then sometimes.... Sometimes he will.....but that is an opportunity....yah.

Trainer: So then he chose to go to the town center and ... and I know they were just getting into the play, because I was just kind of listening at the end... but you were starting to get into you know...the ice cream... let's do this... suggesting some more things that they could do together as a group.

Teacher: um hmm

Trainer: I know you were just beginning, but there was a lot of you know, communication descriptive prompting to communicate and he was the leader because he was there first, right?

Teacher: um hmm

Trainer: So they had to ask him to come in. So that was a great opportunity that he had lots of time to respond to them when they came in.

Teacher: yah

Trainer: um you know drawing their attention to look at him when they asked him..."ask him first" um.

Teacher: Talks to David [interruption]

Trainer: He even said he was sorry to a peer when he bumped something... I don't know if you noticed that.

Teacher: uh hmm

Trainer: You know he apologized that he messed up the road or something.

Trainer: So I was going to go over the definition of cooperative participation again. "Engaging in a mutual activity that clearly displays a common purpose." I was wondering when he does do the town center...Does he usually do the same kind of things, just share...you know, pass things to people, but do they ever do anything that has a common purpose together like for instance...."Let's build a tower or let's see how many cars can we put in the car wash. Um, I'm just thinking does he ever get to that next, next step? [unintelligible]

Teacher: When, probably not in that activity when they are using the train tracks and other things because everybody kind of moves with their own ideas in that, in that area. Sometimes they'll get together if, if um depending on the students that are there, because the ones that were surrounding us right today were under 3's.

Teacher: So they are still in that area of play when they are kind of more parallel play and interactive play....If [unintelligible]... there or Tyler some of the other boys... they... they do the more common purpose.... Let's do this together. But because of the children that were in there it doesn't happen as much... yah... but doing train track with the older ones that are more his age level are together playing, then they do.

Trainer: So they... they kind of pick it up from each other like if one suggests something...then the other one kind of you know watches them and imitates what they are doing and takes on from there.

Teacher: Sometimes

Trainer: Have you seen him do that?

Teacher: Yah when they are using the train tracks he will.

Trainer: Oh okay.

Teacher: And they'll go and he'll tell them "no, build like this" and you know he's more directive like when he has an idea he wants to especially with the trains and it may be because he has a train set at home. And he's kind of the boss of that...that...when he's here...And using that then he'll...he'll invite them in to do things you know but it's sort of like he's setting the tone of what... how...what his expectation is to what they are building or that kind of thing so.....

Trainer: So what would happen with the 3's if you tried a suggestion like...."David is there something that you are working on or you like to build? [unintelligible] What's his interests and you [unintelligible] use that activity if it's a car wash – he brought that thing over.

Teacher: yah – well when ... I think with David when he sees too many are around then he wants to provide another place for them to use their stuff so there's not so many around.

Trainer: [unintelligible] – and once there are four or five people it's... Then he's gone, right?

Teacher: It's too much activity and that's why we set the group size to four...Ya so he excused himself before.

Trainer: Yah, I noticed [unintelligible]

Teacher: But they're there and I guess for me that my um I don't want to say my training, but my um involvement is their play is more often as an observer than a facilitator of their play because they do a lot of problem solving and cooperative play things with out me having to really be there...Yah, so I think that I've gotten in that and with 20 of them I don't always have the luxury of sitting and working for a length of time. I might be able to do it 'cuz I'm kind of more around the room so I'll sit for 5 a few minutes in family center and then I'm gone and then I'll move to another area and because out of necessity you know, I just have to but um...

Trainer: Right – well I noticed okay, say so if he's done that before in class [unintelligible] I'm just wondering what would happen if you noticed something that he was doing like you might see that he's lining something up or he's uh, I'm trying to remember what was over there....he's getting all of the fire trucks for a certain area.

Teacher: um hmm

Trainer: If you suggested something like "David, are you doing _____ this?" If he says yes... "oh my goodness I wonder if you could get some friends to help you finish?...or whatever. Suggest something

Teacher: uh hmm

Trainer: And if the kids start coming in then you fade back – you don't have to be there once you get something that they can do together.

Teacher: That's a good suggestion.

Trainer: I'm just trying to think what his interest in during that time whether it's stacking things Whether it's putting you know, 'cuz I was watching. Oh, I really liked the way you talked "there's a hole in that oneWhy is there a hole in that one?" And then you had them ask David because he seems to have attention and detail probably.....right? [laugh] that was awesome.

Teacher: Yah, and he will come up with, he will really often come up with something to explain why it's like that.

Trainer: That's great... that was a great opportunity yah. Hmmm I don't know – maybe I mean if he's doing it already but maybe suggesting something to get them going together...put all of these.....

Teacher: Even if it's just in passing or

Trainer: Ya and if, if they catch on to it or if that's his interest that you know again.....

Teacher: At least you tried

Trainer: You tie it into something he is already doing and suggest it because it seems like whenever you do suggest it the kids are yah I want to play they are right

Teacher: yah um hmm

Trainer: Maybe they will start something together that they can complete together and then you can back off.

Teacher: Good idea.

Trainer: You're awesome I saw some great things.

Teacher: I'll try too, I'll try to b....be more, you know.... I think that I still see myself as interjecting in their play.

Trainer: Right okay

Teacher: And I need to stop thinking that way.

Trainer: So yah, you don't have to do that you don't have to keep being there if you suggest something descriptive enough that they can do it together. As a team then you can back off, you don't have to be there.

Teacher: Yah, yah.

Trainer: You really want to get them going with something they can do together to complete together, that has a common theme that they are working together as a team. But I like that there are different opportunities when different kids come there.

Teacher: But this is beneficial to 3's coming in because they need to learn that skill. So rather than me just assume that they are not at the stage, you know being introduced to it is beneficial to them too.

Trainer: Or even if they don't know that they are doing something together as a team at least if you tell them. "Can you help David put all of the cars in the car wash?" They are doing something individually but then they don't realize that they are doing.... To get that they are working together as a team I don't know...

Teacher: And as much not to draw it to him, but to draw him into something that they like.

Trainer: Yah, Exactly

Teacher: So if I observed you know like Daniel was there, Joshua was there and I could, you know, I see Daniel has this or is doing this, maybe David....you know suggest that maybe another child...

Trainer: Right.

Teacher: That another child invites him into what they are doing.

Trainer: Right and if you can think about too as descriptive as possible you don't have to tell them exactly what to do but if you can acknowledge what they are doing and if you say, "Oh it looks like Daniel " ... for instance the coconut let's say they are over there or something "it looks like he's trying to line them all up in a row" like something that he's doing you're drawing attention, he's doing it already but you are putting a purpose to it.

Teacher: yah

Trainer: There's an end, or there's something they can do together to complete – anything in there you know but I like your idea like it's not just to David its to peers too.

Teacher: yah, right.

Trainer: But what he might be interested in and can complete together.

Teacher: Alright, okay, good.

Trainer: But every center is different and your dynamics are different but ya.....

Teacher: Yah. But its good to be able to think of it in a different way because when you know, you are teaching for awhile you really do get kind of stuck in, you know, and depending on who you've gotten advice from and the workshops that you go to and one presenter will tell you this is the right way to do something and another presenter will

tell you another way.....and you just kind of try to model yourself and in my own comfort zone and what I think is appropriate but its good to be open to doing things a different way.

Trainer: right um hmmm

Trainer: It was so interesting because I met with Lisa Yogi last night.

Teacher: She's so great.

Trainer: And I was sharing with her the strategies with her and she was like that's what we do ECE teachers are taught to do that but the only thing you are doing is making the terms more special education like descriptive prompting - we use the word suggest....what did she use? Uh, she used a different term that you know ECE teachers are trained to do step out.... It's... you do all along, it's just that it's, it's a little more often, but once you get them going you can step out.

Teacher: Yah

Trainer: because once you get that, that suggestion of how they can interact and sometimes David might need more specifics.

Teacher: Yah

Trainer: Why don't you guys go get this out this [unintelligible] home center out and play with this " Let's play together" – they are just going to share and parallel until there is a suggestion to do something together.

Teacher: Exactly, yah.

Trainer: Because the other kids pick it up, like you said they do it automatically, but he might need a little bit more.

Teacher: yah

Teacher: and see that's where it's good that I have the opportunity to learn something more

Trainer: and I'm learning from you

Teacher: more about the teaching tools that I can use to help him because I might not have known that there was a better or a more defined way to get him to do cooperative play... you know like that because to me I guess I saw it that having a common purpose just kind of intensifies it It makes it more dialogue and more playing with a purpose and I wouldn't have seen it like that.

Teacher: Oh, good.

Teacher: So it's good that you.....

Trainer: And like you said, that's a late 3, early 4 year old skill, but he's?

Teacher: He's 4

Trainer: And you know that that's a difficult thing for lads with autism

Teacher: You need the social.

Trainer: so he's going to need even more practice.

Teacher: Yah

Teacher: So for instance they are here (water table) right now and they are parallel playing, they are kind of doing their own thing. You might want to suggest "you are pouring that all the way to the top. So, well, can you pour her some?" You've done this already...but something they can do together....."I wonder how many times we can pour that water into the.....", you know, or "let's see how many times it takes to fill up this tank." So he's doing that already [referring to David who was playing at the water table].

Teacher: And there goes Mia.

Teacher: David, what are you doing – talks to the children.

Trainer: So that was good you asked him "what are you doing".....he wanted to see that thing turn and maybe pour more water in it but he also wanted that to pour it in so may..."Can you pour some in for him? – let's see it spin" – he wants to see it spin and have them make a game of it.

Teacher: Together?

Trainer: yah, but every situation is different, but something they can complete together as a team, something yah, mutual. And they all like to pour it in there too so...

Trainer: Alright I'm going to let you get back to your class.

Teacher: OK alright, [laugh] thank-you.

Teacher #2
Feedback Session #3
9-28-07

Trainer: Okay, this is my last feedback session.

Teacher: Okay

Trainer: So what I thought we could spend the majority of the time is talk about...because that activity...you know...because you really...really... it's a hard activity to do like cooperative play with.

Teacher: Mmm.

Trainer: So I thought maybe later, we can brainstorm all the other areas. I was kind of noting what the other kids were doing in each one.

Teacher: Oh okay...okay.

Trainer: Maybe we can brainstorm together because we didn't get a chance to see him in those areas. In the future... [unintelligible].

Teacher: Okay...okay.

Trainer: But, I loved how you got some conversation going and you did have a cooperative game in there which was great! You were talking about write his name, that was an interest of his and he seemed to enjoy that.

Teacher: Uh hmm.

Trainer: Tell me about that.

Teacher: I think he faded off though cuz you know, um if it's him initiating it, then he's more willing to do it cuz I've seen him at other times...he'll look at the names on the table and self-initiate writing his peers' names, but it's kind of like when I put him in that position of me asking, you know, me influencing it, even if I am going through the other person, he kind of...it's not the same thing as his deciding for himself that he wants to do it...so

Trainer: Right. But I thought...

Teacher: But he tried. Ya. that was good.

Trainer: Well next time that he's got that idea he might initiate it on his own and be able to ask them.

Teacher: Ya.

Trainer: Because I noticed he was asking you for the letters and a couple times he started looking at his peers.

Teacher: Uh hmm, uh hmm

Trainer: And that was cute how you were whispering to him...

Teacher: [Laughs] [unintelligible] ...and it was good the way that he...the way that he started putting, you know, dramatic play into it...about the letters being sad and crying. Ya.

Trainer: And then you drawing attention and letting him explain that to his peers..."Ask him why it's crying," instead of just guessing.

Teacher: Uh huh. Ya.

Trainer: So that was really good. And then today, I saw him...you suggested for him to take his picture to a peer...[unintelligible].

Teacher: Uh hmm.

Trainer: He did one, but at least he's acknowledging his peers that are around.

Teacher: Ya.

Trainer: So I was noting all the centers that you have. You have the home center. I was just noting what kind of the girls were doing and you can tell me what he's interested in and what you might think he might take to in those centers and where we can get a cooperative activity going. So in the home center...does he usually go in there ever?

Teacher: Um, occasionally. And it's usually brief, attention span-wise he'll engage for maybe 5 minutes.

Trainer: Okay.

Teacher: And um...he'll...and he'll kind of watch and see what everybody's doing. He likes to play with the pretend food.

Trainer: Oh okay.

Teacher: Ya and he'll pretend like he's eating. He'll...he'll ...and he'll talk about it as he's doing it.

Trainer: Okay.

Teacher: You know, "Look I'm eating." He'll, he'll engage with the other children.

Trainer: Okay.

Teacher: In conversation, about you know, if they're saying um a lot of time...a lot of times it's done initiating something, you know, "we're going to a party," and he'll go, "no, no, no," and he'll want to interject like an idea...

Trainer: Oh.

Teacher: ...of how he wants to do... you know, how he wants to run that play experience.

Trainer: Oh, okay.

Teacher: You know, so I've witnessed him doing that. Sometimes he'll just go in and sit down and put up a thing of toy food on the plate and pretend like he's eating...

Trainer: Okay.

Teacher: You know...um... I haven't seen him pick up the baby dolls yet.

Trainer: Okay.

Teacher: So that might be a good thing to try to include him when the girls are playing with the dolly because I haven't seen him show that like nurturing side of caring for a baby.

Trainer: Right.

Teacher: So that might be a good...

Trainer: I think you hit it on the head when you ... [unintelligible]

Teacher: [Teacher distracted by student...talks to student].

Trainer: ...when you are talking about what he likes in there. So you want to stay with things that he's already interested in because that's what is going to take it to the next, you know, higher level of cooperative play.

Teacher: Ya, Uh huh.

Trainer: So if he likes...and that was great how he liked writing...what could you do in the home center that takes that interest of writing...

Teacher: And it's already there.

Trainer: and how can you turn that into cooperative play...

Teacher: And it's there...we have, we have um, writing boards and pencils in the area, too. So if it were something that he you know, like when you do, when we had restaurant and the grocery store...

Trainer: Uh huh.

Teacher: ...then they have the writing, um, materials there to take orders or that kind of thing...

Trainer: Can he jump into a role...

