

AN ABSTRACT OF THE THESIS OF

Michelle D. Kerrigan for the degree of Honors Baccalaureate of Science in Human Development and Family Sciences presented on May 10, 2012. Title: Addressing Children with Disabilities through Inclusion Literature.

Abstract Approved By

Megan McClelland

This project aimed to address the topic of children with disabilities through a well-researched children's book. Dancing with my friend Maddie is a children's book that focuses on a friendship between Claire, a typically developing first grader, and Maddie, a first grader with Down syndrome. Research has shown that addressing the topic of children with disabilities at a younger age can help increase the feelings of acceptance. This book's target age group is five to seven year olds. The project aims to teach others to accept everyone's differences. The project hopes to have children see themselves in the characters in the book. The children's book portrays a lasting friendship and expresses the love we have for each other despite and because of our differences. The projects goal is to address the topic of children with disabilities in a way that allows for discussion and questions as well as allows for a story to be told where everyone can relate to a character in the book. This document contains the research associated with the book, character development, content, and future goals of the project as well as the book itself.

Key Words: Down syndrome, disability, literature, inclusion

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Addressing Children with Disabilities
through Inclusion Literature

by

Michelle D. Kerrigan

A PROJECT

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APPROVED:

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Dean, University Honors College

I understand that my project will become part of the permanent collection of Oregon State University Honors College. My signature below authorizes release of my project to any reader upon request.

Michelle D. Kerrigan

Acknowledgements

I would like to thank my committee members for their hard work and support throughout this project. I send my deepest thanks to my family and friends for their loving support as I worked on completing this achievement. Thank you for all the support and prayers that went into this project and helped to make it a success.

Contribution of Co-Authors

Samantha Farwell, creatively and beautifully illustrated Dancing With My Friend Maddie. Samantha Farwell dedicated many hours to the perfection of the illustrations. I am grateful for all of the hard work Samantha put into this project.

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Introduction

Background

There are approximately two and half million typically developing three to five year olds enrolled in early childhood education settings that include at least one child with a disability (Diamond and Huanga, 2005). While data on inclusion schools show that children with disabilities do not differ in their friendships, they are less likely to be included in social interactions (Diamond and Huanga, 2005). Children's attitudes are influenced by direct and indirect experiences (2005). Media is an example of an indirect experience (2005) and research has shown that children's literature is an example of a type of media that helps influence children's attitudes. Researchers have found that children's literature about inclusion can impact a child's sensitivity to diversity and to children with disabilities (Andrews, 1998). Inclusion literature has been shown to increase acceptance of children with disabilities and is a good tool to address the topic of disabilities with young children (Andrews, 1998). Research also suggests that inclusion literature be introduced at a young age to increase acknowledgment and acceptance of disabilities at a younger age so that negative attitudes are less likely to form (Smith-D'Arezzo & Moore-Thomas, 2010).

This book addresses Down syndrome. Down syndrome is the most common genetic disorder resulting in mental retardation (Davis, 2008). The difficulties this population faces include delayed cognitive development, motor development, and a higher incidence of obesity. This population has difficulty with fine motor skills that impacts their ability to write in school (Davis, 2008). Their delayed cognitive development gives them difficulty in reading and some have fairly extensive hearing disabilities (Davis, 2008). Their increased risk of obesity is due in part to their difficulty in digesting fruits and vegetables, lowered metabolism rate, and a

decreased amount of physical activity (Murray and Ryan-Krause, 2010). A major strength of this population is social interactions and friendships (Filder et al. 2009).

Goal of Project

The goal of this project is to create an interactive children's book to help typically developing children better understand children with Down syndrome and become more accepting of children with disabilities, and also aims to help children with Down syndrome better understand themselves and have a character to which they can relate. The target audience for this book is children aged four to seven.

Book Summary

Dancing with My Friend Maddie is about a friendship between two first graders named Claire and Maddie. The book is written from Claire's perspective. Claire is a typically developing child and Maddie has Down syndrome. Maddie struggles with classroom activities and sometimes gets frustrated at school. Claire likes school and tries to help Maddie when she can. Maddie's favorite thing about school is recess, when she gets to be free and have fun, and no one has to help her. The conflict comes from an older boy making fun of Maddie at recess. The story continues with Maddie not getting mad back and eventually having the boy join her at recess. The story ends with people recognizing how special Maddie is in her differences and her similarities.

