

*Teaching Children With Autistic Spectrum Disorder:
A Preschool Teacher Survey To Determine Best Practice Approach*

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Teaching children with Autistic Spectrum Disorder (ASD) can be the most challenging to preschool teachers because of the complexity of this brain disorder. A child's life is affected, whether its communication and language, social and play skills, activities of daily living, self-regulation behaviors, and sensory impairments. Therefore, a teacher over a class of preschoolers including children with ASD, deciding what skills to work on can be daunting. The purpose of this study is to explore the best approach to teaching children with Autistic Spectrum Disorder in the classroom. When teachers are presented with different skill areas (social, play, following class routine, self-regulation behaviors, communication, cognitive, sensorimotor, activities of daily living, and group activities) what do they feel are the most to least important skills when working with a child with Autistic Spectrum Disorder?

Introduction

Children with Autistic Spectrum Disorder (ASD) have so many needs that teachers are often overwhelmed at where to start to teach them. Teachers often will comment that the needs of children vary from day to day. One day it could be to work on communication and the next day following a classroom routine is most important. There are so many variables affecting children with ASD such as parental and early intervention, environmental surroundings, peer interaction, nutrition and health, adult support and consistent understanding and teaching of basic developmental skills (Journal of Pediatrics 2001, p.e85). Teachers need to be proficient in their knowledge of this disorder to guide preschool children in a program that helps a child progress in all skills.

Importance of Study

If the goal for any preschool program and teacher is to have a child be successful in learning either with a developmental or play based approach, deciding what skills to work on is paramount. Often in an inclusive setting where a child with Autistic Spectrum Disorder (ASD) is with age developing peers, different strategies are used, such as:

1. Teaching communication and social competence.
2. Use of instrumental strategies that maintain the natural flow classroom activities.
3. Teach and provide opportunities for independence.
4. Proactively and systemically build a classroom community that includes all children.
5. Promote generalization and maintenance of skills (Schwartz, Billingsley, McBride, n.d.)

These strategies are important when developing a positive relationship between a teacher and child. One study by Rodger and Lewis (1989), stated that the relationship was "an important factor...showed the children made significant gains over those expected based on previous rates of progress, in social and language development" (Shopler, Bourgondien, & Bristol, 1993, p.66). A teacher can help a child become ready for school. Meisels (1999) proposed "Readiness must be conceptualized as a broad construct that incorporates all aspects of a child's life that contribute directly to that child's ability to learn. Definitions of readiness must take into account the setting, context, and conditions under which the child acquires skills and is encouraged to

learn”(early Developments, 1999,p.8). According to Grove and Fisher (as cited in Elkins, Kraayenoord, & Jobling, 2003, p.122), “it may be difficult for parents to find school with personnel who are sufficiently knowledgeable about inclusive educational goals in order to provide appropriate services to their child”. It is important to find out how knowledgeable and informed preschool teachers are of the necessary skills needed to work with children especially those with ASD.

Statement of Problem

The basic premise or expectations of parents and preschool teachers is that children will learn if taught. It is very important that preschool teachers implement programs that meet the needs of children for readiness skills but provide a curriculum that can be modified for those with disabilities. According to Handleman (1992), “Curriculum development for young children with Autism is an intricate task”. “Selecting appropriate goals and objectives, determining accurate levels of instruction, identifying and creating suitable materials often present challenges for the teacher” (Handleman, & Harris, 2001, p.6).

Children with ASD can be taught skills, but the rate of continuity, and skill building depends on the teacher. Which skill is most important for a teacher to teach? Therefore as we revert back to the basic premise for this paper, a survey of preschool teachers had to be done to assess what they felt was most important to least important when working with a child with ASD.

This survey will help to address what skills teachers would begin to work on with a child with ASD in their preschool class. Finding a skill that everyone would agree on is difficult. In an article by Stone and Rosenbaum, (1988 p.403), the researchers looked at parents, teachers and autistic specialists. They found that the responses of both parents and teachers were to “harbor misconceptions regarding cognitive, developmental, and emotional features” about autism. Therefore, if all three of these groups have different misconceptions of a disorder, teachers may find that their views about this disorder are varied as well.

Preschool teachers and programs should provide “two dimensions of quality for best practice approach: process quality and structural quality. Process quality is the materials, learning opportunities, safety routines, interactions, and activities. Structural quality is the size of the group, education and training of the staff. Teachers should be able to describe their curriculum, why it was chosen and what they are accomplishing with it”(Espinosa, 2002, p.1). Teachers however, have varying viewpoints on which skills to teach first, especially to child with Autistic Spectrum Disorder. It is apparent that it would be difficult to get teachers to rate one skill over another with a high majority. In an interview with Jean Gray (personal communication, January 21, 2006), a special education teacher “all skills are important to children and one is just as important as the other, it depends on the child”. That means that one skill will not have an overwhelming majority because there are too many variables.