Teacher: He won't do it willingly. I mean, he won't initiate it on his own...

Trainer: Okay.

Teacher: If it's suggested, then he might, but I am not really sure he understands taking on a role, but he'll go with the influence of...

Trainer: Okay.

Teacher: Like when he was doing the cashiering, when we had the grocery store...and then, I am not sure he knows cash...that's a cashier...do the cashier's job, but he wanted to be at the register, so we just kept saying..."That's what a cashier does...you know, they take your money and so the adult that sits in there that kind of facilitates their play, will kind of...label the roles, so that they get an idea of what that is.

Trainer: Okay. And were the kids coming up to him to check out?

Teacher: Ya to check out...and do that kind of thing and taking money and...ya...

Trainer: Oh good!

Teacher: ...and he would put their things in a bag...ya...

Trainer: Oh good.

Teacher: So after imitating what the peers were doing so...

Trainer: Oh good, so he picked that up all from his peers?

Teacher: Ya, and by the suggestion by the adult in there.

Trainer: Okay.

Teacher: But then that was everybody.

Trainer: Right.

Teacher: I mean some of them just really didn't know what to do when they were in there. The older one's do, but some of the younger ones they didn't really know either so it was kind of helping everybody.

Trainer: Right.

Teacher: Ya.

Trainer: Okay. That's perfect! That's exactly what, you know, he needs opportunities to do.

Teacher: [Distracted...talking to a student].

Trainer: So today did you feel...still a little...like you're...not intruding, but interjecting...

Teacher: Interjecting...um...ya I still feel that way...ya, cuz it's not normal for me to have so much, you know, and you can tell, cuz the other kids feel it...I can see the look on

their face...that they are not used to me, you know, ya like putting myself into their communication stuff, so I can see like with Jodi... she is very observant...and she was even looking at me like..."why are you doing that." [Laugh].

Trainer: Oh Okay.

Teacher: You know, cuz it's not something that I normally do...they do it amongst themselves without me...

Trainer: Right.

Teacher: You know normally with David I could see that it could be enhanced... you know, he has those experiences without me being part of it, you know, on his own...it might not be as frequent, you know, but it happens naturally in between them...but I do still feel like I'm...like I'm...not really interfering, but just...cuz that's kind of a negative thing...

Trainer: Ya.

Teacher: But then I...my influence is there.

Trainer: Right.

Teacher: Ya. So I can't say it's an uncomfortable thing...it's not really, but I am making an effort.

Trainer: Right.

Teacher: It's not just coming out of me naturally. I feel like I am making an effort to do it. Ya.

Trainer: Right. Right.

Teacher: Cuz, when they do it amongst themselves you know, in center time, you know I might here and there...so I don't know if I am trying too hard, you know because I know I am being observed or if it's just something that's not natural for me in my classroom setting period. You know, cuz it happens it just doesn't happen as frequently.

Trainer: Right.

Teacher: Ya.

Trainer: So normally what, what would you do during that [unintelligible] time...would he be making any connection [unintelligible].

Teacher: Ya, on his own... on his own. It might not be as frequent like I said, but he'll talk about what he's doing and you know, especially if he...if he does something, or if somebody, you know...I guess I almost want to say 'normal times' for the kids to interact...if it means somebody's got the basket and he's getting a color or you know, those time when there's... there's like a need...a need for talking to your peer because they're taking something that's yours...

Trainer: Right.

Teacher: In those situations, like I said, when he's, when he's on the carpet doing things that are more, um, not, you know, one on one kind of things...you know, like the coloring and doing those activities...then there's more language going on between them...

Trainer: During those instances then maybe...you know the next few times...I come in to...

Teacher: Try to encourage...

Trainer: So you don't have to be right there...

Teacher: Uh hmm...Uh hmm

Trainer: You know, using the home center...if you can suggest descriptively what he can do...like the cashier...you've already done this...so I am giving you your own examples...

Teacher: Right. Ya.

Trainer: So like, oh your in...[unintelligible] you know, it's like his interest... it's something he's doing already..."Looks like he's going to do all the groceries...oh...everybody's in line...okay I'll come check on your guys later..."

Teacher: Uh hmm, uh hmmm.

Trainer: "Oh the cashier's doing a good job...whoa got a big line...see you in a bit..."

Teacher: Uh hmm.

Trainer: Then see...

Teacher: If he continues...

Trainer: So he has a job and so if he kind of loses interest and he's out..."I thought you were the cashier... I thought you were going to ...you know...just suggest to kind of keep...intermittently.."

Teacher: Ya.

Trainer: just come back in and get that...see if you can get that, you know...cooperative play a little bit longer...and draw it out...if he loses interest...he loses interest... he can jump to something else, but...

Teacher: Right.

Trainer: ...that's usually what happens with our kids is that they jump...jump...jump...so they don't get a chance to have that...

Teacher: Ya

Trainer:...quality interaction...

Teacher: ...sustained play

Trainer: Ya. But maybe...maybe different...I mean I am not saying that that activity is not a great activity... but for maybe these strategies it's kind of hard...you feel like, you know...so there might be other activities or areas that might be more conducive to the strategies that we were talking about.

Teacher: Right, right.

Trainer: Which...I come in snapshot...come in for 15 minutes...so ya we are going to catch different things...

Teacher: Right.

Trainer: ...and I am sure it's happening already so...

Teacher: It does...it does...like I said; it might not be at as frequent because it's not prompted...

Trainer: Right.

Teacher: ...but it happens. It's just not as, as frequent in such a short time...span of time...so

Trainer: Right.

Teacher: Ya, so, but um, you know, that would be good...and he, and he's easily, he's easily attracted to a play area...

Trainer: Oh that's good.

Teacher: So it's not like I was noticing in the videos you shared you know it was really different...a different child and a different level of his being a part of the class to where David is easily influence you know, to come join his peers at a center, you know, a lot of eye contact. When the kids come in the morning, every morning as they are coming in, he's right up to them, "Hi Stanton's here, hi Stanton," and he'll go up and so there is inter...engagement and eye contact and acknowledgement and all of that so like morning time...especially I notice you know when we are leaving...you know, the kids are leaving that you know, whoever's here he'll go, "It's time to go...it's time to go good bye, [teacher laughing]...but he'll make sure that he bends down and makes that connection...

Trainer: Oh good.

Teacher: ... and eye contact, so it's not enough that he just saying they are here, but he's...

Trainer: Uh hmm.

Teacher: Ya, so...

Trainer: So you just made me think... so he's easily attracted to different center so that's kind of...something will spark his interest there so...to take advantage of those times...just...think of it like okay...this 15 minutes I am going to work on this skill of cooperation or communication. So if he's jumping from one to another...if there is an item of interest in there that could get him going and then get out... you can try to focus on that.

Teacher: Okay.

Trainer: Um...I am trying to think... but I mean it sounds like he's doing a lot already but he might just need...

Teacher: But there's always another level, you know, it's...I don't want make it sound like I think that he's just great and there's no progress goal of you know...there's...that I don't see that he can progress...

Trainer: Right.

Teacher: ...to another level and another level and another level...that's why we are here...

Trainer: Right.

Teacher: So you know I think that it's good for me that I get the teaching tools to help him get there.

Trainer: Right.

Teacher: Because that is what I am suppose to be doing. And because I know that we have other staff members, I think that I, you know, I kind of draw on what their mannerisms are with them, too... and because that we are all kind of like that, you know...like that's my influence in the classroom is that... that things happen in a natural progression...it's not so influenced by the teacher, but I can see how that could be beneficial so maybe I'll be a good influence you know, by learning it that I can... by example...then my coworkers will...and including the one's that are working more one on one, you know with him...will kind of take that... take that as part of their teaching tactics, too.

Trainer: I agree with you on, you know...there's a fine line between when you are suggesting things too much and it's not natural because it's definitely not what we want, too...

Teacher: Ya...ya.

Trainer: ...but to look for opportunities where he is interested and suggest something descriptively enough that he can do it... and a lot of time with most kids we could say..."why don't you go play in home center," they already pick up...two of the girls go, "I got a walkie talkie," you know, she gave the other one a walkie talkie... and started talking... you know, that was natural...

Teacher: Ya.

Trainer: They already have a cooperative thing going on, but David, he might need... "she has a walkie talkie, look what you can do with it," show him how to do it... "okay..." you know, and have...suggest something so that, kind of teaching him what to do...cuz a lot of times...

Teacher: [Teacher distracted...talks to student].

Trainer: So suggesting something that he might not normally just pick up... natural like everybody else [unintelligible]. Ya. It sounds like he's done that already, but there might be other um, opportunities or other items that he can play with or explore with and he might find it interesting...so

Teacher: Ya. I agree... and I like to see...I like to see more interaction you know because I think, too as teachers we get stuck in a rut of just doing one on one, you know feeling the...feeling the.. not...not seeing how to go ___{unintelligible} a peer would be in the child's best interest socially... so like rather than...have him...have me use somebody else to ... to you know get what David wants... so say he wants something and he asks me...then you know by asking him to ask a peer...

Trainer: Right.

Teacher: ... it's making him engage with them when you know most teachers just give it.

Trainer: Right...and you do that so well already. You do that so well already.

Teacher: Sometimes...[teacher laughs] Sometimes I catch myself just finding a short cut, too

Trainer: [unintelligible] But for him it is...it is important...

Teacher: It is.

Trainer: I think that you realize that...that he's... a lot of our kids don't tune in and they kind of get fixated on one thing so... for him all of those practice sessions and opportunities are gonna help him a lot.

Teacher: Because I would really like to see him as soon as possible get to where he won't need somebody and he'll be doing on his own.

Trainer: Right.

Teacher: And you know, the more practice...the more ...easier it will come. Ya.

Trainer: Do you have any questions on any of the strategies or...

Teacher: No not really. I think I... I think I kind of understand um...it's just getting more comfortable with it... learning my place and...and when it's, you know uh... would be a good thing and when you know, I might be over doing it.

Trainer: Right. Do you feel like when we are not here...are you able to get a cooperative activity when we are not here?

Teacher: Ya.

Trainer: ...and do you use some of the descriptive prompting to get there? Do you think you can you give me an example of something....

Teacher: Um, when we were...when we were doing play dough yesterday afternoon, um... the...the DOE kids stayed later in the afternoon so we took out play dough...sometimes we'll do outside centers and we'll do inside centers so I found myself having him rather than you know, just tell me what he's doing. I would encourage him... you know, "why don't you play right here..." you know, so everybody started to make balls, you know...

Trainer: Oh good.

Teacher: So one of...Kara was making balls so she was like, "David, David, can you make balls?" You know, so she was showing him and he was watching her so he started making it and then, Steve started making them, too... so they were all kind of working together...

Trainer: That was their common purpose...they were all making balls...

Teacher: ...and then I didn't do anything like after saying that...I didn't say anything, you know.... I was sitting there doing it with them. but I didn't...

Trainer: Right. Good...

Teacher: ...verbalize anything...then they started counting how many...cuz Kara initiated and she's like, "oh I have..." and she started counting them and David counted his...and then Stanton tried to count his...

Trainer: Oh good!

Teacher: ...and they were all kind of doing it together without me really saying anything...

Trainer: Great!

Teacher: Just the suggestion of...you know...Ya... "Wow can everybody..." I think I said, "I'm gonna make some, too," and you know, that's all I had to say is I'm gonna make some, too and then everybody started..."I can make some..." and everybody was rolling play dough in little balls...

Trainer: That's great!

Teacher: And it's good, too because there is good observations for me because then I get to see their differentiating size...you know, so they learn big...big and small and medium and um counting, you know...so those are the kind of activities that I always have to look for to get observation in so I know where they are [unintelligible].

Trainer: Ya.

Teacher: I can't, I can't...I am already on three on all of his check point areas you know for his cognitive ability because he has all that down...

Trainer: Right.

Teacher: So all of his are social/emotional goals and even in that, he's done so much better. I think there's a little resistance still when he doesn't get things the way he wants it, you know, there's that, but um, but even that...behavior is really improving.

Trainer: Right.

Teacher: So ya.

Trainer: Okay. Well sounds like, you know, I wish I was a fly on the wall watching...[unintelligible].

Teacher: [Laugh]

Trainer: We just get a snap shot...

Teacher: and it...and it would be nice if you know, you could come in and spend the whole day...

Trainer: Ya.

T: You know to be able to see, you know the transitions and...

Trainer: I might just do that...

Teacher: We always encourage that...it would be fine. And I don't know if it's something you want to keep track of, too but, we have volunteer time sheets...every time that you are in the classroom...then you can sign the volunteer time sheet...

Trainer: Oh.

Teacher #3
Feedback Session #1
11/26/07

Trainer: So tell me what you thought. So you thought he disengaged? He wasn't talking as normal.....as much as he used to.

Teacher: or as much as he usually does. He um... He had been doing really well with her in blocks. Not a lot of verbal but he had been doing really well. He had chosen her for his partner. So I was like yeah!! Baby!! Then when he wanted to leave blocks he chose her again and he wanted to do puzzles and then.....

Trainer: When were they doing blocks together? Was it right before this or... that was

Teacher: uh huh [yes]

Trainer: the other day?

Teacher: And they were building. He said they were going to build an apartment.

Trainer: Wow!

Teacher: Pretty big words huh?...an apartment! And they didn't go out, they didn't go up.....they went out. So they...

Trainer: good

Teacher: Not only did they have almost every block on the floor but they also cleaned it up.

Trainer: Together?

Teacher: And for him that's pretty magnificent because clean up is not his favorite thing....so he did it

Trainer: And you were in that center with him?

Teacher: uh huh [yes]

Trainer: What was your comment to them as they were building?

Teacher: Pretty much just observation comments. It was more watching what was going on because first of all I was shocked that he had chosen a friend, so that was a shock to me and then he had engaged her to build an apartment so I was like whoa!

Trainer: Did you use any praise or compliments for that? Or you just kind of sat back and watched?

Teacher: No I was commenting, small kind, but I wasn't trying to talk to him personally. I was just like....What would you say...umlike the commentator ...oh now they have the football. Its like oh now they have the block...oh look it, he gave you the block, that kind of stuff.

Teacher: Oh perfect okay

Teacher: So that seemed to work.

