

The School District of Philadelphia  
The Office of Research and Evaluation

# Make It and Take It: Autism Speaks



2012

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Make It and Take It: Autism Speaks

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## I. Introduction

According to The Center for Disease Control and Prevention, autism is a disorder that impairs the neural development of roughly 11 out of 1,000 children in the United States. Autism<sup>1</sup>, often, reduces a child's ability to communicate, interact with others, and it restricts their ability to understand language. It has been hypothesized that children with autism may have problems communicating because they use visual mental representations to process information that a typical developing individual would perform verbally.

The theory that children diagnosed with autism process information visually has been tested by many researchers. Kunda and Goel (2010)<sup>2</sup> explored the validity of this hypothesis by looking at how children diagnosed with Autism respond to visual search, semantic processing, special recall and visual recall. The researchers concluded that children with autism "think visually" or "thinking in pictures".

Cihak (2007)<sup>3</sup> conducted a case study to test the viability of visual learning in autistic children. Three students diagnosed with autism, who demonstrated extensive histories of ineffective speech communication, and who solely relied on hand gestures to communicate were a part of the study. The students were taught by using four sets of pictures that showed people, objects, actions and sequences. After seeing the cards, the children would use hand motions to pick the correct answer. For the objects and people, the child would point to the object or person. For a sequence or action, the child would act it out with their hands. The study found that when the three students were tested this way they increased their comprehension skills score between 58-77%. When tested six to nine weeks later, the students showed a 100% maintenance rate.

Dettmer (2003)<sup>4</sup> conducted a study that highlighted the importance of visual cues in the education of autistic children. The study investigated the usage of visual supports at home and school in elementary age boys diagnosed with autism. The information taught at school was supported at the home settings. Consequently, this strategy incorporated more visual supports than the students' standard curriculum. Post intervention data showed "a significant decrease in the latency between the time the students were given instructions and the time they began the next activity."

Johnston (2003)<sup>5</sup> conducted a study in which autistic preschoolers used graphical representations to help with communication. When the preschoolers were

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<sup>1</sup> Also referred to as Autism Spectrum Disorder or ASD.

<sup>2</sup> Kunda, M., Goel, A. (2010). "Thinking in Pictures as a Cognitive Account of Autism," *Journal of Autism and Developmental Disorders* Vol. 41, 9.

<sup>3</sup> Cihak, D. (2007). "Teaching Students with Autism to Read Pictures," *Research in Autism Spectrum Disorders* Vol. 1 Issue 4, University of Tennessee.

<sup>4</sup> Dettmer, S. (2003) "The Use of Visual Supports to Facilitate Transitions of Students with Autism," *Focus on Autism and Other Developmental Disabilities*, Vol 15., 3.

<sup>5</sup> Johnston, S. (2003). The Use of Visual Supports in Teaching Young Children With

interested in play activities, they would use the symbols to communicate their intent. According to the researchers, the students that used these visual cues were more likely to engage in activities than students that did not use such cues.

During the 2012-13 school year, The School District of Philadelphia enrolled 2,290 children diagnosed with autism. The Office of Specialized Instructional Services received funding from Autism Speaks, an advocacy organization, to implement a onetime workshop on September 27, 2012, for people who care for and support children with autism. Autism Speaks is dedicated to funding research into the causes, prevention, treatments and a cure for autism; increasing awareness of autism spectrum disorders; and advocating for the needs of individuals with autism and their families.. The goal of the *Make It and Take It: Autism Speaks* workshop was to enable each student to more fully participate in classroom activities and connect families with communication skills learned in the workshop to enrich family interaction at home and within the community. The expected outcomes were:

1. To develop communication books/boards for use by teachers, staff and families. A communication book is pages of symbols usually organized by topic. Depending on the age, cognitive and physical abilities of the user, the page may have anything from one to many symbols. The communication book helps build vocabulary and fosters an exchange.
2. To foster carryover communication skills into the home and school environments.

## **II. Methodology**

The Office of Research and Evaluation (ORE) conducted an evaluation of the *Make It and Take It: Autism Speaks* workshop. The evaluator attended the workshop and participants were surveyed and interviewed.

## **III. Evaluation Results**

### **Observation**

On September 27, 2012, the *Make It and Take It* workshop was conducted from noon until 4 p.m. at Henry A. Brown Elementary school. Flyer invitations were emailed and hand delivered to 14 speech and language pathologists and three teachers announcing the opportunity and requesting their presence (Appendix A). Prior to the workshop teachers, families, and specialists interested in participating were asked to complete a functional language list to determine functional vocabulary items relevant to their specific child/student's need within the school community and home environments (Appendix B). Some participants submitted

their functional language lists prior to the workshop while others provided their lists the day of the workshop.

The workshop was led by speech and language pathologist, Dr. Lorna Schwartz. There were 16 attendees; seven parents, three classroom support staff members, five speech and language pathologists, and one speech and language intern. The organizer of the workshop began by greeting the attendees. The goals of the workshop were reviewed by the organizer with the attendees. The functional language lists made by the attendees were also reviewed. Attendees were oriented to the materials needed to create the communication books for their child/student. Using Boardmaker software and real life pictures, attendees identified pictures they would need for their child's communication book. Attendees also searched the internet to find needed images. Attendees then printed, laminated and added Velcro to the pictures for placement in their books (Appendix C). Duplicated materials were also developed so the child would be able to communicate at the same optimum level at home and school. After the pictures were affixed to the book attendees then developed, printed, Velcro and attached sentences to their books, which accompanied some of the images (Appendix D).

