

Hands-On Reading For Students With Autism

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Introduction

From even the very first days of school literacy instruction comprises much of the learning in the United States today. Literacy is a key component in education involving not only the reading of written word, but also comprehension, communication, vocabulary and much more. For a subject so crucial to understanding and interacting in the world around us it is imperative for students with moderate to severe cognitive abilities. Unfortunately, for students like those with autism, little of the curriculum in functional special education programs today focus on literacy for these exceptional learners. It seems evident however, that for students where the connection with the outside world is so lacking, literacy instruction to support success in a foreign world would be of utmost importance.

Enhancing vocabulary and communications in everyday interactions can be achieved through literacy instruction. Current research as well as my own observations in the classroom can be utilized to support this notion. Given specific literary interventions, students with autism can achieve success in vocabulary acquisition, visual literacy, initiation and much more.

Rationale

For the past six months I have been privileged to teach at the Anderson Center for Students with Autism and Other Developmental Disabilities in Staatsburg, NY. Providing education as well as residential services to students aged six to twenty-one on a private school campus, it is a remarkable school with a wealth of resources. Within the classroom I strive everyday to meet the unique needs of six different students aged twelve to fifteen with autism.

After working for the first few months establishing routines, behavioral expectations, data systems, visual supports and general classroom procedures I have begun to aggressively

address both curricular and academic goals. In looking at the curriculum and subject areas one considerable fundamental deficit became apparent. Without a strong foundation in literacy, whether reading words or pictures and understanding of basic communications, these exceptional students were significantly at risk in all other subject areas. Without attending skills, listening to various types of literature and interacting with the written word these children would continue to remain dependent in science, social studies, writing and math. Here is where I set out to boost our literacy program in the classroom to impact student responsiveness and interaction with language.

While two of the six students can recognize some sight words none are reading with fluency or are able to identify all letters of the alphabet. To date there has been little success and motivation for students to achieve these fundamental goals. All students are currently using picture exchange communication systems (PECs) to communicate. These icons present the written word paired with a visual representation to facilitate speech. Each student has become familiar with these PECs through classroom and residential usage. The students also present poor skills for attending to and responding to literature. Many have auditory processing as well as attention disorders which interfere with the ability to interact as typically developing children do.

In an attempt to remedy the aforementioned deficits I set out to create hands-on reading materials for students with autism. By adapting children's literature books it is my hope that students will gain skills in content vocabulary, turn the pages of the books to interact with print, identify words or pictures within a story and respond to literature using the provided manipulatives. Visual icons from the Boardmaker system sized one inch by one inch will be created, laminated and velcroed into the books. Appendix A provides a list of the books with the targeted concepts to be addressed.

Each book was carefully selected based on its visual appeal and to reinforce specific concepts. I picked books with realistic, vibrant artwork to interest my students. The books focus on key vocabulary, basic concepts for learning and many follow a predictable pattern. Using predictable literature will hopefully support verbalization in students as they read the books with an adult.

The books and materials utilized for this project are noted for their strength and durability. To support hands-on reading the materials need to be sturdy enough to withstand even the toughest consumers. Thick laminate is required to preserve the picture icons used with each individual book.

The books are fashioned to be used during shared reading between a staff and student(s). The icons are set out on a table where they are easily accessible. During reading the staff calls attention to the key vocabulary, having the student identify the correct icons before matching it into the pages of the book. Students are prompted to turn the pages and participate in the hands-on reading experience.

Research

Various peer-reviewed articles set the groundwork for an independent project in literature for students with autism. Of the five relevant studies completed in the field, all experienced success and increased skills in communication and literacy. Each of the five studies rest on the same principle as this project; adapting literacy instruction and materials to fit the specific needs of students with autism.

Just as I had discovered in my own classroom, Lanter and Watson (2008) suggested “the literacy needs of students with ASD are underserved” (p. 33). The authors promote the practice

of shared reading, both frequent and repeated reading of texts. Shared readings have shown positive impact on both oral language and attending skills. In finding that both oral language and literacy skills are enhanced by one another, this study supports the underlying concept of this independent study. Incorporating books like *Brown Bear, Brown Bear What Do You See?* (Eric Carle, 1996), children will follow a predictable pattern to complete a retelling of the story in hopes to support both language acquisition and basic literacy skills.

Similarly, Bellon-Harn and Harn (2008) support the research for increasing verbalizations and communicative exchanges through use of adapted literacy curriculum. Just as in Lanter and Watson (2008), a shared, repeated storybook pattern was utilized to augment literacy instruction. Students in the study participated in shared reading through use of adapted pictures much like those designed for my classroom. “As a book is repeated, children become more independent in their ability to communicate thoughts and ideas related to the events and relationships depicted in the story” (Bellon-Harn & Harn, 2008, p.113). Adapted books specifically chosen for my classroom will help facilitate these results through shared, repeated readings.

In Browder, Trela and Jimenez (2007), researchers used adapted middle school literature within the context of literacy lessons for students with special needs. Using text and symbol support, students received adapted chapter books for use in class. In this study “all students increased their independence in book awareness, listening comprehension, and other early literacy skills” (Browder et. al, 2007, p.215). By incorporating picture icons with word labels into children’s books I hope to produce the same results observed in this study.