Literature Review

A literature review was done both with books on autism and internet searches to see if a survey was given by an educator or medical practitioner to preschool teachers to speculate which skills were most important when working with children with Autism Spectrum Disorder. There was no survey done on this particular subject matter. The two main areas of concentration that are so often written about are that social and communication skills are needed for children with autism

to improve in order to succeed in the community. “When children with autism learn how to initiate spontaneous communications within natural social contexts and to respond appropriately to the communication of others, they can begin to appropriately control their environment and develop positive relationships with others”(Schwartz, et al, p.2).

According to statistics provided by the US Department of Education, the children with Autism serviced by IDEA from 1992 to 2000 has greatly increased. Every state has seen an increase of cases of children with autism. In the year 2000, the increases throughout every state, showed the lowest percentile increase range from 10% to the highest of 48,600%. The medium percentile increase in all 50 states was 535%.

In a report by the New York Department of Special Education on *The Availability and Effectiveness of Programs for Preschool Children with Autism*, a survey was sent out to preschool programs to study how many children with autism attended a preschool program in the school year 2000 to 2001. Out of 292 preschool special education programs reporting, 191 programs served 5 or more children with autism, which were located in 38 counties statewide. Of these children, 65 % were in a self-contained class and 35 % were in an integrated setting. In 191 preschool programs, 36% of preschool teachers who taught children with autism, classified themselves in their knowledge of working with autistic children as “experts to a large degree”, 38% as “somewhat”, and 17 to 25% as “not at all expert”. How can 17 to 25% of teachers working with children with ASD in 191 programs throughout New York have some to no knowledge in teaching and be able to meet the needs of these children? In a national pre-kindergarten study out in May 2005 entitled, *Massive National Study Finds Many PreKindergarten Teachers Underpaid; Others Lacking Required Credentials*, 3,898 pre-kindergarten teachers were surveyed from all of the nations 52 statewide pre-kindergarten systems in 40 states. Key findings of this study about the education of pre-kindergarten teachers nationally revealed that, 13% had a high school diploma, 14% had an associates degree, 49 % had a bachelors degree and 24% had a masters or higher. This study also reported that pre-kindergarten teachers in four states: West Virginia, Maryland, New York and South Carolina had a majority of teachers who work with children had masters, but teachers in Alaska and Florida had only a high school diploma.

Inclusion Settings

When one considers that the least restrictive environment for children with disabilities is often sought, then the primary focus of early intervention for children with disabilities is an inclusive setting. Teachers without adequate training and education can alter the maximum potential of children with disabilities including ASD in the early years. Providing a curriculum that works on readiness skills is very important in meeting all children’s needs in early intervention. More and more children with ASD are in inclusive settings because it provides a way to “enhance the child’s development, provide support and assistance to the family and to maximize the child and family benefit to society”(What Is Early Intervention, n.d. ¶ 3). Teachers should have knowledge ranging from basic to proficient in knowing what areas and skills to work on with all children and those with ASD. As cited in the above study, 13% of pre-kindergarten teachers had only a high school diploma, which should be unacceptable given the mix of disabilities of children in inclusive settings. Another way of thinking about this study is that 13 % or 449 out of 3898 teachers had only a high school diploma, and do not have any idea what readiness skills are, and what to work on with an age appropriate child, let alone one with ASD. Grove and Fisher in

1999 (as cited in Elkins, et.al) “found that the parents in their study viewed staff as lacking in knowledge about their child, and they found it difficult to assess teachers or other staff willing both to provide them with information and receive information from them”.

Method

Participants

The teachers surveyed were all women and one male, with ages from 24 to 62yrs. old with teacher experience from 5 to 35 years. The schools in which the teachers work were widely spread out, located in different cities to suburban areas all within 75 miles of each other. Out of the 50 teachers surveyed, 33 are special education teachers from Intermediate Units, and 17 are regular education teachers from 5 different nursery schools.

The teachers were given a questionnaire survey and asked to fill it out at their convenience within a two-week time frame. Where needed, the teachers were given envelopes to send the information back; otherwise the questionnaires were either picked up or sent via interoffice mail. This survey asked the teachers to rate the most to least important (1 >10) skills they feel as teachers they need to work on with a child with ASD. There were 50 questionnaire surveys handed out with 43 returned, and 41 filled out correctly. This indicates that the survey is valid as stands because 95% were done correctly.

A quantitative research methodology was done for this study. The teachers rated from 1 to 10 what they felt is the most to least important skill when working with a child with ASD.