During the creation of the communication books, parents and professional staff members sat together in a very relaxed and informal manner and had general conversation about the children for whom each book was being created. Parents were able to share their stories from pregnancy to diagnosis. Parents discussed their child's level of communication and asked many questions regarding autism. The organizer, as well as the speech and language pathologists appeared very receptive to questions, sensitive and thoughtful in their responses, and knowledgeable about the subject matter. The organizer and the speech pathologists guided parents in picking out items and sentences that would yield the desired response from the children. Professional staff members were also able to provide parents with other strategies they could use to provoke frequent and fluent communication from their children while in different environments. Parents and professionals were very engaged in the process. Once the books were complete, the speech and language pathologists modeled using the newly created communication books. Parents practiced communicating with each other and with the pathologists with the books.

### Survey

All participants were asked to complete a satisfaction survey (Appendix E). All attendees were provided a survey. Ten (10) of the 16 attendees completed a survey; four parents, three classroom based support staff members, and three speech and language pathologists. All attendees reported that the goals of the workshop were clear and met. All agreed that the materials provided supported the workshop goals. Additionally, 100% of the surveyed participants reported that the workshop introduced concepts and strategies that they could use in their classrooms, schools, and homes. All respondents reported that they will likely utilize the materials created in the workshop on a consistent basis.

## Interviews

Nine participants: four parents, two speech pathologists, and three classroom assistants were interviewed regarding their experience of the *Make It and Take It* workshop. The interviewees were asked if they acquired new knowledge from the workshop. Each reported that he/she acquired new knowledge as a result of the workshop. One participant reported that she learned how to use Boardmaker to make visual schedules for her child. Others reported that they learned how to use specific pictures from their child's regular routine to create books that will assist them in communicating with their students and children. Participants reported that they valued the workshop because it allowed them to come together with people with whom they had a shared experience and create, in an uncomplicated manner, ways to combat the communication barriers that exist with children diagnosed with autism. Participants reported that they will introduce the book to their child or student and use the book to facilitate better communication. Three participants said they would like follow-up information, training, additional workshops, and time to work with speech pathologists as the children make progress in their communication skills. Three of the interviewed participants stated that they were very grateful to the program for hosting a wonderful workshop.

## IV. Conclusions and Discussions

The workshop appeared to be successful. Surveyed and interviewed participants reported being very grateful and pleased with the workshop. Participants reported that they were also pleased with what they were able to create as a result of their participation. The *Make It and Take It* workshop successfully met its goals. The workshop provided those who care for children with autism with ways to create effective two-way communication.

The workshop attendance was low in relation to the amount of children diagnosed with autism who are enrolled in the District. The low attendance may be due to the manner in which the flyer invitations were distributed. Flyer invitations were emailed to 13 speech and language Pathologists and hand delivered to three autistic support teachers and a speech and language pathologist. Those individuals were then charged with distributing the flyer invitations to teachers and parents. When and how those flyer distributions occurred was not tracked, thus unknown. Although the turnout was low, the small group setting may have contributed to the therapeutic milieu that yielded such positive responses from participants. The participants were extremely transparent in discussing an issue that they stated is very sensitive. Based on participation feedback and the observation, it is recommended that if such a workshop of this nature is implemented again it should be conducted in a similarly intimate environment. Parents may be more comfortable participating in familiar sites with people they know.

The School District of Philadelphia  
Office of Specialized Instruction  
in conjunction with Autism Speaks  
is pleased to present

## A Make It and Take It Workshop for Children with a Diagnosis of ASD



Thursday, September 27, 2012  
12 PM to 3:30 PM

Library

**H.A. Brown School**  
1946 E. Sergeant St.  
Philadelphia, PA 19125  
215-291-4717

### **PARENTS, CAREGIVERS, TEACHERS, ASSISTANTS AND SPEECH / LANGUAGE PATHOLOGISTS ARE WELCOME TO PARTICIPATE!**

The School District of Philadelphia (SDP) is pleased to present a Make-and-Take workshop to include all participants responsible in the rehabilitation of children with the diagnosis of autism spectrum disorders (ASD). The focus of this workshop is to enable family, teachers, staff and SLPs to work collaboratively in order to develop picture communication books, boards, and other materials for classroom, community and home use. Including families in this endeavor will enable participants to construct low-tech communication tools that will enable meaningful and enthusiastic implementation within the classroom, home and community environments.

The long-term goal of this workshop is to enable children with ASD to develop independent and effective communication skills. This workshop will include consultants, teachers, families, speech and language pathologists (SLPs) and staff who represent students with ASD within the Academic Division 5. Through their active participation and contributions, families will work alongside teachers, staff and SLPs, and provide input with regard to their child's home needs.

**Appendix B**

Please use this side of the flyer to make a list of pictures and words needed for your child/student.

**Foods**

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**Toys**

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**Activities**

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**Places**

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**Descriptives (colors, quantity, etc).**

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**Animals (pets, etc.)**

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**Household/cooking items**

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**Miscellaneous (schedules, etc.)**

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