Teacher: But then at puzzles it just kind of disintegrated...so maybe had used all his.....interpersonal _____ workings.

Trainer: I noticed he really, like you said, you're my feely boy..., or my huggy boy.

Teacher: Huggy boy....uh huh.

Trainer: And maybe that was a little bit more reinforcing than the actual puzzle.

Teacher: ok

Trainer: He actually liked that more.

Teacher: ok

Trainer: There's one thing I noticed when you are saying um, "you are not going to talk to me today." It was almost like he was, he was waiting.....he was like going to be quiet, so he could get that hug from you.

Teacher: oh, ok

Trainer: You know I'm not sure I am just kind of guessing because I saw him [unintelligible] and then he looked back to see and then you'd make a comment like "oh you're kind of quiet today." Or "he's ignoring" or it's almost like reinforcement for him so that's kind of why maybe was a little [unintelligible]

Teacher: Cuz I noticed when he went to the family center that he kept looking behind and

Trainer: right

Teacher: Seeing what I was going to do.

Trainer: What I was thinking for that one was because he wants that attention from you, if you could get him to do something with a peer, even just hand a puzzle piece to them and then trade him for interacting with a peer.

Teacher: okay, okay

Trainer: Because he's kind of getting reinforced for being quiet, which you know, he's playing with you fun but then you want them to kind of interact.

Trainer: I heard a lot of um, you know, strategies we talked about. You can see all of the descriptive prompting that I kind of coded here (referring to data sheet).

Teacher: oh, ok

Trainer: Can you talk so others can hear you? That was great because he was saying something and you were drawing attention. Like, you know, your friend is trying to hear what you are saying, you are showing that it is important that whatever he has to say, his peers want to understand (?)

Teacher: okay

Trainer: I saw a lot of great general prompting like, "did you hear?" I [unintelligible] Answer you. Did you use your words? So that's kind of a general prompt like what kind of words. Like....that was perfect....general prompts are great too.

Teacher: okay

Trainer: Like this one, "can you use your words to tell her_____?" "Let's put the puzzle pieces together." That was perfect, because it's a descriptive prompt of what they can do together.

Teacher: okay

Trainer: "She wants to know where the piece goes." That's kind of like a hint. Like he wants to, you know, help her out and later that peer picked up on it and she asked him by herself.

Teacher: right

Trainer: That was perfect. Um and then you were giving them the words to say"Say, sure, the more the merrier." So you are giving him the words to say when he was, you know, stuck there.

Teacher: okay

Trainer: [unintelligible] with the puzzles – you know trying to get him back and engaged. [fast recording]together as a team we are all trying to put the pieces together – she's helping.

Trainer: So another thing I was thinking is if he does disengage like that, to break it down, even if just handing a piece to a peer. "Can you give this to Abe?"

Teacher: okay

Trainer: Just to get him back and engaged again.

Teacher: okay

Trainer: Then compliment them for it.....just to break it down.

Teacher: okay

Trainer: Because come play.....come play.....come play.....but then he's kind of like disengaged and does not know what to do. So that might be a way to kind of get him back in there.

Teacher: okay

Trainer: You know how you were teasing him at the head, "Where does this piece go....does it go on my head?" So it was an interaction between you.

Teacher: uh huh

Trainer: If you can tie it in with a peer like, "does it go on Abe's head?"

Teacher: oh, okay

Trainer: Just to get some sort of

Teacher: "more interaction"

Teacher: ok what are – I don't see any NS's are these things I should be getting?

Trainer: NS's are not as good – specific praises are good. Um you said, oh let's see, oh, I think that the peer said "I don't know where this goes" by herself. You caught on right there and you said, "you are using your words nicely". You said that to Shirley. Is that her name?

Teacher: uh huh [yes]

Trainer: So she asked him (target child) herself. So boom, you complimented it so hopefully she might do that again 'cuz she's realizing that's important.

Trainer: So you caught on to that, that was great.

Teacher: okay

Trainer: He's say – these are all descriptive promptings to communicate "Say, where does this go." Um so you are giving him the prompting a lot to communicate. So maybe next time you can think of, how can I also use those descriptive prompting even if he's not going to talk, he might be able to do some cooperative acts with out even saying anything – "Give this, - hand the _____, here's your piece." "When she finds the piece can you hand her another one?" Give him a job to do so that he has a purpose for sitting there, even if he is disengaged.

Teacher: okay

Trainer: Um, I love the dinosaur food {interaction} and even though you were on puzzles, that was perfect – that was his interest. He wanted to be hugged then Shirley jumped in and you included her too. So you said, I have more dinosaur food." So they are both dinosaur food. So that was perfect.

Teacher: uh huh

Trainer: So maybe you could get them to say something together. "What kind of food are you?" Tell Shirley, are you meat or are you jellybeans?

Teacher: oh, okay

Trainer: So that was perfect because you noticed they kind of disengaged from the puzzle and you had his interest so that was one of the strategies – taking his interest and you brought in a peer with that. So that was good.

Teacher: okay

Trainer: Cool!

Trainer: And I guess these could be like opportunities – you said, "Oh give Miss Madison a high five." Could you have asked a peer to give him a high five to whatever he did? So be thinking of that.

Trainer: Uh

Trainer: So let's see.

Teacher: You probably get writers cramp, because I think _____ way too much.

Teacher: [laugh]

Trainer: [laugh]

Teacher: Anytime you want me to shut up I will you know [laugh]

Trainer: No, it's perfect.....so you said, um are you going to help us put the puzzle together and SeanI think he said "no." You can also use the peers to ask him the same thing that you would have asked him. So "Can you go tap him on the shoulder?" "Can you go tickle him under the ____?" 'cuz you were tickling him and he liked it.

Teacher: uh huh

Trainer: So, "can you tickle him on the shoulder like this?" to get him back over to start interactions ... So of what you would normally do, but it brings the peer in.

Teacher: okay

Trainer: And then make sure you reinforce the peer for trying. They are doing the puzzle and they are engaged but they need that too. I thought it was great, I mean he was sitting there. I saw more interactions he even touched a girl on the head and even though he jumped on her, that's still communication.

Teacher: When he did that I was like, oh, here it goes.....laugh.

Trainer: But any questions? Do you have any ah, has or anything that you thought of that maybe you um.

Teacher: Not that I can think of at the moment.

Trainer: But it sounds like it's not just during the observations that you are thinking about some of the strategies.

Teacher: And, and trying to get us all to be realizing that he doesn't seem to be interaction and how can we get him to interact.

Trainer: Right.

Trainer: The one thing like with the tickling, just be careful of when you are reinforcing him 'cuz that is reinforcing for him.

Teacher: okay

Trainer: So if you are going to bring attention to him not saying anything and he gets tickled for it, that might...

Teacher: be reinforcing the negative.

Trainer: Right

Teacher: okay

Trainer: So do that tickling when he does make a communicative act or when he's giving something to a peer. That might help better.

Teacher: okay

Trainer: Sounds like a good plan.

Talking about scheduling

Teacher #3
Feedback Session #2
11/27/07

Teacher: I feel like I'm dyin' [laugh]

Trainer: It took a lot to keep him in that area yah?

Teacher: uh huh

Teacher: And to keep him engaged! And try to get others to engage

Trainer: uh huh

Teacher: although thank God for Kara 'cuz she'll engage with anyone and everyone [laugh] so it's a lot of challenging work!

Trainer: um huh

Teacher: Yes you know that [laugh]

Trainer: So tell me about some of the things you were excited about that maybe you saw some cooperative play going on.

Teacher: Oh, I saw a lot of cooperative play.

Trainer: Yahl

Teacher: I was really shocked when he actually started to talk to her with the phone. That was really exciting and encouraging.

Trainer: uh huh

Teacher: um but I felt like up until the time he said "hello" on the phone I felt like I was drowning. Come on dude throw me a life line help me out.

Trainer: Right, but did you see how when you have him specifically what to do he got engaged? First it was his interest because he was like "oh, you know, like, you checked that out first right?"

Teacher: uh huh

Trainer: And then you were telling him, say "hi"

Teacher: um huh

Trainer: You were actually giving it to him. You were having her telling her what to say to him and you saw how specifics – that you got a longer interaction

Teacher: Right

Trainer: Versus saying um... "Can you get one of you friends to build with you?" What are they going to build exactly? So you started talking about the apartment. Then he might need just a little bit more of "oh you're stacking something let's add 2 more pieces – you know what I mean?"

Teacher: And I thought too, he said the apartment yesterday that might not be what's interesting him today. That's right but you checked that out because it might....

Trainer: have been.

Teacher: Ya I tried... uh huh

Trainer: That was great!

Trainer: um I thought you did a great job of taking his interest and going from there so one of them was the phone, the other one was the horses when you were talking about.....oh don't you remember [unintelligible] oh that was great because you never know if it's gonna [be in his interest].

Trainer: uh huh

Teacher: I think your hand must be so exhausted by the time you are done with me because I think all I do is ramble.

Trainer: Do you feel like it's out of the norm of what you normally do?

Teacher: No 'cuz I'm constantly talking.

Trainer: yah.

Trainer: I think it's good for them because they are hearing what you're saying and watching even what I thought was really great was even though he wasn't interested in the phone I think like the 4th time, you still reinforced the peer and said, well if he's not going to talk then I'll talk to you, because that engaged her to do it again later.

Teacher: Oh okay.

Trainer: You still give her that reinforcement and talk with her and he was watching you.

Teacher: Oh he was? Oh okay cool!

Trainer: You know he was sitting and he stopped for a minute and he was watching and listening you see you were modeling for him for the next time.

Teacher: ok

Trainer: And I thought it was great how even though okay they talked on the phone... or we are done with that. You used it again.....you tested it out to see if it was his interest.

Teacher: and draw him back ummmm huh

Trainer: You did it three times and the 3rd time; he was able to do a little bit more on his own.

Teacher: oh

Trainer: It was like more repetition for him and as long as it's his interest you know that could be a chance to fade out later because he already knows how to do that right.

Teacher: right, right

Teacher: And he was willing! I mean I was shocked that he kept going back to it.

Trainer: But I am glad you tried, you know, um. It was great how giving the peer her words "I was building there." I mean even if it was something negative, he's doing, you are encouraging a communicative act with them. And then you reinforced her for talking to him.

Teacher: And I gotta tell you for that particular, both of those children, I thought.....

Trainer: Those are the two that you said are.....

Teacher: I thought, oh my gosh, here we go... there's gonna be an explosion. There's going to be real fire.

Trainer: But I...loved how you situated yourself... you realized what was going on and you plopped yourself right in the middle [laugh]

Teacher: Because I'm like they are going to kill each other! [laugh]

Trainer: That was great then, you reinforced her for using her words and not...that was great.

Teacher: For not...hitting even though you want to clean his clock....[laugh]

Trainer: Um..."Do you want to give this to Sean...?" that was a descriptive prompt. You were giving her the choice to see if it was her interest but then you were telling her specifically telling her what to do versus "Do you want to build...with your friend?" You tell them exactly what to do....that they can do together.

Trainer: it's for you" [laugh] That was kind of like a general prompt, but like somebody's calling you.

Teacher: [laugh] uh huh

Trainer: That was great "you better tell Sean to bring the fire truck." You took what she was doing, her interest with the fire – and then he even started making those siren noises.

Teacher: Yah, Did you hear that uh huh

Trainer: He was coming!

Teacher: He's like... whew, whew [siren noise]

Trainer: He looked like he was engaged he was getting the fire truck.

Teacher: yah he made the sound!

Trainer: So you could have even taken it from there and kept going with the fire truck. Let's blow on the fire.... Here's the hose. Let's hold the hose together!

Teacher: [laugh] yah that would have been great!

Trainer: Let's see... and you did lots of prompting too. That was awesome. And she [peer] even said "two high fives" because she was you know

Teacher: getting into it! Uh huh.

Trainer: You were praising her for interacting yah

Trainer: Umm it was great how Sean is saying something to them and you are drawing their interest of you know "look he's talking to you. He's saying something, you know

Teacher: uh huh

Trainer: That you know is important and then you reinforced.

Teacher: Even if I didn't understand it I'd say, "say it again, Sean"

Trainer: uh huh that was great.

Trainer: You, you....this is just an idea you already do this so well. You take his interest so well...you take something that they are already talking about and you go from there rather than coming up with your own ideas.

Trainer: One of the times he fell down and he goes 'owie" and you asked, "Do you have an owie?" So you were trying to see if they could tell each other about each others owies. Another idea would be with the blocks. "oh can you check her temperature" you know...

Teacher: oh ok

Trainer: Something with the blocks because then you can break it down to something more specific that they can do with the blocks.

Teacher: Okay

Trainer: I don't know if that is the area for it or if that's more of a home center...but

Teacher: They actually have a nice doctor...and he does...his mom came for a meeting and he got the doctor stuff out and he goes.... "shot mom"

Trainer: oh good.

Teacher: [unintelligible] Let me listen to your heart.

Trainer: oh good

Teacher: She's an awesome parent.

Trainer: So that might be something, he might need something more specific to do with the blocks otherwise he jumps from one block to another and he likes the feeling of being high on them.

Teacher: uh huh

Teacher: Did you notice how he likes to sit on a stack of them?

Trainer: u huh yah yes.

So if he has something to do with it..."Can you look in her ear? Or something with the block then he's, you know.....

Teacher: I think that's why I said oh I see you in the red, but he didn't get that one in [unintelligible]

Trainer: But he tried.

Teacher: One of the other children came and got drawn in

Trainer: But that was great because you are associating his interests. If it is his interest, you go with it and that is part of the strategies.

Teacher: oh okay

Trainer: I love how you took what the peer was doing with the giraffe.

Teacher: uh huh

Trainer: If you wanted to bring in Sean, I don't know if you could have him build a swimming pool?

Teacher: I was gonna say look here he comes but yah, I thought he was going to get engaged with that 'cuz I thought he was going to say something about, "giraffes don't swim" or something like that.

Trainer: would he normally have said that?

