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Through Children's Eyes: Teaching Inclusivity and Understanding of Communication Disorders with Children's Books

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THROUGH CHILDREN’S EYES: TEACHING INCLUSIVITY AND UNDERSTANDING OF COMMUNICATION DISORDERS WITH CHILDREN’S BOOKS

A Capstone Project Presented in Partial Fulfillment of the Requirements for the Degree Bachelor of Science with Honors College Graduate Distinction at Western Kentucky University

By

Rachel E. Peavler

April 2019

*****

CE/T Committee:

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Dr. Christopher Keller
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ABSTRACT

“Through Children’s Eyes” is a series of children’s books that focus on describing different aspects of four different communication disorders. The topics covered in the books include augmentative and alternative communication (AAC), autism spectrum disorder (ASD), dementia, and dysfluency. The illustrations were drawn and colored by hand, and the text and background were added digitally. The goal of this project was to create materials to effectively inform and instruct children about the nature of various cognitive, speech, and developmental differences to foster greater understanding of and tolerance towards people with communication differences.
ACKNOWLEDGEMENTS

This project was possible thanks to the help of many different people and organizations. I am thankful especially to Dr. Leigh Anne Roden-Carrier, who first gave me the idea for this project and became my advisor. I would also like to thank Dr. Janice Smith for providing her expertise on the research, writing, and presentation elements of the project. Special thanks as well to all my professors in the Communication Sciences and Disorders Department who are responsible for so much of my knowledge and experience in the field.

The illustrations and physical books created for this project are thanks in part to the Mahurin Honors College at Western Kentucky University, who awarded me the Honors Development Grant to acquire the materials needed for the project. I am grateful to the Honors College faculty and staff, especially Dr. Christopher Keller and Capstone Experience and Thesis student assistant Jared Long, for helping to guide me through the Capstone Experience process.

Last, but certainly not least, I would like to thank those who personally inspired this project. Every person I have known or worked with who had a communication difference served as motivation and inspiration for the books and their intended purpose as a tool of understanding and education. Special gratitude also goes to my family and friends who supported and encouraged me as I brought this project to completion, especially my nephews, who I hope will enjoy reading and learning from my books.
VITA

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Communication Disorders Study Abroad Program

PRESENTATIONS

FIELDS OF STUDY

Major Field: Communication Sciences and Disorders

Minor Field: American Sign Language
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SECTION I

Introduction

This project grew from a desire I had to create something that would combine my academic endeavors in the field of communication sciences and disorders with my talents in the visual arts. Over time, the creation of the books became less of an art project and more of a mission. With research, I discovered the value of and need for representation of people with special needs, especially within children’s media.

A 2005 article by Rosemarie Garland-Thompson states that “Representation structures rather than reflects reality. The way we imagine disability through images and narratives determines the shape of the material world, the distribution of resources, our relationships with one another, and our sense of ourselves” (p. 523). Representation of individuals with special needs therefore shapes societal perception and political decisions for people with disorders and differences.

Studies show that dismantling prejudice against people with special needs begins at an early age; research by Consiglio, Guarnera, and Magnano (2014) further proved the idea that direct contact and interaction with children with disabilities improved typically developing children’s perceptions of individuals with special needs (p. 1968). But how can all typically developing children interact with children who have special needs when, according to reports by the National Center for Education Statistics (2018), individuals receiving special services make up only 13% of the national public school population?
Children’s literature could be one of a number of solutions to this problem. It is through books that children, “…will be learning how to make sense of their lives and experiences, the lives and experiences of others, and the world in which they live” (Crisp et al., 2016, p. 30). However, a 2016 investigation of various early childhood classroom libraries revealed that only 2.6% of the books available to the children included depictions of people with special needs (Crisp et al., p. 34). More children’s books that represent people with special needs are needed in order to promote and foster a greater understanding of and tolerance towards people with these communication differences. It is my hope that this project can someday play a small role in furthering this initiative.
SECTION II

Process

The process of creating the books began, as most projects do, with research. After choosing the four topics for the books, which I chose based on my personal experience with them in the classroom and in clinical experience, I researched the main attributes of each disorder as well as their effects on communication and daily life.