Why Write A children's Book

Picking A Topic

This project was inspired by a family member. During a family holiday, I was talking with a family member who has a disability and is now 23 years old. This family member was relaying to me that his peers were unaccepting of him and at the age of 23, people were still

bullying him about his disability. From this interaction stemmed a desire to write a book for young children that would address children with disabilities. I chose to focus not on the disability my cousin has but on Down syndrome. After initial research I found that many children's books on disabilities are about autism. Down syndrome is represented in children's literature, but few books have addressed conflict among children and have simply discussed aspects of the syndrome itself. The inspiration for this book is to help people understand differences among people, be more accepting, and sympathetic of those with special needs.

Importance

In an article about a research project entitled, "In The Picture", Matthew and Clow discuss what this 3-year project focused on (2007). The project addresses the lack of inclusion of children with disabilities in children's picture books. This project also addresses the fact that the disabled characters portrayed in children's literature often do not present an accurate depiction of a child with that disability. For example, they often only show one side of the character and are portrayed as saint-like (Matthew and Clow, 2007). This lack of existence of disabled characters and inaccurate portrayal of characters is important because research has shown that early childhood is an important stage in developing attitudes towards people with disabilities (2007). Inclusion literature has been shown to help encourage positive attitudes (2007).

Inclusion children's literature is also important for children with disabilities. Inclusion literature allows this population to identify with characters (Wopperer, 2011). They are able to see themselves in pictures book and gain a better understanding of themselves and, at times, their disability. Some research suggests that inclusion literature can even help lessen the feeling of loneliness for this population (Wopperer, 2011). Similarly, inclusion literature can help children

without disabilities to better recognize the similarities he/she has with children with disabilities (Andrews, 1998). This research suggests that an increase of inclusion literature will benefit all populations in understanding themselves and other's better.

Character Development

Maddie

Maddie is the main character of Dancing With My Friend Maddie, she is a six-year old with Down syndrome. Down syndrome is the most common genetic disorder resulting in mental retardation (Davis, 2008). Down syndrome (DS) is a chromosomal variation that results in a neurodisorder that affects language development, verbal memory, motor development, visual-spatial processing, and auditory processing (Davis, 2008). Maddie's character demonstrates this population's difficulty with language development by her use of sign language to communicate with her classmates. Her motor development is also shown by her difficulty in grasping utensils. The Down syndrome population has also been found to have an increased likelihood of obesity (Murray and Ryan-Krause, 2010). Murray and Ryan-Krause found that this population has a decreased metabolic rate, increased leptin levels, nutritional deficiencies, and lower rates of physical exercise (2010).

Maddie's character demonstrates this population's increase in obesity by her physical characteristics. Maddie also demonstrates how this population has a decreased amount of physical exercise. While Maddie is an energetic six-year old who enjoys recess, she also demonstrates how this population can struggle with competitive sports (Murray and Ryan-Krause, 2010). However, Maddie's character shows how this population can find a physical activity that they can enjoy that will help them to decrease their likelihood of obesity. Her character does not address the other factors that attribute to their obesity (metabolism, leptin

levels, and nutritional deficiencies). Maddie's character also demonstrates the positive characteristics of Down syndrome. The Down syndrome population excels in social settings (Filder et al. 2009). Maddie shows her strength through developing friendships and her social interactions with her classmates. Maddie's character is one that shows a typically developing child with Down syndrome. Maddie shows the difficulties and the strengths of this population. My hope for Maddie's character is for children to be able to relate to her and for children with Down syndrome to feel connected and see themselves in Maddie.

Claire

Claire is Maddie's best friend and the book is written from her perspective. Claire is a typically developing six-year old who enjoys school and recess. I used the perspective of a six-year old to help make the book more relatable through the use of language and experience. Since the main goal of this book is to have children gain acceptance of others, having Claire, a young girl who is very accepting of Maddie's differences, be the voice in this book will hopefully help others to see the importance. Claire is also used to help the book be interactive. While telling the audience her favorite subject in school, she says she can count to 20 and then does so, making the book have the capability of being used to engage the audience.

Fifth Grader

The conflict in this story comes from a fifth grader. Research shows that children's literature about children with disabilities can have negative impacts on children if introduced too late (Smith-D'Arezzo & Moore-Thomas, 2010). This character is meant to represent the population of children who are unaccepting of children with disabilities, and children with differences. This character is introduced towards the end of the book, so that the audience has already been introduced to Maddie and knows her character so that they have a greater impact

when this boy is mean to her. In the end the conflict is resolved when the boy ends up becoming friends with Maddie.

Target audience

The target audience for Dancing With My Friend Maddie is four to seven year olds typical developing children. Many children this age are involved in inclusion preschools or elementary school classrooms (Diamond and Huang, 2005). This age group is still developing their attitudes (2005). Children's experiences shape their attitudes and beliefs about those around them. Positive and negative attitudes are developed through direct and indirect experiences (2005). Introducing this population to positive interactions with children with disabilities can help create positive attitudes for the target population (Diamond and Huang, 2005).