Teacher: uh huh

Trainer: oh, good, okay

Teacher: But he didn't go with it and I'm like okay....I gotta work harder... you got me sweating here child! [laugh]

Trainer: But there was a really great minute with him talking on the phone that was the true definition of what we have for cooperative play where they are doing something together. You know, cooperating to talk on the phone.

Teacher: And there was that total engagement there.

Trainer: And lots of communication! Even though here is a lot of non verbal there's still a lot of communication going on.

Teacher: Yah cuz I was actually thinking we have a meeting with his mom today and I was thinking this would have been great for her to have seen this on a video to see him interacting with his peers.

Trainer: Yah, that's an idea for next time.....a before and after video

Teacher: Ya. I think it would have made a big difference for her to see before when he was just totally with an adult and now he's getting engrossed with his peer for example today before we went to free play, we asked him again to find their friend and it was cute because he got on his hands and knees and went around the circle until he found her and then he just...he was on his hands and knees and he was just looking for her.

Trainer: oh

Teacher: Somebody said what are you doing and he said, "hey friend and was like [whimpering sound]

Trainer: ok good.

Teacher: This is a moment, this is a Kodak moment I don't think he know her name but he knew friend.

Trainer: That's awesome!

Teacher: Her actual name is Gina and for some reason her parents call her Abe – I don't know why but we called her that to help- she was here last year with her older sister, her sister went to kinder and she was here by herself and she had a hard transition from no longer having a sibling. So we were desperate. We'd do anything to make you have success in the class. We'll do it – we don't know why but we're calling her Abe.

Trainer: Well do you have any questions? I saw a lot of great things. If you feel like it is too much. If you can get that phone conversation going, you prompted her – maybe you can try it the next time – like get them started – you know, like " I'll be right back."

Trainer: "I'll put my phone on hold, I've gotta go check on something and I'll be back to answer my phone and see if....."

Teacher: [teacher distracted]... Sandie, why are you carrying the chair? Please up it down.

Trainer: You are a true multi tasking pre k teacher. You are talking and.....

Teacher: Yah, I don't want anyone to die in this classroom.

Teacher: Okay so it seemed like it went better, but it really is a lot of work.

Trainer: Do you feel like you're having to come up with or think of what you can do to engage him or do you feel like he just needs a lot of prompting.

Teacher: I feel like he needs a lot of prompting.

Trainer: cuz its coming natural to you.

Teacher: uh huh

Trainer: It seems like to me that you are taking his interests, you're just

Trainer: I just want to make sure it's not like 'cuz one of my first teachers, she was, I just gotta think of what, I don't know what exactly to prompt him with.

Teacher: No I For most of it I feel like I'm just following his lead, you know, and then going with it but it's a lot more work in as much is, you know today there was a lot of volatility that could have occurred because he and this one child was like oil and water.

Teacher: Um it doesn't feel like it's taxing it doesn't feel like it's that way at all. It just feels like it's challenging because, you know I'm trying to get....where as before he and I it would just be he and I communicating or he and Miss Shandle or he and Mrs. Mary . Now we are trying to engage him with peers. So that isn't taxing but it's more challenging because I have to top being his sole supporter and start to try to pull away and replace me with someone else.

Trainer: Right uh huh

Teacher: Its not that is taxing because we do it for all the children. It's just that for him it's like...okay if I start to step back – what's going to happen? Is he going to hurt that child?

Trainer: Right so you have to monitor for safety – that comes first.

Teacher: uh huh

Trainer: And it's also instead of focusing so much on him I see you really looking at the peer and taking what they are doing which is great because they are natural prompters we'd rather have them prompt than you prompt anyways.

Teacher: Right. Right. And having Kara in there oh man 'cuz that she's that must have been how I was at 4 years old.

Teacher: Non stop talking [laugh] that's what she's going to do when she is older.

Trainer: That was so cute when she said, "he [Sean] can't hear you" and she goes, "answer the phone!" [laugh]

Teacher: That's what I mean, I am sure I was Miss Tita...I told you [laugh]

Trainer: [laugh] oh but I saw some really great things.

Teacher: yah, I did too, I did too. It was real encouraging!

Trainer: Good, good.

Teacher: And it is encouraging to see him interact with other children but I can see what you are saying about other children wanting to be with me. Isaac was at the table doing dinosaurs and the more I got people engaging with Sean, the more he was like...did you hear me say to him "Do you need something, because he was standing there and he's like....

Trainer: ...give me some attention, I want some too.

Teacher: yah, but I can see where this has been real beneficial.

R: Good.

Teacher: Thanks.

Teacher: Do you think you will be able to share some stuff with mom?

Trainer: Oh sure, actually what we'll do is I have one more feedback session and then we'll do 3 times without any feedback. Then the last day on the 16th I'm gonna ask some social validity questions about, you know, the training and what you thought, and you thought about his behaviors, the change...and then that day I'll go over the data – I'll explain all of the data for you.

Teacher: okay

Trainer: I'll give you copies of it and if you want me to have another meeting after I can go over everything.

Teacher: Okay

Trainer: And actually what I'll do, in my write up, I've gonna have actual Samples of some of the communication that he's done so you can kind of see before and after.

Teacher: Cool.

Trainer: So I can do that for her.

Teacher: Yah that would be great
Not only the data, but actual maybe things he was doing versus before, maybe it's not a video, but you can see before and after.

Trainer: Right. I think maybe that we'll help her to see progress. Our goal is that he be able to be in a kinder classroom with support but in a kinder classroom because he's very bright and we want to see that as opposed to an se classroom.

Trainer: And you can use that data to, you know, to show before and after to say he is communicating, he is playing cooperatively with his peers.

Teacher: Yah, I'm really excited with about that

Trainer: Yah, okay

Teacher: Did you want me to rephrase that?

Trainer: No, no that's okay. So he usually goes from the puzzle to the block center. But, he did that art center that one day.

Teacher: That was actually freaky. Ya, I wouldn't say that is normal for him. Primarily, in fact, all through his ESY [extended school year], I would say 95% of time at ESY, he was with that... those one particular dinosaur puzzle and we would try to engage him at other things, and it was um, it was like he was fixated on it... that was where he wanted to be.

Trainer: Okay. So now that you actually have some peers that he is starting to get reinforced from, um you might want to use some of those materials to draw him into maybe another center. I mean...

Teacher: Now see, I know I can get him to magnets, but remember...

Trainer: Oh ya, ya, ya.

Teacher: Magnets is kind of like...

Trainer: Ya

T: It will definitely like...draw him out, but I can't predict the outcome...

Trainer: Right. So another, I am just thinking... you are making me think, um... let's say in the block center you did something with, "Oh I'm hurt... let's you know"... but then you know you might tell them later... "The family center has actual... you know..."

Teacher: The doctor stuff.

Trainer: It was an interest that he had, but it brings him into something else.

Teacher: Cuz otherwise I know I can get him with the magnets. I know he'd redirect from the blocks over to that.

Trainer: Hmm. But like you said before it's an interest that is so reinforcing that you are going to get negative behaviors.

Teacher: Uh huh.

Trainer: But, you did a great job of asking, not only... he chose that center, but in that center pulling his interests. You did a great job at that. And testing it out to see if something sparks, and if it does you go with it. If it doesn't you switch up and do something else and that just comes really natural for you.

Teacher: Okay, well, we'll see if we can get him to a different center, but truthfully, I think...

Trainer: It's fine!

Teacher: I think it's primarily going to be blocks and I mean you know even when I tried to engage him with like the fish, like feeding the fish... that didn't even last like 30 seconds.

Trainer: Uh Hmm. Okay.

Trainer: Well I say take the example that you did of talking on the phones... and you can do that or you can try other activities in there, but how you broke that down and you were saying, "say this..." "Here hold the phone." You were descriptive, you broke it down for him and once they get engaged with that you can start pulling back.

Teacher: Okay.

Trainer: So use the same strategy that you used with that... with other... building a tower, building an apartment, lining up all of the horses, whatever, you know... sparks his interest.

Teacher: Okay. We'll do.

Teacher #3
Feedback Session #3
11/29/07

Trainer: Ya!

Teacher: I am so surprised!

Teacher: Hey you are in flats!

Trainer: Oh ya!

Teacher: I think it's the first time I have seen you in...

Trainer: And I wore pink so I am matching... well kind of sort of.

Teacher: Hey, your shoes, that counts.

Trainer: Alright so...

Teacher: How did we...

Trainer: I saw a lot of... okay the boat was the big one and that was great...

Teacher: I can't figure out how to sing that darn song [referring to 'row row row your boat']

Trainer: They had it, they were rowing!

Teacher: Isn't that sad, that was the only thing I could remember? [laugh]

Trainer: But, you know, they were rowing the boat so that was a cooperative play activity, they were all sitting in the boat and they were all doing the same actions.

Teacher: Wasn't that wonderful! They were all...

Trainer: Even the picture...

Teacher: Ya! Even though I felt like...

Trainer: Did you see his face...it was like Mr. Shiroma...

Teacher: Ya! He smiled...I was like...[claps hands]

Trainer: And all three of them were in there...

Teacher: Ya! I was... that I was really excited about.

Trainer: That was great. So, that was a cooperative play act together. They were building, building the boat together... some were sitting in it...um, there was a time when you started, when a peer started talking about transformers...

Teacher: Uh huh.

R: You directed him... you gave him attention for it, but then you directed him to ask Sean. So, that was a good try, he might have and maybe in the future he ...

Teacher: He might. Ya. I thought they'd connect on that. Cuz they both like it.

Trainer: The doctor was great, I don't know if you saw this, but after you had suggested, he did bandage Sean up.

Teacher: Ya! I thought he was going to break his finger cuz he was pulling it back so far to bandage it.

Trainer: Did you see his face after he did it? He looked at him and went... and went on with their business. But that was really like a nice moment.

Teacher: Uh huh.

Trainer: Um, then it kind of looked like you know when he was kind of disengaging from the boat, you or before, well actually, it was before they actually started building the boat, you talked about the horses, so you were testing out his interest to see if you could...

Teacher: Get him involved...

Trainer: get some other thing that they could do together.

Teacher: Uh huh.

Trainer: Um, you made specific suggestions instead of like... because he was building the boat and you noticed that more friends wanted to come...

Teacher: Uh huh.

Trainer: So you said, "I think we need to make the boat a little bit bigger."

Teacher: Uh huh.

Trainer: And you made suggestions like um, well Sean was already making it bigger... and if the peers were kind of doing it on their own... they were playing with blocks and kind of doing their own thing... um... "Can ____ come in the boat with you?" You know, you are making a point to show that you are doing this together as a team that you know it's your boat... it's everyone's boat. You know...um...

Teacher: Wow, look at all those notes!

Trainer: Ya and I haven't...coded all of these...

Teacher: I don't know how you get all of that done?

Teacher: Are you helping him build...[reading trainer's notes] Oh!

Trainer: But I saw more specifics with you today instead of saying, um... what are you.. let's build something. You specifically started talking about the boat and how to make it bigger. When he started stacking up the blocks you said, "I thought it was suppose to be like this..." You got it, you know, more details for him.

T: Uh hmm.

Trainer: And then, look what it turned into.

Teacher: Ya! A Kodak moment!

Trainer: So I was gonna brainstorm with you what are some other things that you could do with the boat. You had the doctor. You had that idea. I was thinking fishing...You did the row, row, row your boat

Teacher: Oh! I didn't think about fishing. Oh okay.

Trainer: you could think of all different types of...

Teacher: They are gonna kill me.. the alligator.

Trainer: Uh huh, you brought in that one. Uh huh.

Teacher: The shark. I said I was gonna be an alligator, but then I started going [singing] "Dun dun dun dun [singing], hello!"

Trainer: But they were all engaged with you, they were watching you and what are some ways, I know we talked about fading out and you wanted to... you know, with his demeanor... and also in the blocks, that maybe that might not be a good...

Teacher: ...way to fade.

Trainer: But what are some things.

Teacher: Cuz I could envision you know when he put the block...

Trainer: Yah.

Teacher: Hmm hmm hmm [sing songy]

Trainer: So what would be a way that you could... maybe for your fading might be um... less prompting when they get to a point that they are already starting to cooperatively play...so maybe your attention turns to somebody else...and you're still watching them. You don't physically have to get out of the area.

Teacher: Okay.

Trainer: But maybe be thinking about what is or what would be an opportunity that I don't need to keep prompting.

Teacher: So fading without being physically gone because I am still worried about the safety.

Trainer: Right.

Trainer: Just fading your prompting. You just wait, once they are in the boat together, wait see what they can do...

Teacher: See what happens...

Trainer: and then if they need prompting, then come back in.

Teacher: Okay, that's a good point.

Trainer: And then you won't feel like you're having to prompt every minute. Um notice that with the doctor thing that was going on. That was really great. You could go back and reinforce it and say, "oh no, somebody else is hurt." And you know how you did with the um, the uh, talking in the phone...

Teacher: Oh uh huh,

Trainer: You came back to that one because you saw that that was something that they did like to do together.

Teacher: Uh huh.

Trainer: So use that strength that they have that he knows that he is able to pretend he's hurt and the doctor's coming...

Teacher: Uh huh.

Trainer: So do it again, try it another time...

Teacher: Okay.

Trainer: and then fade back as they are playing together just, you know, verbally.

Teacher: Okay. Cool.

Trainer: Um...

Teacher: So actually, I don't know if you see it or if I am imagining it, but doesn't it seem like he is engaging more with the other children?

Trainer: Have you noticed that?

Teacher: Uh huh.

Trainer: I mean more eye contact?

Teacher: Uh huh.

Trainer: He was listening to some of your descriptive prompting to communicate and saying things to them.

Teacher: Uh huh. But at what point is what he saying okay and not echolalia... you know what I mean?

Trainer: Uh huh. Well I think there was a couple times uh Tuesday, that you had modeled something and then later he had said it on the phone without you prompting him.

Teacher: Okay.

Trainer: So he's gonna pick up on that modeling from you and hopefully be able to do that routine again with another peer or in the same situation again. So that is why that repetition is gonna be important... that okay...you guys build a boat...and that's why I liked how you were checking to see...let's build a fence...because you know the horses might have been an interest... you can always go back to something that they had played before which is going to be good for him because he is gonna need that repetition.