QUESTIONNAIRE

Key: Most important =1

Least important=10

- | | |
|---------------------------------------|-------|
| 1. Social Skills | _____ |
| 2. Play Skills | _____ |
| 3. Following Daily Classroom Routine | _____ |
| 4. Self-Regulation Behaviors | _____ |
| 5. Communication Skills | _____ |
| 6. Cognitive Skills | _____ |
| 7. Motor Skill (fine and gross) | _____ |
| 8. Activities of Daily Living | _____ |
| 9. Sensory Systems | _____ |
| 10. Participation in-group activities | _____ |

Social skills: eye contact, joint attention, responding to adult direction, recognize emotional states, peer friendships

Play skills: reciprocal play, turn taking, sharing, theme play, pretend play, playing close to others, interest in toys

Following Daily Classroom Routine: getting into class, putting book bag and coat away, following schedule, moving around the structure of the class

Self-Regulation Behaviors: repetitive movements, spinning toys, hand flapping, arousal state (high =to active or low = no motivation)

Communication skills: shift gaze of person to object, gesturing, pointing, use of picture schedule, expression of emotion, language pragmatics

Cognitive Skills: readiness skills, object permanence, concept development, decision making, problem solving,

Motor Skills: Gross motor: playing on playground equipment, jumping, ball catching, walking up\downstairs. Fine motor: using two hands, holding pencil to color or scissor cutting

Activities of Daily Living: independent feeding (using utensils, cup), toilet training, coat on/off independently, hand washing,

Sensory Skills: providing activities that give movement, deep pressure and heavy activities, oral motor stimulation to prevent putting objects in mouth,

Participation in-group activities: sitting for circle, art projects, arm movements with music, sitting in seat

Procedure

Permission to conduct this survey was given by the preschool supervisor at the Capitol Area Intermediate Unit (CAIU), directors of public nursery schools, a private nursery school, and head start. The director of the preschool program at the CAIU reviewed the questionnaire before it was given to any teacher and director. Permission was obtained two to three days by each director before the survey was handed out, except in three nursery schools who took the survey that day. The teachers were asked to fill out the questionnaire survey on what they feel as a teacher is important when working with children with ASD.

Results

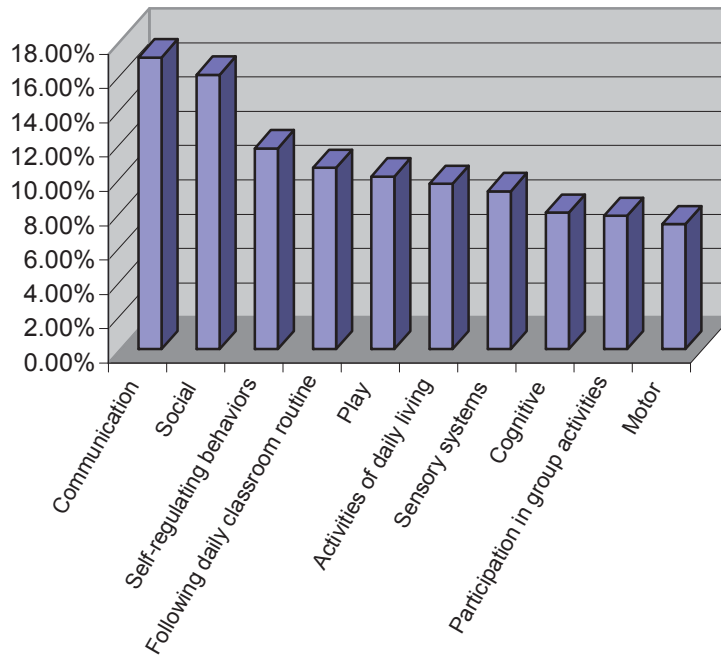
The surveys were returned and the data was placed on a data collection table. After all 41 surveys were tallied, totals were computed and results were observed. The teachers ranked the skills in this order from most too least important when working with children with ASD:

1. Communication Skills.
2. Social Skills.
3. Self-Regulation Behaviors.
4. Following Daily Classroom Routine.
5. Play Skills.
6. Activities of Daily Living.
7. Sensory Systems.
8. Cognitive Skills.
9. Participation in Group Activities.
10. Motor Skill (fine and gross).