Content

Goal of Content

The main goal of this children's book was not to alter the interactions of children through reading this book. The goal was to expose children to different ways of thinking and interacting with children with disabilities. The hope is that this book will be a starting point of discussion and eventual change. Therefore, creating an accurate picture of a child with Down syndrome was a vital part of the success of this children's book. Creating an accurate picture meant including the positive and negative aspects of the disability and the possible negative reactions a child with this disability may encounter.

Challenges of Down syndrome

Down syndrome is a genetic disorder that results in developmental delays and physical anomalies (Davis, 2008). Some of the physical characteristics of DS include dysmorphic facial features, growth retardation, hypotonia, epicanthal folds, and broad hands (Davis, 2008). The

illustrations in the book accurately depict these specific physical anomalies that Davis mentions. Down syndrome is usually associated with hearing problems. According to Dolva et al. 2004, hearing impairments is one of the most common health conditions associated with this disorder. Many individuals with DS have problems with auditory processes and hearing loss. The hearing difficulties can cause delays in language and reading (Davis et al. 2008). This difficulty is shown through Maddie's difficulty in communicating with her classmates. Maddie uses sign language to express her thoughts when words are difficult. Down syndrome causes delays in motor development especially fine motor skills. Kearney's and Gentile's (2002) study of prehension showed decreases in feedback and difficulty in grasping abilities. Dolva et al. (2004) discuss the difficulty this population has with motor skills, which includes fine motor skills such as using utensils and holding a toothbrush. This developmental delay is expressed through Maddie's difficulty in grasping utensils such as a pencil, paint brush, crayons, and markers. Another significant struggle for the Down syndrome population is obesity and other health problems. This population has many factors that increase their risk for obesity which include a decreased metabolic rate, increased leptin levels, nutritional deficiencies, and lower rates of physical exercise (Murray and Ryan-Krause, 2010). The book specifically covers the difficulties of proper rate of physical exercise. This topic is addressed through Maddie's lack of involvement in organized sports during recess. Murray and Ryan-Krause (2010) discuss how children with Down syndrome may not do well with the competitive nature of sports. In addition, some sports may automatically be discouraged due to the amount of contact or collision involved in the sport, for example football. In the book, dancing is used as an alternative to a contact sport and a competitive sport (at least at that age). The book addresses obesity through the physical portrayal of the character as well as the physical activity portion by showing Maddie becoming involved in

physical activities and sports that fit her personality and physical capabilities. Overall, the book tries to address the challenges that are presented to the Down syndrome population and give a realistic look into their lives. Maddie is a character that struggles and becomes frustrated with her struggles. The book attempts to address these struggles in a realistic manner.

Positives Characteristics of Down syndrome

Children with Down syndrome (DS) also have many positive characteristics. The DS population has been called, “charming, affectionate, outgoing, cheerful, happy and sociable”, according to Filder et al. (2009). Filder et al. (2009) also mentions that the characteristics found in friendships between typically developing children and children with DS have characteristics of true friendship. Not only is sociability a strength for this population, but in some areas they are above average compared to typically developing children in sociability. In the book, Maddie’s ability to make friends and have true lasting friendships is heavily included. The book focuses on the friendship between Maddie and Claire. This is not only a long lasting friendship but also a friendship that exists between a typically developing child and a child with Down syndrome. Maddie also portrays the above characteristics in that she is outgoing and cheerful with her classmates during recess. Maddie also shows above average social skills when she is faced with a boy being mean to her. The book works to focus on the positive effects that inclusion can have on typically developing children. Maddie’s conflict with this mean boy addresses the concept of inclusion. Kearney’s and Gentile’s (2002) study of Okagaki et al. ‘s (1998) research found that inclusion schools show many benefits for children without disabilities through their ability to understand disabilities, and sympathizing.

Summary

Overall, this book attempted to be an example of an inclusive setting where children struggle to understand each other's differences. It strived to accurately portray the life of a child with Down syndrome and that lasting friendships can happen between any two individuals no matter the differences between them.

Illustrations

The illustrations for this book were inspired by the children's book My Friend Isabelle (Woloson, 2003). My Friend Isabelle focuses on a young girl with Down syndrome (Woloson, 2003). This children's book had a very simplistic and playful feel to them. The illustrations felt more like illustrations than pictures. I was drawn to this style because I felt that children could relate to this more. I appreciate this style and my illustrator did a wonderful job of using it. I hope that the audience appreciates this style as much as I do.