Teacher: Okay

Trainer: If it's not his interest... then you can go to something else, but if it is familiar to him then he is gonna be more likely to do it on his own.

Teacher: Okay. Cuz sometimes I feel like uh oh, you know like...is he saying it because he processed what I said or is it I just have him go into the echolalia. Does that make sense?

Trainer: Right, right.

Teacher: But I didn't realize that he said something that I said prior.

Trainer: Ya, and he's done that a couple times.

Teacher: Okay, that's great!

Trainer: And you can see him processing, you know when he does have an [unintelligible] like on the phone yesterday. He was looking at her and kind smiling...like oh this is how it works. You know.

Teacher: Ya, ya.

Trainer: And today with the bandage, I mean he, you said, ask the doctor for help and he kind of looked and you could see...that's not echolalia..

Teacher: When he repeated, "Ask Mr. Shiroma to take a picture." Then I saw that he was processing that because he smiled for the picture.

Trainer: Exactly.

Teacher: Okay.

Trainer: And you didn't say "Say take our picture." You said, "Ask him to." And he [Sean] said...

Teacher: "Take our picture!"

Teacher: Okay.

Trainer: He was modeling what they were saying and that is really what we want our kids with autism to do is watch what their peers are doing and imitate it because that is how the kids learn.

Teacher: Okay.

Trainer: And it's teaching him to pay attention to his peers and model what they are doing.

Teacher: Okay, very good.

Trainer: Ya okay. I guess maybe for the next...because you know he's gonna be in the blocks.

Teacher: Like all the time! [Laugh]

R: What are some things...if he does do the boat...what are some things that I can take in to...like row row row your boat was perfect because that's something they could all do together.

Teacher: Uh huh.

Trainer: Fishing...[tape stopped]

Teacher: Okay cool.

Trainer: So maybe brainstorm all the things that you can...can suggest as they are in the boat... what are other things they build in there? They build towers...they build um...

Teacher: I was actually thinking that maybe I should go out and buy some... I mean not like it's gonna be here for within the week but... I was thinking wow, how come we don't have any ocean stuff in here.?

Trainer: Hmm that's a good idea.

Teacher: Cuz I was thinking, I can't find a shark! Remember when I said...so then I pulled that thing off [block that looked like a shark fin] ...I'm like...we need more stuff in here.

Trainer: That would be a good idea.

Teacher: Ya.

Trainer: You could even use what you have in their now. So you have the horses..."We need to go save the horses...we gotta go to land".. and they could be on the land..."Let's go save them." "Here go put the horses inside the..." you know..

Teacher: Okay.

Trainer: Something that they can do as a team together... so brainstorm what that could be. Um ...tidal wave is coming..."Oh no, everybody take cover... put your, you know...raincoat on..."

Teacher: Oh okay...okay...that would be good.

Teacher: [distracted] Uh oh, now are they cleaning that up or...no and nobody's helping them...Oh okay I am just gonna focus on you and...not on them...

Trainer: No, no, no [laugh] if you need to go...go, go, go.

Teacher: No, no, no.

[Discussion about sharing information with parent]

Teacher: But you know, like I was sharing with our team, cuz we had a team meeting yesterday...I am actually very thankful that you have come in because it has helped us to see things that we weren't seeing that were right there in front of our face but, we weren't...we were seeing but not applying. You made it be more applicable.

Trainer: Oh.

Teacher: So that was a big plus for us.

[Discussion about negative behavior]

R: You are a great team.

Teacher: That's very kind to say. I think it's because I have a great team.

Trainer: It's fun. Well, it's gonna be hard the next time I come in no feedback...

Teacher: You're just gonna walk away...and I am gonna sit there going... ahh.

Trainer: But if you have questions that you want to write down I can answer them after I go over all the data with you and everything.

Teacher: Oh okay.

Trainer: I just have to keep my um feedback the same for every teacher.

Teacher: That makes sense. You don't want to skew anything.

Trainer: Ya, but if there is something that this happened this day...I'm gonna ask her about this at the end...I can do that..

Teacher: Okay. So tomorrow you'll come back. We'll shoot for 10:00 and we will pray that there won't be a fire drill or...

Trainer: No problem we are flexible

Appendix J



Social Validity

Teacher: _____

Date: _____

- 1) Would you be able to talk about the differences, if any, you have seen in the target child's cooperative behavior and communication since the intervention?
- 2) From your experience, talk about how ____'s (name of target child) behavior differs/is the same as your other children his/her age.
- 3) What differences if any has the intervention made in the target child's acceptance?
- 4) What did you learn that you did not already know about prompting and praising?
- 5) What was your impression of the training?
-long?
-short?
- 6) What was your impression of the strategies?
- 7) Would you mind addressing the concept of the ease of implementation of the intervention strategies?
- 8) What would you suggest for future training of teachers to facilitate cooperative participation and communication?
- 9) What information was most valuable?
- 10) How do you think you will use this in the future?
- 11) Do you have any other comments, recommendations, thoughts, ahas?

(If you think of anything else you would like to add, you may e-mail your thoughts to me at alethagomez@aol.com)

Appendix K
Fidelity of Training

Please check Yes or No.

I. Phase 1: Overview	yes	no
1) Provides teacher with Handout 1 and discusses the following three areas affected by autism:		
A) Social Interactions <ol style="list-style-type: none"> 1) Inattention to others / disengaged 2) Lack of age-appropriate peer relationships 3) Lack of joint attention 4) Limited social initiations or imitations 5) Lack of social or emotional reciprocity 6) Have a hard time putting themselves in "other people's shoes" 7) Lack of varied, spontaneous make-believe play imitative play 8) Lack of spontaneous seeking to share enjoyment, interests, or achievements with other people 9) Lack of eye contact 		
B) Communication <ol style="list-style-type: none"> 1) Delayed or no language 2) Immediate or delayed echolalia 3) Little understanding or use of nonverbal language 4) Inability to sustain a conversation if they do have language 5) May have atypical pitch, rate, rhythm volume of speech 6) Repetitive use of language or idiosyncratic language 		
C) Restricted Repetitive and Stereotyped Patterns of Behavior, Interests and Activities <ol style="list-style-type: none"> 1) Stereotypic motor mannerisms 2) Preoccupation with parts of objects 3) May have strong reactions to changes in their environment or to routines 4) May have preoccupations with an interest that is abnormal in its intensity or focus 		
2) Discusses the following risks for children with autism.		
A) Difficulty gaining and maintaining employment.		
B) Delinquencies or dropping out of school.		
C) Mental health problems later in life.		
D) Poor interpersonal relationships with family members and friends.		

E) Developing symptoms of anxiety, aggression, depression, and substance abuse		
F) Being bullied or teased		
3) Provides Handout 2 and discusses definitions and examples of cooperative participation and communication.		
4) Provides Handout 3 and discusses the three scenarios of common situations:		
A) Target child is not in an interest center or is in an interest center without a peer.		
B) Target child and peer are in interest center but not participating cooperatively in an activity.		
C) Target child and a peer are cooperatively participating in an activity in an interest center.		
4) Discusses five strategies to promote cooperative participation and communication:		
A) Use knowledge of the target child's interests		
B) Provide verbal/nonverbal prompts to suggest cooperative play activities.		
C) Provide descriptive praise as they begin to cooperatively participate in an activity.		
D) Fade physical presence as the children begin to participate together.		
E) Provide prompts and descriptive praise intermittently to maintain cooperative participation and communication.		
5) Provides Handout 4 and discusses definitions and examples of Prompting and Praising		

II. Phase 2: Video Segments	yes	no
1) Plays video and discusses segments depicting scenarios and strategies.		
2) Answers questions posed by the teacher.		

III. Phase 3: Feedback	yes	no
1) Provides feedback related to implementation.		
2) Suggests ways to use the strategies more effectively where applicable.		
3) Solicited input on teachers thought processes.		
4) Answers questions.		

Appendix L
Blank Child and Teacher Consent Forms
Consent for my Child to Participate in a Research Study

My name is Aletha Gomez, a doctoral candidate at the University of Hawaii. I am requesting your consent for your child to participate in a research study.

Purpose: The purpose the study is to evaluate how training teachers to use specific skills impacts how the teacher speaks and acts in their classrooms.

Procedures: Two to three observers will conduct 15 minutes observations, 3-4 times a week for approximately 1 month. I will be observing interaction between the teacher, the target child, and the child's peers. I will be asking that the teacher kindly to do what they usually do with the child and to stay in the general area where the child is during these observations. I will then ask the Early Childhood Teacher to participate in a 90 minute training session with feedback.

Confidentiality: The name of your child, the teacher, or the school will not be disclosed.

Inherent Risks: The researcher believes that the risks of your child participating are little or none.

Benefits: The Early Childhood Teachers will receive training in working with your child.

Dissemination: I am doing this study to meet one of the requirements of my doctoral degree program. During and after this study, I will take steps to protect the identity of your child and your child's teacher, and to keep study information confidential. For example, I will keep study data stored in a locked cabinet. Any paperwork indicting teacher, school or child's name will be destroyed.

If you would like a summary of the results of the study, please contact me.

Your permission for your child to participate is voluntary and you may withdraw your consent at any time.

I will be delighted to answer questions about the study now or during the course of the research project. You can reach me at (808) 954-1250 or alethagomez@aol.com. Should you agree to participate in the study, please call or return the signed consent to the address below:

*Aletha Gomez
3604 Maunalei Ave.
Honolulu, HI 96816*

If you have questions regarding the rights of your child as a participant in research, you may contact:

*Committee on Human Studies
2540 Maile Way
Spalding Hall 253
Honolulu, HI 96822
Phone: 808-956-5007
Email: uhtrb@hawaii.edu*

Name of Child _____

I agree to participate in the research study described above. Should you agree to participate, permission will then need to be obtained from your child's school director and Early Childhood Teacher before beginning.

PLEASE SIGN ONE COPY AND RETURN IT TO THE RESEARCHER.
PLEASE KEEP ONE COPY FOR YOUR RECORDS.

Printed Name of Researcher

Printed Name of Parent

Signature of Researcher Date

Signature of Parent Date

Consent to Participate in a Research Study (Teacher)

My name is Aletha Gomez, a doctoral candidate at the University of Hawaii. I am requesting your consent for your participation in a research study.

Purpose: The purpose the study is to evaluate how training teachers to use specific skills impacts how the teacher speaks and acts in their classrooms.

Procedures: Two to three observers will conduct 15 minutes observations, 1-4 times a week for approximately 1 month. I will be observing interaction between the teacher, the target child, and the child's peers. I will be asking that the teacher kindly to do what they usually do with the child and to stay in the general area where the child is during these observations. I will ask that the Early Childhood Teacher participate in a 90 minute training session.

Confidentiality: The name of the child, the teacher, or the school will not be disclosed.

Inherent Risks: The researcher believes that the risks of your participation are little or none.

Benefits: The Early Childhood Teacher will receive training in working with the target child.

Dissemination: I am doing this study to meet one of the requirements of my doctoral degree program. During and after this study, I will take steps to protect the identity of the child and the teacher, and to keep study information confidential. For example, I will keep study data stored in a locked cabinet. Any paperwork indicting teacher, school or child's name will be destroyed.

Your permission to participate is voluntary and you may withdraw your consent at any time.

If you would like a summary of the results of the study, please contact me.

I will be delighted to answer questions about the study now or during the course of the research project. You can reach me at (808) 954-1250 or alethagomez@aol.com.

If you have questions regarding the rights as a participant in research, you may contact:

Committee on Human Studies
2540 Maile Way
Spalding Hall 253
Honolulu, HI 96822
Phone: 808-956-5007
Email: uhirb@hawaii.edu

Name of Teacher _____

I agree to participate in the research study described above.

PLEASE SIGN ONE COPY AND RETURN IT TO THE RESEARCHER.
PLEASE KEEP ONE COPY FOR YOUR RECORDS.

Printed Name of Researcher

Printed Name of Teacher

Signature of Researcher

Date

Signature of Teacher

Date

Appendix M

Social Validity Transcriptions

Teacher #1
Date: 9/14/07

1) Would you be able to talk about the differences, if any, you have seen in the target child's cooperative behavior and communication since the intervention?

Teacher: "Um, I see more cooperation with her...a little bit more interaction and not only with her, you know. Doing this has also taught the other children how to work with her and gave them a little bit different expectations towards her and I think it also helped her become more social and interactive with other children."

2) From your experience, talk about how Macy's behavior differs/is the same as your other children his/her age.

Teacher: "She's good with cooperation, very compliant to what we ask. As for comparison with another child she's not as verbal, not as expressive, she kind of needs to be cued on. You know, or prompted to communicate with others. So socially she's still a little bit immature. More so the other kids are more in depth when it comes to imaginary play. Still Macy's still needs to be kind of told you know, 'Here is a pot, you know, oh the waters boiling, take it off the burner.' So, she still hasn't gotten that far in depth to the play."

3) What differences if any has the intervention made in the target child's acceptance?

Teacher: "Um, more so having her try to establish relationships is the first key. You know in the beginning it was really hard for her because she wasn't really familiar with everybody, but um just as long as I got involved with her and the other kids started coming around. That helped her to accept the other peer play."

What about the peers with her?

Teacher: "They've um actually come to accept her. I mean even now when I am not there, they'll still go up to her and try to get her to play. So it's been really exciting."

4) What did you learn that you did not already know about prompting and praising?

Teacher: "Well, I knew more about the prompting and praising, but really didn't know, um, the signs of autism. So it kind of helped me to look more into the child... what can you do next and take steps like that. It kind of helped me to acknowledge a little bit more, you know, the signs of autism."

5) What was your impression of the training?

Teacher: "Well, I've never really had a 1:1 kind of training but that was a really good thing you know, you can answer more questions that way. Um, I have done a lot of group trainings where it's good but then it's not so much training on the one person that you work with. It's training with others. So this 1:1 training has been really good. The time frame was all right. I mean, we covered a lot of things and you know, a lot of reviewing, but I thought it was good, you know, to take a look back and kind of mirror yourself."

What was the most meaningful part then of the training...was it the overview...the strategies...?

Teacher: "Well, like to look at the reflections and then put together the strategies that we've learned and try to use something different into the concept and see what worked...what didn't work...um."