Alberto, Frederick, Hughes, McIntosh and Cihak (2007), present another example of a unique literacy program where students are focusing on visual literacy or the reading of functional pictures in the environment. For these students with moderate to severe disabilities, word reading is not relevant but finding meaning in visual logos or pictures provides access to the outside world. Much in the same way the students will be using picture icons, Alberto et. al (2007) were successful in expanding literacy skills using pictures.

In addition to adapting literature to meet the needs of exceptional learners, Gately (2008) identifies eight strategies to increase higher order comprehension skills in reading for students with autism. Picture walks, priming background knowledge and think alouds provide a strong foundation for the project. The icons and pictures adapted for my books will help students identify key vocabulary, characters and attributes in each story. In relating key concepts through hands-on reading it is anticipated that students will comprehend more of the stories shared in class.

While reading each adapted storybook students will essentially complete a picture walk as they match the appropriate pictures in a story retelling. Picture walks and priming background knowledge helps “students connect what they know to new information and skills” (Gately, 2008, p.41). Each book was carefully picked to supplement the basic skills and knowledge of six students with autism. As shown in Appendix A, each book highlights basic skills such as numbers, letters and colors.

With all the supporting research one truth remains evident. In each case researchers experienced success in adapting literature to meet the diverse needs of exceptional learners. Using both pictures and words within the context of shared, repeated readings, students

experienced success and made gains in the areas of literacy. Increased independence in skills such as attention, responding, turning pages, communication and much more resulted from the modified literacy curriculums. With guidance from these studies and the use of my own classroom methodologies I will implement my shared literacy program to increase student performance.

Projected Outcomes

After implementing the hands-on literacy program into the classroom it is anticipated that the students will demonstrate increased basic reading skills. On a fundamental level I hope to increase attention to literature, teach students to independently turn pages and respond to literary questions. Building on emergent literacy skills, the hands-on adaptive books are meant to increase vocabulary skills, increase visual attention to identify key vocabulary icons and support vocalizations in students with autism.

With successful examples from the various research studies, and my wealth of knowledge regarding the students I teach, the books will act as a modified reading program for students with exceptional needs.

Appendix A

1 Brown Bear, Brown Bear What Do You See? By. Eric Carle

- Colors
- Basic animals

2 Dr. Seuss' ABC: An Amazing Alphabet Book

- Alphabetic order
- Letter Identification

3 Freight Train By. Donald Crews

- Colors
- Travel

4 My Very First Book of Words By. Eric Carle

- Basic sight words

5 We're Going on a Bear Hunt By. Helen Oxenbury

- Items in environment

6 Shapes By. Little Scholastic

- Shape identification

References

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Hand out a few vegetable slices to each child along with a cup of paint. Instruct your students to dip the bottom of the vegetable slice into the paint and then press it against a piece of paper. As your students use these homemade stamps, they will make vibrant botanical impressions on their paper. Try these tips, educational accommodations, and resources for students with autism to help them learn concepts that might otherwise be difficult for them to grasp. 10. Bring Special Interests Into Lesson Plans [12]. Many children with autism have a fixation on certain topics or activities. Larkey, S. Strategies for teaching students with Autism Spectrum Disorder and other students with special needs. Learning Links: Helping Kids Learn, 3, pp. 1-5.[14]. Penn State Extension. Learning to read can be challenging for some children on the autism spectrum; however, the right teaching approach can make all the difference. If parents ... For instance, work on reading for ten minutes and then have a five-minute sensory break. Although it may seem counter-intuitive to interrupt work time so often, you may find that the child makes much better progress this way. Choose the Right Materials. PCI Education offers reading materials for verbal and non-verbal students with autism. Special Reads is a program designed for children with Down's Syndrome, but the manufacturer says it is also very effective for children with autism. Incorporate Technology. Autism often affects the way a child learns, but you can successfully teach reading and spelling to a child with autism—check out these 6 tips! Kids with Autism Learn Differently. Autistic kids often have difficulty learning in traditional ways because their brains just don't process information in the same way that other children's do. They are wired differently. For example, many children with autism are visual thinkers—they think in pictures instead of words. Hands-on learners absorb knowledge best when they can touch and manipulate objects. A magnetic white board with moveable letters works wonders for both kinesthetic and visual learners. Saying the word or letter out loud is important for auditory learners. Students on the spectrum are either hyper-organized or seem to have few or any organizational skills. A large number of students with ASD seem to have either the neatest or the messiest desks or lockers in the school. The one with the neatest desk or locker is probably very insistent on sameness and may be very upset if someone disturbs the order s/he has created. The one with the messiest desk will need your help in frequent cleanups of the desk or locker so that they can find things. This student is not making a conscious choice to be messy; they are most likely incapable of this organization.

Autism Spectrum Disorder (ASD) is a complex and multi-layered neurological variation that manifests differently from person to person. This creates a challenge when determining how to teach autistic children. Although each child is an... This article received 18 testimonials and 96% of readers who voted found it helpful, earning it our reader-approved status. This article has been viewed 254,375 times.

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