I utilized research databases, such as the Western Kentucky University Libraries database and Google Scholar, to find scholarly articles related to the topics. I also used print sources in the form of books from the WKU Libraries and textbooks I have used in my communication disorders classes. I also read other children’s books featuring characters with special needs, which I borrowed from WKU Libraries, and from the personal libraries of professors and friends.

After conducting research and writing the basic outlines for the stories, the design and illustration process began. To draw a character or scene, I first created a rough sketch on simple sketching paper. Following the design of the sketch, I drafted the permanent drawing on Bristol paper, a heavyweight paper made for ink-based media. I outlined the drawing in black archival ink to create a bold, graphic look. The drawings were then colored using alcohol-based artist markers.

When the physical drawings were complete, it was time to digitize and edit. I scanned the drawings and uploaded them to Adobe Photoshop, where they were edited and given backgrounds and text.
Figure 2-1. Preliminary pencil sketch and inked drawing for AAC book, *Alima’s Voice*.

Figure 2-2. Finalized illustration for *Alima’s Voice*, with text and background added digitally.
SECTION III

Challenges

I was met with many challenges during the creation of this project. There was the danger of oversimplifying the different aspects of the disorders portrayed within the book. While broad and simplified explanations of the disorders were required to fit within the context of a children’s book, the intent was not to overgeneralize the lives of people who have these special needs. I attempted to combat this problem by including details about the communication differences and the characters in the illustrations when they were not included in the text.

Another issue I faced while creating the books was to not put emphasis on the characters “overcoming” their disabilities, but to also not define the characters by their special needs. Thompson (2005) includes a good explanation for this concept by looking at the lives and work of two artists, Claude Monet and Chuck Close, whose artistic styles changed due to the development of disabilities (vision loss and paralysis, respectively) (p. 524). Thompson (2005) notes that their respective changes in style came to define their artistic legacy and that, “Monet and Close did not overcome their disabilities, but, rather, they accommodated their disabilities, and their art changed. They were great artists not in spite of disability but because of disability” (p. 524). In aligning with this idea, it was my intent to show disorders and disabilities not as something the characters were defined by or had to completely overcome, but as something that shaped their everyday life while remaining only a small part of their personal identity.
One of the more personal challenges I faced with creating these books was time management. Having never created such an involved artistic project, I misjudged the amount of time I would need to create each book. Originally, there was to be a fifth book focusing on deafness and use of American Sign Language; however, due to time constraints, this book had to be excluded from the project.
SECTION IV

Augmentative and Alternative Communication

The first book, entitled *Alima’s Voice*, is about a teenaged girl named Alima, who has worked nearly all her life to effectively communicate via a computerized speech device. This book focuses on the topic of augmentative and alternative communication, also known as AAC. AAC is a broad term that refers to the area of research and intervention for deficits in communication abilities caused by different impairments or limitations (Beukelman & Mirenda, 2013, p. 4). According to Beukelman and Mirenda (2013) “Approximately 1.3% of all people, or about 4 million Americans, cannot rely on their natural speech to meet their daily communication needs” (p. 4). These are the people who, like Alima, could be users of AAC.

*Figure 4-1*
Figure 4-2. Though it is never explicitly stated in the book, Alima likely has cerebral palsy, which is a common reason for AAC intervention (Beukelman and Mirenda, 2013, p. 5). Cerebral palsy can cause difficulty in breathing and speech sound production (Hodge, 2013), which is why cerebral palsy is a disorder often associated with AAC device usage and strategies. The decision to not name Alima’s diagnosis in the book was made to give more focus to the communication aspects of AAC, which can be involved in many different situations and diagnoses (Beukelman & Mirenda, 2013, p. 4).
It was important to start Alima’s AAC story with her as a young child because learning to use an AAC device can be a long and continuously evolving journey. To master communication through a speech device, the communicator has to not only have the technical skills to operate the device, but also social competence and strategic competence to facilitate conversational repair when there is a breakdown or misunderstanding in communication (Beukelman & Mirenda, 2013, p. 12).
Figures 4-6. This training sequence was inspired by the idea of symbol hierarchy, which asserts that objects, being more concrete than other symbols, are more easily understandable for emerging communicators (Mirenda & Locke, 1989, p. 137). The training sequence then moves to more abstract symbols, like pictures and words. Though the use of the hierarchy of symbols as a method of teaching AAC has been questioned in various studies over the last decade (Da Fonte, Thurber, Chae, & Lloyd, 2008), it was used in the book as an efficient way to portray the development of Alima’s understanding of abstract language concepts and her communication abilities.