6) What was your impression of the strategies?

Teacher: "Um, you know, I really like those strategies. Um, they... if one didn't work, you could always try something else. You know, like she doesn't want to interact with this person... let's try a different person...and finding an interest that she likes so I really like that. You kind of pick and choose and you see if working and you can fade out and just have that relationship going."

7) Would you mind addressing the concept of the ease of implementation of the intervention strategies?

Teacher: "In the beginning, um yah, I found that it was a chore trying to figure out her interest areas...trying to get other children involved with her...trying to get that communication skill going. But, once it's a consistency, I've noticed that the children are, you know, you don't really have to get them to come over, you know, they'll come over and her interactions with them have increased because of this ongoing thing. So it's been really good. The feedback helped. Especially when... um... the feedbacks really good, like I said, it's a reflection process and it's like I said, what you've done and then you can take a look back at what you did and think about what can you do next time. When we first started [the observation sessions] it was a little hard. We were trying to figure out a more appropriate time, but um... I think once we finally got the time... then you know, it was a lot better. The children are used to with you coming in and you know observing. It became a routine."

8) What would you suggest for future training of teachers to facilitate cooperative participation and communication?

Teacher: I would ask that teacher become more involved with the child's play rather than just sitting and watching. Interact with that child and the other children as well because children like that...if you interact, they'll interact and start interacting with one another once they find the common interest."

9) What information was most valuable?

Teacher: "Um, the most valuable thing out of this whole thing was seeing a difference in Macy's social skills and the other children being able to come up to her and actually work with her. So once again, a lot of the teacher prompting to get the children there. I think that probably has been the best skill."

10) How do you think you will use this in the future?

Teacher: "Um, well if I have another one coming in like that [laugh]. I can always refer back to these sheets and going back to do my own reflections and see what works."

Have you been able to use these strategies with any other kids that may have needed those strategies?

Teacher: "Um, just Macy's."

11) Do you have any other comments, recommendations, thoughts, ahas?

Teacher: "What about video recording [laugh] like maybe like short clips of teacher and child interactions and then maybe like... because for me personally, I wish that I did get to see myself working with her so that I can go back and I can go, oh well, maybe if this happens then I can do this. You have to ask other teachers though if you want to be recorded."

(If you think of anything else you would like to add, you may e-mail your thoughts to me at alethagomez@aol.com)

Teacher: Teacher #2
Date: 10/19/07

1) Would you be able to talk about the differences, if any, you have seen in the target child's cooperative behavior and communication since the intervention?

Teacher: Um, I think I've, you know I think I've seen cooperative behavior in him, you know from the beginning of this year because he had the benefit of last year. Um, I think I've noticed a willingness on his part, you know, like the more I practice having him ask his friends, the more willing...he, he tunes me in more, you know before, so I think maybe it's the frequency of me asking him, maybe he's, he's cooperation and that is more because it's getting more familiar...rather than just asking you to do it by helping him to ask a peer for help because now I'll notice that that he'll do it without me prompting him. Today for instance, he was trying to use a close pin to hang up his paper on the board and he turned around and looked at me but then he turned and looked at Jamie, who was standing next to him and asked her. But I saw him look at me first like he was gonna ask me and then he asked her without involving me so...ya...and that was just this morning so that was a good communication...He's just been doing amazing with that anyway. I wouldn't say that I see a difference one way or another with it since doing, you know...practicing this but I think that it's just that he's in that flow already. So, I don't know if I can really say that I could attribute it to this but I do see willingness on his part to want to seek out his friends first you know, before looking to you know, the adult.

2) From your experience, talk about how David's behavior differs/is the same as your other children his/her age.

Teacher: Um, I think you know at the point he is now, cuz I...by reflecting...it's just not you know, not part of the time that you've been working with me so like that's the hardest thing, you know, and I've been saying it from the beginning because he's made such progress um, he doesn't, you know, there's not the tantrumming that happened before and so, behaviorally you know, most adults that come in the room, cannot...cannot distinguish between...you know...none of the other...adults that have been in the room including the parents, know that David has autism...you know...they can't see it because he interacts and there's not the characteristics, you know the outward, you know and he doesn't do the stimming behaviors or that kind of thing so it, it just doesn't stand out. A lot of eye contact, a lot of you know, so much more language, you know. That's the testament to being in an inclusion classroom. I'm so happy, you know and it's a testament to him to because of his willingness to want the things...because even if you tried...and he didn't want it...participate in it or couldn't, you know so it's his own abilities and his desires to want to do that [unintelligible]. You know I mean it's, it's gone so far now it's like manners and names and please and thank you and you know...telling me stories that happened you know, a month ago and it's just reflections and ya. So you know honestly I don't, I don't see him any different behaviorally or ...developmentally there still a little development things ...you know, his fine motor...he writes his name first name, middle name, last name...you know, cognitively you know, way above...ya but. And he'll even be inventive with toys that look like something, you know that imaginative um finding a different use...you know he'll take a block that kind of looked like a telephone and he holds it up and "hello," you know, and pretends like it's a phone and you know, like he's talking and looking at her so he's pretending into his hand or a block, you know, but looks like the one he has and you make like...talk to me and you know, so he has all the same level you know, I don't see that he has...he doesn't pair up with anybody. He doesn't have a best friend, but he's not a lone in that because there's

boys that are his age level that are developmentally without you know IEP's or educational programs or anything and they don't do that either, so that's not necessarily a conditional thing cuz there are several boys in the class that they're migrant... [laugh]...you know, they like go around the room and they are friends with everybody, but they don't pair up and some that just need that...they have that connection and they have a best friend and...and then they kind of isolate sometimes they even you know, "you're not my friend," you know, this is my friend...where he's like a social butterfly and he is friendly with everybody. Ya. Communication-wise...where he is now you know, he can express himself, he defends his right to turn, he expresses when he's angry...when he's sad, um, of course there's always progress you know, from where he is you know, but I think in the time that he's been in school, he's just done so fantastic that um, I ...I wouldn't say I don't still have concerns, you know, I still have concerns and I still want to practice the things that you pointed out to me because I see that I was not...I wasn't ...not as helpful in helping him have those social exchanges...even if it's just something small you know, rather than having him always come to me and you know this morning was proof of it, because he turned around to look at me and then he asked her. So you know, I would rather him look to his peers...but a lot of children do that anyways, but I am the grown up, so they ask me and I'll say, "can you ask your friend?"...and most of them are willing ... I mean I know who will tell me "no," [laugh] you know, so I don't ask them to help because they'll go "no, I don't want to," and I'm like, "oh, that's okay," you know, ask somebody else and...but um, I think that communication-wise I'll still have him use his words to you know, ask a friend for help or include them in play and you know and...and...kind of prompt dialogue still...ya. But I don't have concerns, but I do see there's still room for progress...ya.

3) What differences if any has the intervention made in the target child's acceptance?

Teacher: Um, I think I, I think I kind of said that, you know...oh, you mean acceptance among his peers? Um, you because there's always been a willingness on their part...ya...sometimes...they're great [peers]. And sometime I'll, sometime I'll hear them say you know, some of the older children say, "but he doesn't know..." and I'll correct them and I'll say, "No, he does know...see you just need to make sure he's paying attention when you talk to him and make him look at you." So you know, I'll tell them, "Look at me," you know, so you know he's listening. So in that sense it helps them to see you know, I said, "Just like you, when you're not looking at me I'm not gonna talk and say things because I don't know if you are paying attention to me until you are looking at me." So I say, "You know it's the same thing with your friends...if they are looking somewhere else...they might not even hear what they are saying, and so I think it's helped in that sense, that the more he talks and the more he initiates conversation, the more comfortable they feel. Cuz when a child is real quiet, then the other children are kind of apprehensive to say anything cuz they don't, you know, sometimes they get scared they don't have a response you know, they don't want to not be answered so then they don't ask. So the more conversational he is, the more willing they are to talk because they want reciprocation. If they know they are gonna...there's two other children in particular in our class...they are just the mainstream students, but they are really quiet and kind of shy and they end up...the children even call, you know, that...they go, "aunty, they're shy ya," because they don't talk but then the other children are less likely to initiate conversation cuz they don't get anything back...ya. They want conversation so they'll give direction, but they won't, like...like...start a conversation kind of thing...you know, "what happened to you," or "did you do that?" It's more like... instructional then...or direction giving then conversation.

4) What did you learn that you did not already know about prompting and praising?

Teacher: Um, I think that, you know, I am sure there have to be times even as contentious as I want to think I am that I let moments slip when another child is being helpful, you know, towards anybody...that I don't...I don't want to create praise junkies, you know where they are always wanting [laugh] the you know, the reassurance, cuz sometime it's just they feel good. You can see it in their expression that they did something helpful and you don't always have to say something...if you just smile at them or. Then they know that acknowledgement...like you saw it, you know, but you don't always have to say, you know "oh good job," you know, cuz then they just start to really expect that and need it rather than just appreciate that somebody noticed. Ya, so I try to pay attention and say something, you know, "Thank you for helping your friend." You know, or trying to, even if they don't let you, ya, but um, I am sure there are times when I...when I miss it...I miss an opportunity. I try to stay contentious of it though.

What about the prompting part?

Teacher: Um, that, too. Ya the...um...um...catching myself so that I don't, I'm not just doing it on my own. You know, cuz I...even with the other children, you know...class wise [unintelligible] I catch myself, you know, someone will ask me and I found myself in the last few weeks kind of putting...asking, you know can you ask your friend to help you. Sometimes if I know it's something that...or even with particular children, they're less likely to want their friends to ...cuz they'll just tell me you know, "I don't want them to." Like even with opening their milk or you can see, you know if you could spend the day with us you see like at lunch time you know, you'll have peers tell, "I'll open you milk for you," and they'll let and sometimes they'll go...no they want aunty to do it. You know, even if their friends offer they...they...they hide it and they don't want them to do it and they want an adult to help so even if I try to prompt...you know, "You want Jamie to open your milk for you?" "No." And they pass it to me [laugh]. So I try to be respectful and let it be their choice if they want their peer to help them or if they want it to be an adult, but sometimes if my hands are busy or if I have creepy, or play dough, or paint on my hand then I can show them I can't touch it, you know, so can you ask your friend and then they know that I just can't so them they'll go and ask a friend. Ya.

5) What was your impression of the training?

Teacher: Um, I know when it goes long it's because I valaau [talk story]. But, I like that part, you know, I mean some times you know, the more I talk...I get...I get a different perspective on things if I say something...if I...if I talk enough sometimes I get corrected which is good cuz then I learn that maybe the way I was thinking of wasn't really...there's another way rather than it just being wrong. But, there's another way to look at it and you know, I want more than one opportunity to handle a situation if I can. Sometimes there's not just one answer...there's multiple answers and um...so I think the more I got to share with you about that, the better I felt because you know, I think I know a lot already, but there's always room for improvement and I learned a lot from John [special education teacher] and working with him and Dorothy and so that was a great benefit and I know I shared with you in the beginning that I could have really used your teaching tools at the beginning when I first started [laugh] because this is the first opportunity I had to work with a child that had autism and you know...so rewarding...I can't even tell you know, just watching him from the beginning of the year and like all the behaviors and the things that are like completely not there anymore. It's just great you know, like the

language and his socialization and his independence skills from not being...from not being...um you know, toilet trained and you know, just not having the communication so you know, that's where the tantrumming comes from because it has to be super frustrating that you can't get your point across...and...ya. So it's been really great and I...and I...as far as the sessions you know, I see them as not intrusive you know, the other children didn't you know, they were aware that other people were there, but it was so not in a position...in the classroom having there in...[unintelligible] and the training things were just about the right time and it's nice to be able to and that you accommodated...that it was you know, that you know, you were always conscientious of asking me if, "Is it the right time?" You know..."Can I"... and you know, I have the luxury of having the other three...four staff in the room so I could do that so, if you know, if you are doing this in other classrooms as well, you know, that have that benefit...ya.

6) What was your impression of the strategies?

Teacher: Ya. You know, just...I think that the strategies are something that I would implement with any of the children you know, so it doesn't single them out or anything. And I think it's good to stay aware of what...what their interests are you know, to...to...to help...um you know, give them... Sometimes I see that even if I offer a play theme...it doesn't...they just don't go with it. But, then that's okay you know, it's okay that I can suggest something...they do that with each other and ignore the...the...suggestion. So, it's okay that they don't do [unintelligible] something you know, and even if just a few of them...sometimes just a few of them start and the other ones kind of you know, want to be a part of it, too...even if it's a minute of engagement that might not have happened if you hadn't suggested something so, um... you know, being conscientious and praising children that are helping, um, you know...I especially notice myself more practicing the fading...the coming back...ya... you know, and I do that you know, and I think that I...I...was already to that stage so much that I maybe wasn't being as helpful when I could have been you know, that I had already...I saw him here...but then, he really is fluctuating between here but you know, I still do need to be involved in helping him to look towards his peers, rather than the adults in the room...and what is good is when I got to share this at our meeting. I kind of made the other adults aware of that, too. So I said, "As much as possible, when he comes to you and asks you..." you know, "look around to see whoever's closest..." um, you know, "to see if you can have him..." you know. And they're...they're usually doing that anyway you know, and sometimes it's just because a teacher may be already in a teaching moment with another and they want your attention right then...you can say, "Well, I'm helping so and so; can you please go ask..."ya...so I said, "Instead of asking him to ask me or asking him to ask...if it's something a child...a peer can help him with..." If it's something that an adult only can help with...bathrooming things or whatever...but um...ya...and a...ya...I think that they are all easy to practice strategies...and important and if you gotta keep them condescend...it's good you know, you give too many things to have to be contentious of with a child, then you know a teacher might feel overwhelmed, but that you broke it down you kept it basic you know, with these strategies. It's easier to work with...ya.

7) Would you mind addressing the concept of the ease of implementation of the intervention strategies?

Teacher: Just you know, during you know, during the time it works all day. I mean I know that basically the center time was the best observation time because it's when the most social interaction happens in the classroom but, through the whole day you know, I

can...mealtime...there's a lot of opportunities...at outdoor play you know, to use cooperative play you know, we do group games and you know, where they have to... you know, interact with each other and...um... you know, mealtimes especially you know, they'll talk with each other...asking for help with their milk and so I think that I am contentious of it all day...ya.