Table 1

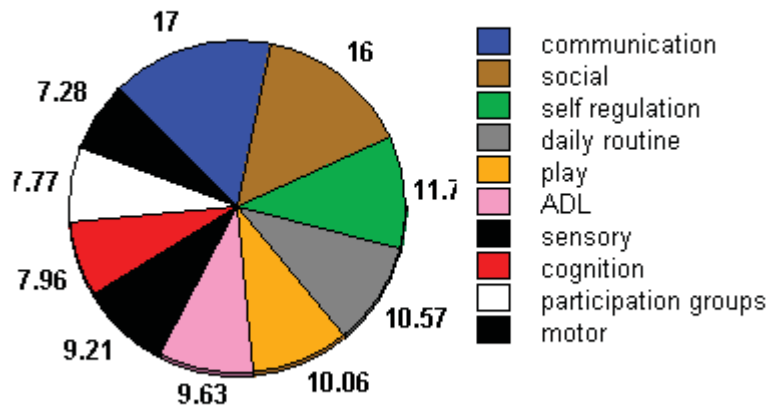
SKILLS:	PERCENTAGE
Communication -----	17%
Social -----	16%
Self-Regulation Behaviors -----	11.70%
Following Daily Classroom Routine -----	10.57%
Play-----	10.06%
Activities of Daily Living-----	9.63%
Sensory Systems-----	9.21%
Cognitive-----	7.96%
Participation in Group Activities-----	7.77%
Motor-----	7.28%

Skills



Figures 1 and 2

Preschool Skills



The results of the questionnaire survey represented a close relationship between communication (17%) and social skills (16%). Children with Autistic Spectrum Disorder need language to communicate with their peers and have interactions during play. Teachers feel the need for both of these skill areas to be developed. Boucher (1999) stated “playing is the norm in early childhood and a lack of play skills can aggravate children’s social isolation and underline their difference from other children” (as cited in *Play and Autism*, n.d. ¶ 9). According to Fitzgerald and Karnes (1987, p.31) “perhaps the most debilitating characteristic of young at-risk and

developmentally handicapped children is a lack of functional communication or a delay in the acquisition of early language skills” (as cited by Byers, n.d., p6.).

The lowest skill teachers’ felt needed worked on, was the motor area including both gross and fine motor skills. This would be logical since most autistic classes or children with ASD in inclusive settings have an Occupational Therapist (OT), and part of their focus is on fine and gross motor skills. Teachers would not need to concentrate on these skills because the OT would assist in supporting the child’s educational needs, and integrating different strategies to assist them with the curriculum. Motor skills are not a main concentration area of most importance to a teacher. Another understanding of this is that motor skills aren’t always affected to the degree that communication and social skills are.

There is a close percentage of skills with following daily classroom routine, and play skills, activities of daily living and sensory systems and cognitive and participation in group activities. Some teachers want the child to be able to follow the routine before any other skills are worked on, while others feel that play and interaction are very important to the child in preschool since it is the foundation of social skills and community interaction. The last grouping of cognition and participation in-group skills appear to go hand in hand since cognitive skills aid in interaction in groups.

It appears that the best practice approach when looking at the most important skills for preschool teacher who work with children with ASD, are communication and social skills. These two areas got the most votes and the percentages are very close to one another. However it is interesting to note that there was not an overwhelming majority of one skill. This questionnaire asked qualified teachers with years of experience from a variety of programs to identify what skills they would address when working with children with ASD. This study was made up of 2/3 special education teachers and 1/3 regular education teachers. It would be of interest to further this research study by asking these same teachers to fill out this questionnaire 6 months from now and see if the results are the same. It would also be of interest to ask the parents of the students in these class’ to identify the skills they think should be worked on by a teacher, then compare the two.

It is important as preschool teachers to decide and provide a curriculum that it is done with quality and skill building in mind. In order to do that, teachers need adequate education and training. How else can a curriculum be modified for the student’s special needs? From this survey, communication and social areas should be the main focus of the preschool program. These skills can be integrated in activities throughout the day. Some activities such as play centers, arts and crafts, peer modeling, show and tell, journal writing, snack helper, book reader, teachers assistant helper, and game helper are all ideas to get the children involved and increase language and social interaction in class.

The limitations of this study are that there was a small amount of teachers answering a very important question in regards to children with ASD.

Summary of Findings

It is seen that there are many differences with teachers in settings and in their educational status. This survey could be repeated in any state in the country in both private and public preschool, because it reflects the basic skills needed to teach children and assists teachers to reflect on the different curriculum areas within a preschool program. It would be interesting to note if the findings in the east coast are different than the west, or suburban versus urban areas. Regardless of the findings, it is very evident that teachers need continued education and knowledge about working with children with ASD.

Conclusion

In this vast growing society where children diagnosed with Autistic Spectrum Disorder have increased to almost epidemic levels, preschool programs with educated teachers and modified curriculum are vital. Research has shown that providing early intervention for children with disabilities increases their success rate in school. This study may assist some teachers in defining where to start in establishing their curriculum. However, it is the responsibility of every teacher and director of preschool programs in this country, to seek out further educational training, workshops, and best practice approach for the children they serve.

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