Figure 4-7
The software Alima uses to communicate was modeled after Proloquo2Go, a commonly used communication application created by the AssistiveWare company (Proloquo2Go, 2019). The physical hardware Alima uses as her communication device was modeled after both an Apple iPad and the Tobii Dynavox I-110 device, which is highly durable and also uses similar core words and pictures in its software as the Proloquo2Go application (Tobii Dynavox, 2017).
Figure 4-10

I still have bad days. Sometimes my speech device won’t work, and other people don’t understand me.

Figure 4-11

But when things go right, I can do so many things! I can talk with my parents.

Figure 4-12

I can answer questions in school.
Figure 4-13

I can laugh with my friends.

Figure 4-14

I can play with my brothers.

Figure 4-15

So maybe I am like other kids. Because just like them...

=I have a voice!

Figures 4-15
Figure 4-16
SECTION V

Autism Spectrum Disorder

The next book, Magical Martin, is about an adolescent boy named Martin, who loves showing off his magic tricks, but struggles with social communication skills due to autism spectrum disorder (ASD). This book was particularly challenging to write and create because there is so much information available on ASD to condense into a short children’s book. ASD continues to be diagnosed more frequently. In fact, according to the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM–5; American Psychiatric Association [APA], 2013) “In recent years, reported frequencies for autism spectrum disorder across U.S. and non-U.S. countries have approached 1% of the population” (APA, 2013, para. 17). ASD has also become a popular topic in media with television shows like The Good Doctor and Atypical (Singer, 2017); however, there is still not a vast amount of children’s literature available on the subject, though more have been created in past few years (Belcher & Maich, 2014, p. 108).

Figure 5-1
Figure 5-2. Martin is the only male main character in the series of four books. This was done because, “Autism spectrum disorder is diagnosed four times more often in males than in females. (APA, 2013, para. 28). Originally, Martin was not going to be the only male main character in the book series. The proposed book on deafness and American Sign Language usage was created with two male characters in mind, though the book was omitted from the project due to lack of adequate time to complete the illustrations.

Figure 5-3 According to the American Psychiatric Association (2013), some aspects of ASD include “inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behavior” as well as “rigid thinking patterns” (APA, 2013, para. B2). These symptoms are alluded to in these figures through Martin’s interest in following the exact steps of the magic tricks.
Figures 5. Martin appears to be more interested in sensory input from the rabbit’s fur than in what his dad is telling him. Preoccupation with sensory input and textures is common in a diagnosis of ASD (APA, 2013, para, B4).
Martin demonstrates difficulty in “adjusting behavior to suit various social contexts” (APA, 2013, para A3), when he reveals how he did the magic tricks to his peers when they clearly did not want to know.

When his father is talking to him, Martin demonstrates deficits in social communication that are common for a diagnosis of ASD, including lack of eye contact and lack of facial expression (APA, 2013, para. A2).
Figure 5-8

I don’t always understand other people. They don’t want to talk about magic all the time.

Figure 5-9

Having autism sometimes makes me wish magic was real.

I wish I had a charm that could calm me down when I feel stressed.

Figure 5-10

I wish I had magic earmuffs that made loud rooms quiet.
And I wish I had a magic megaphone, so that everything I said made people like me.

_Dad says I don’t need any magic to make friends._

Because when I’m brave and talk with other people, I can make friends who like me for who I am.

**Figure 5-11**

**Figure 5-12**

**Figure 5-13**
And that’s what’s really magical!

Figure 5-14

The End

Figure 5-15
SECTION VI

Dementia

*My Favorite Person* is a book about a granddaughter and her favorite person—her grandma. The story follows their relationship as Grandma begins to decline cognitively due to the onset of dementia. *My Favorite Person* is the only book in the project that features an adult with a communication disorder, rather than a child. Despite dementia being a disorder associated with aging, the topic was chosen to be a part of a children’s books series because dementia and other disorders of aging are becoming more and more prevalent. As the large Baby Boomer generation continues to move into post-retirement age, the amount of dementia diagnoses and other age-related health problems have grown and will continue to grow (Hull, 2017, p. 8). In fact, 10 to 15% of people who are 70 will be diagnosed with dementia, “…and by 80 years of age, 40 to 50% of the population are likely to receive the diagnosis” (Edelson, 2017, p. 84).