8) What would you suggest for future training of teachers to facilitate cooperative participation and communication?

Teacher: In regards to ...?

My training...is there anything else that you might have wanted added to the training, or anything differently? I know you had mentioned before about the video footage that you wished it would have been with a higher functioning child because that was kind of a level where you were at with that child...so to be able to see a child kid of at David's level and see somebody model the strategies that way versus lower functioning kids...he was already past that you said.

Teacher: Ya, because you know, I've become aware you know, in working with David and listening to Dorothy and John [special education teacher] and...and working summer school at a different school and it was all the special needs students...So I got to see that the variety and the different levels of autism and so, I think you know, I know that for me having these strategies might have empowered me a little more because I did feel like I'd pull back and not be as involved and I'd let John [special education teacher] them...

This summer?

Teacher: ...in the beginning...no last year...last year when David first started...I mean I still interacted with him a lot but, I think sometimes I felt like it was out of my league. You know, so I would pull back and let Dorothy and John [special education teacher] take care of it, but then I am an active teacher in the classroom and I wanted them to recognize me at that and I wanted to be helpful and not have my DOE staff feel like that's just their...you know, I don't ever want there to be a feeling of like separation between your kids and my kids...we're all... you know, they're all kids...all our students and we team teach and I want it to stay that way and we never know from year to year what students we are going to take in so...it's actually good for me to see both, but it probably would have been nice to see those practices happen you know, I can't say the video footage really would have made or break anything that I learned like...just to maybe see the difference of children that are more severe...because the video that you showed was actually how he was when he started. So, it wasn't that far off from what I remember you know, but I guess [unintelligible].

At what point did you...you were saying that you kind of let John [special education teacher] and the other teachers kind of take over. At what point did you when you first started, did you feel comfortable and start working with him more and not wanting to have it...?

Teacher: I...I did always...I mean I did from the beginning, but there is certain scenarios...like when the tantrumming would start. An you know, more of that...I think it was an equal balance of me feeling not equipped and the other part was, too many

teacher giving directions at the same time is overwhelming for a child so, I more or less hold back because I could see that they were handling it and I didn't want to be just you know, the kids overpowered and you know, people telling them what to do you know, um, but I we were always interacting and I always felt a part of being his teacher, but I think there were certain times when I you know, the tantrumming part...um...I think I was not real instrumental during the toileting because that kind of fell into...that time David's skills trainer was with us a full day so, only this year did they change...alter his hours otherwise he was here before David got here and so he kind of... and then...and then... that other thing about you know, there's so many adults you just don't want to overwhelm him with too many people giving directions at the same time, but when he came to me, then I was there...ya...and when I could see another adult wasn't handling it, then I was there.

Did you, after summer school...did you feel more comfortable working with him...when you saw different kids with autism or did it just come with time and...?

Teacher: Ya, I think it was just time...and...and... you know, familiar you know, like personality. Learning what was personality things and what was you know, because after a while I was like, "okay that...this is not the condition...this is stubborn you know, [laugh]." It's personality, but it took me being in the classroom with I'm and seeing day in and day out that I could see that it was not so much the condition, but more of...that's what he is...ya...

9) What information was most valuable?

Teacher: [Pause]. Ya...I think the feedback sessions you know, because I got a chance to implement the things...the tools that were made aware to me, but then the feedback sessions you know, gave me a chance to even give you more tools you know, so like I'd say, "I'm implementing this and I'm doing this," but then you'd still come back with, "Ya but like there's this way, too." So that was good because it makes me you know, like I was saying about there's more ways of coming at it than just one way that you're thinking of and you know, to kind of open myself up to see that there's multiple ways of handling you know, a situation or helping provide a cooperative play and things between David and his peers and I'd say the feedback sessions were the most helpful and the literature. You know, I read over the things that you shared and, but I'm a learn by doing...Ya, I can read it and I'll absorb so much, but I learn more by doing.

10) How do you think you will use this in the future?

Teacher: Well, I'll definitely use it as a resource you know, for me because you know, with the way I see things going, I'm gonna stay in this partnership in my classroom and so I'm sure that they'll be other opportunities to use it because autism is such a you know, [unintelligible] medical diagnosis now days you know, because then it will be good because if I do have another child coming in, then I'll feel even more empowered like, "I've got this." Even if I forget, then I can go back and I can reread the information and I can kind of reflect on the things that we talked about and you know, the things I already practice with David and it may be easier and I may not be as willing to just kind of kick back and let the DOE staff take care of things and I can be like, "I got it," you know...ya and not feel ...And then it's good, too because you know, sometimes it's mannerisms. It's not even what you know, it's how you do it you know, because you can know things and it's how you...how you project them. Like I notice with David, the more calm I am, the more he pays attention...ya so, I don't let myself get upset you know, even when he's

tantrumming. I just take his hand and I drop my voice down even lower and just say, "Stand up please." You know, and then he's just more compliant because of the [unintelligible] because of his awareness of when somebody's angry or when someone is being forceful. I mean, he'll do it, but then I don't want him to do it because he's scared you know, I want him to do it because I'm encouraging him [unintelligible] not because I'm demanding...ya.

11) Do you have any other comments, recommendations, thoughts, ahas?

Teacher: Not that I haven't already shared.

(If you think of anything else you would like to add, you may e-mail your thoughts to me at alethagomez@aol.com)

Teacher: Teacher #3

Date: 12-10-07

1) Would you be able to talk about the differences, if any, you have seen in the target child's cooperative behavior and communication since the intervention?

Teacher: I think that I didn't realize that until it was pointed out to me, that he was pretty much a solitary child. So um, after I was made aware of the fact that he's pretty much in his own world, even though he's with an adult...he's still in his own world. It was really shocking to me because here I thought he was like you know, still a biter, pincher...all that, but I thought he was a lot more social. So, it was shocking to find out, he is social, but only if you are an adult and not really if you are a peer. It's been challenging to continue to incorporate the stuff that I've learned a long the way that I've shared because he's still hurting people, so you feel like, I know he needs to be with his peers, but at the same time, his peers don't deserve to be hurt. So it's kind of like, I want it to be a win-win and it doesn't feel like it's that yet. But, I can see that we are on the correct path. It wasn't that you pointed out errors, but you pointed out things we weren't aware of that made everybody go, "a ha ha." [deep breath]...and so we're all working to...the ultimate goal is we don't want to see him put in an FSC class. We want him to go into an inclusion classroom and if that's what we need to do to make it work, then we're gonna keep at it. Um, the cooperative participation is more challenging because...that's the key word..."cooperative" and not always do you get it, but it's a challenge we're willing to continue with so...

Did you see a difference after the intervention in either an increase or decrease in cooperative participation or communication?

Teacher: We saw an increase and we are hearing more things we weren't aware of that he wasn't doing... now we are aware that he is doing. So he will not sit down and say, "So, how's it going?" But he will [laugh] interact...you can draw him out of him out of that. I don't know, for some reason we just weren't seeing that. His verbal potential is great, but we weren't applying it to the right areas, but we're working hard on these. So, today um...I was calling children and asking them you know, what center do you want to go to and he said, "I wanna go blocks and I wasn't you." [Laugh]. So that was...it was that same little girl...Abe, that he always was choosing, and it was just cute to see him you know, kind of know what is the ritual and routine and what is expected and actually comply with it [laugh]. Ya...it was funny...kind of like shocking because you're like..."whoa!" Four weeks ago you never would have said that. So I thought that was pretty cool...then again because we weren't made aware; we weren't helping him on that path, until it was pointed out we...I don't think he ever would have said it the way he did today because he wouldn't have been challenged to.

What did he do before in centers, like what was the routine? He would go to center and would he jump from center to center or would he go play with the blocks...like maybe a couple weeks before this all started...what was his regular routine?

Teacher: Well, we still consider it blocks, even though it's technically not. We consider it blocks because it's legos and he was very fixated on the legos and he would go in there and you know our classroom. The lego area might be as big as this area and he would create his own little...usually the majority of the time it was always Transformers, but he wouldn't be interacting with any of the other children. If he were going to interact then it might be with an adult, but probably just as much wouldn't be with an adult. So,

um...the adult would be close by because we never know...he's kind of like a pit bull puppy. You just don't know what he's going to do and what's the extent of what he's gonna do. But, the potential is there for him to do greatness or to hurt people, or to do both. So, what are you going to do? And I'll find myself wanting for him so badly to um, interact, but then when he bites or causes pain...wanting to go...hmmm I knew this was going to happen, why, why didn't I catch it you know what...cuz he's so fast. I swear it feels like you blink and he's bitten or and it seems like they're gathering intensity...I forget...shortly after your...I think it was your last...no it wasn't your last day, anyway, one day last week, he bit a child so hard, he broke the skin. It was a little boy right on the shoulder blade and it was... the boy wasn't even engaged with him. You know, the boy was involved as the chair behind you in what we're doing as that chair is and...so it was a shock to all of us, most of course to the little boy who was suddenly really hurt. So, I just really want us to continue onward with the um, with the continuing to help him relate to peers and not hurt them. So, his mom was saying she can tell how his day's been just by looking at his (what do you call it), forearm because if it has bite marks then she knows it wasn't a successful day.

2) From your experience, talk about how Sean's behavior differs/is the same as your other children his age.

Teacher: With or without autism or just his peers?

Yah his typical peers.

Teacher: Well he's very, very affectionate as are most children his age. Um, what else, um his verbal skills have grown by leaps and bounds. If you were to look at him even in the summer time... If you were looking at comparing him from the summer time, his skills are now growing, so he's now able to know the words for engagement to...a conversation to occur. So um, for most people that walk into our classroom, they would never assume that he has the label he has because accept for the biting...he's pretty much seems like he's a four-year-old and maybe a four year old without that particular label. So, um, he's very loving. He states his wants and his needs. The main difference between he and his peers, is that um...he's more solitary in his play. So as all the other children want to sit on our laps and love on us...um...the way he does...you can't leave him to his own diversion because he pretty much won't do it...where like the other children would and will keep themselves engaged than the others do. But, if you were to come into our classroom, without knowing...I don't think you would be able to know which... I mean the one child with severe autism, you could see, but I don't think you'd be able to say, "Oh check out this child, he's got something," because he doesn't um...very verbal now, he was loving, he's still loving, as are the rest of the children. But, Um for a typical four-year-old you are not used to seeing biting. That's not normal typical four-year old behavior. So that's pretty much our biggest challenge because now we know he has the words, you know, and he could interact, but what is the antecedent causing the biting and what are we not catching that we keep missing that he's gonna bite. So that would be those two things that are more than likely not what you'd consider a child on age appropriate...

Cognitively, is he on the same level as a four year old?

Teacher: Um huh. [yes] Ya, you could even say he's smarter. He's able to tell you all the letters of the alphabet, can tell you all the sounds they make, um can count to 5, can do 1 to 1 as opposed to rote, spells. He can take the letters A and T and make bat, hat, and

can take and create the word 'dad' from a 'b' and a 'p', he can convert it and make dad out of that, so he's um, in some regards, he's actually smarter than some of our own 4 year-olds um, because he is ...because if I said to him um...what is this letter, and it was a 't' and if I asked him what sound does it make, he could tell me...a child...most of our four-year olds in our class could only tell you that it is a 't' if it happens to be a letter in their name, whereas for Sean, it doesn't have to be. So for him intellectually....thank you for bring that up, he's...he's got it. It's, it's not a worry, although they say that that's one of the red flags for children with autism is that exceptional brightness. Like I said, you'd see him in the classroom, you would not think there would be a label attached to him, and you would think, "wow, he must be watching a heck of a lot of videos to have you know... 'cat', 'sat', 'bat' ...oh wow, he must be doing that rather than...he's making the association so...

So communication wise, his verbalizations are the same as a four-year-old, too?

Teacher: Um hmm. [yes] Same as a four-year-old.

3) What differences if any has the intervention made in the target child's acceptance?

Teacher: I think first and foremost, we weren't even aware that he wasn't interacting with his peers, so we didn't connect what he was doing with or without his peers. So that debriefing interaction, whatever you want to call it...engaging...has been helpful because it's somebody that has come in and doesn't have the emotional ties. You know, for example um...if I asked my best friend to come in and take notes...you would say that they are skewed because she's my best friend. Versus having you come in...you had no um...connection with anybody. So when you would make comments and observations we wouldn't feel like, "OH, well so and so told you to say that." I think that we were all very receptive to it because there was no emotional connection because I think what happens is...you believe that this is your preconception and you believe that it's accurate. Whether or not it is a different story, but that's your belief and you're stuck with it. Um, So, you are think thing well, I'm trying this and I'm trying that. But, if someone comes in and they are not coming in to um, to keep giving warm and fuzzies to the people that they always get warm and fuzzies and they are not consistently giving prickly pears to people that always get it, but they are just coming in to take a look around, see what they see and there is no emotional attachment. I think that you are actually able to learn more because I am not um, well...not me particular as opposed to anyone in the classroom...we're not going, "Oh ya well she's doing that because such and such said." So it made it, it made it more like from the guru on high as opposed to some of the things that we were hearing from other people that we were having our doubts with. If that makes sense, I think that it was able to be received better because there was no um...affiliation and so it wasn't, "Well, hotdog look you're doing a great job and you are consistently doing crapola..." It was this is what we see, this is when we are seeing it...um no emotional tie involved...this is what we think can work and you're welcome to try it and you know, know, if it doesn't work, let's try this, but it was at no point did any of us feel chastised or um belittled. So it was well received.

Do you think part of that was because it was your choice to have us come in? It wasn't somebody's going to come in and consult with you, it's...you were asked and it was your choice to have, I guess the training.

Teacher: That may have been it to some degree, but I wouldn't say I could say 50% of it was that. I can say that it mattered a great deal to us that um, that you were not...for

example there is and has been someone that has come into our classroom that has a predetermined thought process. And her predetermined thought process is it. It is the only path you can be on and if you are not on board, then what is your problem, get on board and because she is so entrenched in her belief...and it may or may not be correct...I'm not there to say it is or isn't. But, because she's so entrenched in it...it didn't and doesn't allow for us to have the growth and experience to want to embrace what she's saying because..."Let me open your mouth and just shove it down your throat. Versus, this is what I am seeing, how about if you try this...it's a very different approach and I think that...because it was so um...not get in our face and shove it down our throat...that it was better received than the other way of doing it. Because nobody wants to hear, "oh ya you are screwing this up big time and let me prove to you the 20,000 different ways I have seen that you are screwing this up big time. When in your heart you believe that...I believe in the program and I understand that you know we may need to tweek things, you know, here or there, but you're not coming and saying, "Ya well, inclusion sucks and boy are you wrong!" And so that makes it really different, and I know in no way, shape, or form did she ever mean it to be hostile, but that's the way it's been received. So every time she talks, it's like she's throwing down the gauntlet again and she's throwing down the gauntlet again and that's not how it should be. So I really look at our classroom as a win-win. If we can't figure out how to make it work for everybody, then what are we going to do and how do we make it work. So, I think that was the good thing from our point of view is, you know, it didn't feel like you were standing at the mountain top, standing, bellowing down to us, "You will do it this way!" You were saying, "You know, these are my notes that I have taken. This is what, not only myself, but two other people are seeing, and let me just share them with you and if you choose to embrace what I am suggesting and you choose to go forward, then so be it...and if you don't, then so be it, too." But, at no point does it feel like, I'm coming into your house and telling you how to run your kitchen. So it's easier to embrace.

So, I am glad you touched on that. That was part of like the training aspect that I am going to incorporate. I am going to go back to the question and make sure... What differences if any has the intervention made his acceptance with his peers? You had said before that you hadn't really thought about it because he wasn't interacting. Did you notice the kids accepting him more as he was interacting since the intervention or...?

Teacher: Um hmm. [yes] I think since the intervention because, we are kind of like the buffer zone for them, although children are still getting hurt, but they are receiving him more because they are seeing us try to incorporate them in that it's been well received. But, I think that there again, at no point do we shove down the children's throat, "You're going to play with him because I said!" You know, because that's not going to work either, because "Who the heck do you think you are!" So, I see that the changes there have been that, they're not like running away from him saying, "Ahh hmm here he comes and he's going to hurt me." Although the odds are that he's going to do it. They're still going to give him the chance to interact. So I thought that was phenomenal because um... you know nine sessions ago, I don't know if that was three weeks or four weeks...um there were not children who were readily accepting of him because pretty much everybody was afraid of him, so we um... through the help and the support, we made him seem more their peer, which made them easier to embrace him. So I think that was phenomenal.

4) What did you learn that you did not already know about prompting and praising?

Teacher: It's the first time I don't realize...I mean....we are taught in early childhood that praise is not okay so when it was first introduced, I'm like, "Oh ya, how's this gonna go over?" But, from the aspect that it was presented, I saw that it was win-win because it's not swelling another child's head to defeat my child; it's trying to find a way to make you feel warm and cuddly enough to want to come to play with him as opposed to all the prickly pairs that you had felt prior to that...now we are trying to encourage you to come and if we have to give you a high five and incorporate that in we are going to do that because we want it to be successful for both children um...so it was interesting because when you first talked about praise... I was like, "Oh ya, uh huh...sure." But, it works because you do make it win-win, you know I can't pay you to be involved with this child...peer, but I can make it seem more enticing, because you can snuggle with me at the same time he's snuggling with me and maybe you'll find some common ground that you wouldn't have found any other way. That was....exciting! To have him choose a friend! It was like...what would you say...and a ha moment...because we never realized until it was pointed out to us who are his friends and then when we realized, "Oh my god, he doesn't have friends, we want him to have friends," for him to choose people and for people to choose him...that was incredible...it's still incredible. You know, gets tears in your eyes...chicken skin because, "Oh my gosh, this...this might work! Let's keep doing it." So that was exciting and it is exciting. You know, because you have to stay true to your own personality. So when you know, you shared..."Oh hey, I can do that, because I already do that." You know, "Wow, look, check it out...it's working!" That's pretty interesting.

What about the prompting part that you didn't already know about...what did you learn about the prompting that you didn't already know about?

Teacher: I didn't realize that I was doing it in a large part um, and that we are all in a large part trying to prompt without actually spelling it out, "Hey you I want my car washed...pick up the sponge...fill the bucket with water..." You know, you know what you want, but sometimes you're just not sure what is the vehicle to get you there. For the kids it worked well, "You want to make a boat...here...make your boat...here here's some wood, you know here's an oar...pick up the oar and you use it to move your boat." It was kind of like duh, why weren't we doing that before? Because it's also increasing their vocabulary and expanding their thinking besides the one child that you are working with. So, it was kind of like...duh. [laugh]

5) What was your impression of the training?

Teacher: I liked it because it was immediate feedback versus, "Oh, I am going to get back to you in six weeks..." Then you're gonna say, "What? What did I do then? I don't remember doing anything." I liked that it was immediate. And also, I really liked... [Interruption]... the immediacy of it because if there was a question, it could be answered. I liked the videos because sometimes when people are talking to you, what you perceive, might not actually be what their perception is, so by having the videos, it made it a lot more clear. By making it more clear, it was easier to see how to implement and how to put it into action is always the most important part. I liked that...and I was kind of bummed when I had no feedback. Because I was like, "Oh, well...what about the biting? He just bit her in your last minute...talk to me and give me an idea." So I could say I definitely liked the feedback more than the lack of it. Um, I can see that, you know, it sounds like I'm one of the kids, I wanted prompting and praising because...[laugh]. So

ya, I could see that especially in a classroom where there's more than one person interacting with that child. Like when...an example is; most inclusion classroom, there's four. In ours it's way beyond that but you know, even if he four, six, eight key players were all ware of...this is the TV program... okay what did you see when you saw that TV program? Did you see the same thing? Because you know, then it levels the playing field and makes it easier for everyone to be involved...not feeling like, "Well how could both of us look at the same show and how come I got this and you got that?" So it was really nice that the flow of it, you know, and if you had a question...there was the answer. Or if you had a concern...why don't you try it this way? I liked that immediacy of it.

Trainer asked about timing of training.

Teacher: It was just right. Ya those last three [feedback session] when I got done I wanted.

Maybe talk about the training and how you chose to have it here at Sizzler...

Teacher: You know in the classroom, no matter how you say, I am going to have a meeting um, there is always someone that is going to interrupt you and something you don't think is important...somebody else thinks is really important and they've got to speak to you right then and there and so by moving me out of that, I was able to stay focused on what you were sharing as opposed to being pulled in many directions. Because even like to just meet you today...the VP's asking questions...it's like... gosh I gotta go.

6) What was your impression of the strategies?

Teacher: Again it just felt like, duh. Um, it just felt like it makes sense, it's doable, you have the immediate, either positive or negative and you can work from there. But, it felt like, "gosh, we can do this, and we can do this pretty darn well."

7) Would you mind addressing the concept of the ease of implementation of the intervention strategies?

Teacher: Well, again it just felt like, duh, why hasn't anybody said this before. You know, this is not our first child with autism that we've worked with, but um...it's amazing how many different procedures, perceptions every person has on a child that has autism and interestingly to me is um... we used to have a child that had an fm system because he has a cochlear implant and um...Kerrie and I were told at a meeting that now that you've had a system in your program, you guys are it, you are our 'go to' people, because you've done it, you made it work successfully, so you're it. And we are like, "Okay wait, just because we have one child with an FM system and a cochlear implant, doesn't mean that we know all of them, because every single child is different with this particular situation. The same applies to a child with autism, so it was nice that what we were hearing, could be easily applied to this child, but hey we could also try applying it with a more sever child with autism because it's very...the steps are very easy...one, two, three, four...one, two, three, four, it's not um...you know, fast, slow, fast, fast, fast, fast, slow. The flow is there and that makes it easier to embrace. So, I, I liked it.

8) What would you suggest for future training of teachers to facilitate cooperative participation and communication?

Teacher: Well, first and foremost I think that fortunately, not everybody wants to embrace a new idea, a new um...theology. You know, if you believe that purple stone is your leader. You know, and then someone comes in and says, no it's not the purple stone, it's the blue nest in the tree. You're going to say, "Well, I'm not buying that!" So the first thing is that you have to find people that are receptive to wanting to broaden their knowledge. That does not always happen. Just because you sign up to go to a workshop, doesn't mean you are signing up and you are going to a workshop saying, "Oh, yes, yes, that was fun...just poor the knowledge in me," because sometimes people sign up for a workshop or a training session to get them out of the classroom. So the first important thing is that, you know, the best would be that everybody be on that field that wants to be there. Um, we have a teacher in our school right now...and that was what the question was from the VP is, "Do you want to work with this person during ESY?" and I'm like, "F no, no I'm sorry, I don't think she's receptive to um, what I have to say and although I would be receptive to her I feel it's not going to work and ESY is only four days. I don't want to spend my four days in misery so, it's important that you say, "Hey, I like what you are saying and let's learn from it or I like what you're saying but, I'm not getting this or I am getting this and could you try that," but too often people come in, they look like they want to learn but really they are sitting with their fingers in their ears going, "La, la, la, la, la, la, la and not listening because we've had three teachers, three different years we've had another person added to our program, who's come in and just gone, "Huh? What? You guys have been together how many years, but I'm not doing it your way," and that's fine, it's your choice, but you know, for things that work, why are you...you know...breaking that wheel to reinvent another one if it's already working? So, I really liked that fact that um, you were receptive and we were receptive because can you imagine if you had been talking to the blue nest person while you are trying to be the purple stone? It's just you are both hitting walls and it's not helping that child out at all. And for us, we, we really want to figure out how to make this work... and not so that we can help every child with autism because every child is different, but so that we can have success for this child in our program this year. So, I think its key that the first and foremost is the receptiveness. If it's not there, it's going in to be hard to make it...I mean you can't even pretend sometimes, you know...

9) What information was most valuable?

Teacher: Well for this particular child, it was a really 'a ha' moment to realize, "oh my gosh, we thought he was being social and he's not!" He's only being social with adults and that's not the same, but I don't know if that's what you mean...how you would apply it there because like I mentioned previously the fact that you came in with nothing that we could see as a predetermined thesis um, we were all receptive, so just about everything you shared felt like, "Oh , okay, can do, will do, let's go for it." It didn't feel like, "What, um, or depending on your age, 'what you talking about Willis' ." So for us it was just, anytime you shared feedback, I would go back to the class, you know, my peers and I would share it because, it felt like everything was 'a ha'. "Wow, let's try this, wow..." because our goal is to help this child so there were so many 'a ha' moments...really! Does that make sense?

10) How do you think you will use this in the future?

Teacher: Well I think the nicest thing about it is that it's all 'can do'. It's not um... you at no point came in and said, "Now this is only going to work if you use your rose colored glasses, your six inch heels, you put on one purple and one red earring and you correspond all your clothes to match that purple and red earring." So it never felt like you were asking us to do things that we couldn't do so everything that you asked we could do and we are going to try to continue to do because once again, our goal is to help this child. I cannot say it more forcefully that I don't want him to be in an FSC class you know, so we gotta find ways to have him have success where he's not a detriment t himself or others so having this work and be successful, means it's a win-win for every person that's involved with it, and more importantly, with him, because the ultimate goal is to have this child be in a regular kindergarten class where he is with peers and not have someone be his shadow um, because he's learned...okay if I feel like biting you today, I'm gonna squeeze the...I was going to say squeeze the hot dog, but that sounded nasty [laugh- teacher diverged to talking about another student with a sensory toy that looked like a hot dog.] So you know, it's finding...for us it's you know, let's keep plugging at this until we find, what is the most appropriate way for you to say you're stressed that doesn't you know, cause other children to cry and be in pain. Or for that matter, staff members because, you know, I've had my fair share from this child. I've actually had more than my fair share. But, um... so for us it's you know, let's find it, let's use it, and get everybody on board that you can get on board because again, win-win. It wins for him, it wins for his peers, and it wins for the classroom in general. [Teacher talks about sensory toy again]

You know you were saying that you shared a lot of information with your staff members...

Teacher: Am I in trouble?

Were they able to use any of the strategies?

Teacher: Yes! Um..

Did they find success with them?

Teacher: I think it's a continuing success because, you know, just to be able to have him you know, um... pass a block to another child and not knock the child unconscious you know, to have success that he's going to try to build with that child instead of trying to dig a trench for the child...so...it's amazing when...you know when... I think it was...I don't even remember what session it was where you said, he's social, but he's not social to any peers, he's social to the adults...let's work on that to see what we can do to bring other children in. I went back and I shared that and everybody's like, "Oh my gosh! You are right!" Then one of the teacher's like, "Well come on chick, that's because if we have him with any children, he's gonna hurt them." So I'm like, "Ya but our goal is to make it win-win and somehow we gotta bring these children in to want to play with him," so although we are scared for some people, it was... it's been worth it.

11) Do you have any other comments, recommendations, thoughts, ahas?

Teacher: One a ha would be that I would like to see...not just myself...see the...what happened from the first session to the ninth, um, but see what happened with the other children...but have other staff members come in and get involved. You know, so

although I opened my mouth and brought you in, I would like it to be I opened my mouth and brought everybody in. Because I feel like there's just...autism is kind of like this big vague area, where, oh ya that child has autism, but big deal, what does that mean? How does that child being labeled help...how does it help us to work with that child...um, how does it help us to have his peers work with him? So, I really liked you know, you use your verbiage for um, bringin the other child in and directing you know, you have yours, I have mine, but you know, the same thing is that we are getting other children to engage with him and him to engage with others. You know, the first time he chose a child, I think that every part of my hairs that was attached to skin was standing on end because it was so darn exciting. You know, first we didn't realize that it wasn't happening, and then we realized, oh ya she's right it's not happening, and now how can we make it happen...and then holy cow, look it's happening, so that was just, just chicken skin...and then to see it be applied the next day and the next day...it felt pretty darn cool...it still feels pretty darn cool.

(If you think of anything else you would like to add, you may e-mail your thoughts to me at alethagomez@aol.com)

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