![My Favorite Person](image)

*Figure 6-1*
Grandma is my favorite person!

I go to her house every day after school.

Figure 6-2

Grandma is very smart.
She always helps me with my math homework.

Figure 6-3

She always makes my favorite foods.

Figure 6-4
And I get to play games with Grandma’s friends!

Sometimes Grandma shows me pictures of her before she came to this country.

And she tells me stories she learned when she was little.
Alzheimer’s disease, a form of dementia, can impact communication with “word finding difficulties, word substitution errors, and thought disorganization” (Edelson, 2017, p. 92). Grandma’s problems with communication, attributed to what is likely Alzheimer’s dementia, are visualized in the book by the difficulty she has in telling her granddaughter the stories she used to tell her.

According to Edelson (2017), “The diagnosis of dementia requires not only a certain degree of cognitive loss, but also decline in the ability to perform every day, functional activities such as remembering to take medications as prescribed or balancing one’s checkbook” (p. 87). Details included to demonstrate decline in functional activity include changes in Grandma’s appearance in the book’s illustrations. Grandma’s loss of her signature red lipstick as the book advanced were included to visually demonstrate her decline in performing her usual daily grooming routines.
Figures 6-10

Her math answers are wrong most of the time.

But I never tell her.

Figures 6-11

Mom and Dad say that Grandma has dementia.

It makes her forget things.
Figure 6-12

On bad days, we all feel really sad about what’s happening to Grandma.

Figure 6-13

But there are good days too, when we help Grandma remember things.

Figure 6-14

I tell Grandma our stories so she won’t forget them.

And I won’t forget them either.
Figure 6-15

The End
SECTION VII

Dysfluency

Last, but not least, My Friend Sammie tells the story of Sammie, a young girl with a fluency—or stuttering—disorder (also known as dysfluency). It is told from the perspective of her best friend, Rosa, who comes to understand why Sammie talks differently. Children like Sammie, who have a developmental fluency disorder, may not notice their speech differences when they are young (APA, 2013, para. 4). However, as they grow older, they may develop a fear of stuttering, and purposefully avoid certain words and social situations that involve speaking (APA, 2013, para. 4).

Figure 7-1
**Figure 7-2**

*Sammie and I are best friends!*

**Figure 7-3**

*We play together almost every day.*

**Figure 7-4**

*We play...*  
*Fairy Princesses!*
Figure 7-5

Figure 7-6

Figure 7-7 The types of common dysfluencies Sammie demonstrates in these figures include syllable repetitions (APA, 2013, para. A1), such as when she says
“A-A-A-Abracadabra!” and sound prolongations (APA, 2013, para. A2), such as when she says “Mmmmmmove along!”

**Figure 7-8**

Sometimes her words get stuck, like a cow in a lasso.

**Figure 7-9**

And her speech can sometimes be as rough as the waves.
Sammie’s mom explained that Sammie stutters. It makes it hard for her to talk.

Figure 7-10

This means that she can’t control her voice sometimes, and has trouble starting words.

Figure 7-11.
Figures 7-12. The physical dysfluencies Sammie demonstrates are common for people who stutter. These physical signs often occur in conjunction with moments of verbal dysfluency. These concomitant behaviors can involve motor movements such as blinking, fist clenching, jerking of the head, and other movements or tics (APA, 2013, para. 3).

Figure 7-13
Figure 7-14

But now that they know her, they don’t mind.

Figure 7-15

Because Sammie is my best friend!

Figure 7-16

The End
SECTION VIII
Future Goals

While the creation of these four books has commenced, I hope this project will continue to grow. After completion of the Capstone Experience defense process, I intend to gift physical copies of the books to the Western Kentucky University Communication Disorders Clinic and the Suzanne Vitale Clinical Education Complex, so that they will be available for use in therapy sessions and client education. Looking further into the future, I would like to expand upon the project, perhaps creating more books on different topics, including deafness and use of American Sign Language, which sadly had to be excluded from this particular project due to time constraints. Another future goal is to have the books professionally published and put into classrooms and school libraries where children who need books on these topics have access to them.
REFERENCES


Da_Fonte_M_Alexandra/