Future Goals

The future goals of this project are to read the book to a pilot audience, develop curriculum for teachers to use that goes along with the book, and publish the book. A future plan for this project is to read the book to a group of young children ages four to seven, and then gather data about their reaction to the book. The survey given to the children will address whether they liked the book, connected to the characters, whether they saw similarities in the characters, and how they felt about the fifth grader in the story. The information will be used to alter the book to better fit the target audience's reactions and better portray the concepts of inclusion. Once this has been completed, a curriculum for teachers will be developed to help teachers effectively communicate with their classroom the topic of children with disabilities. This curriculum would include optimal questions to ask the children before and after the book is read. It will also give

teachers prompts for a discussion with the class. Finally, the goal of this project is to have the book published so that it can be used in classrooms to teach the target audience about inclusion.

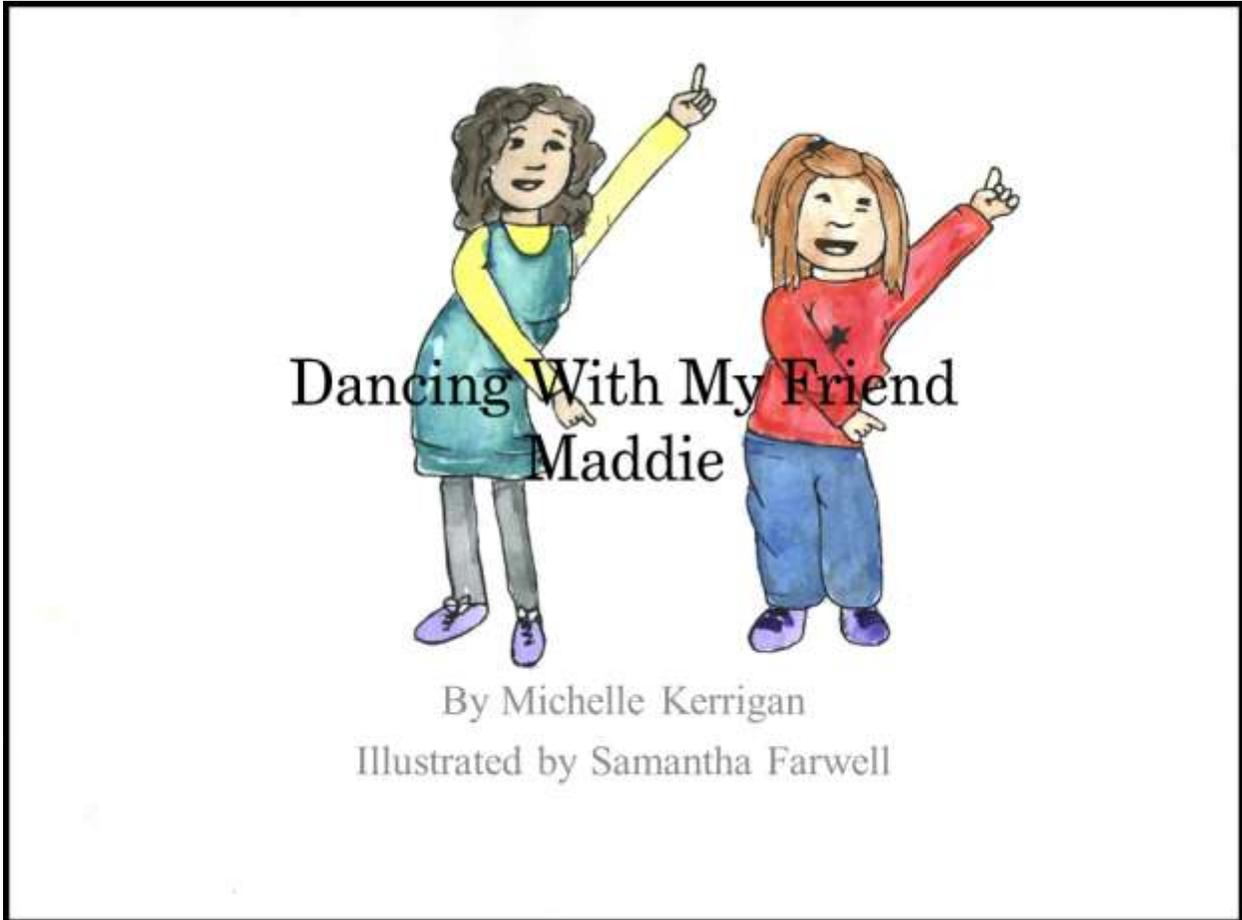
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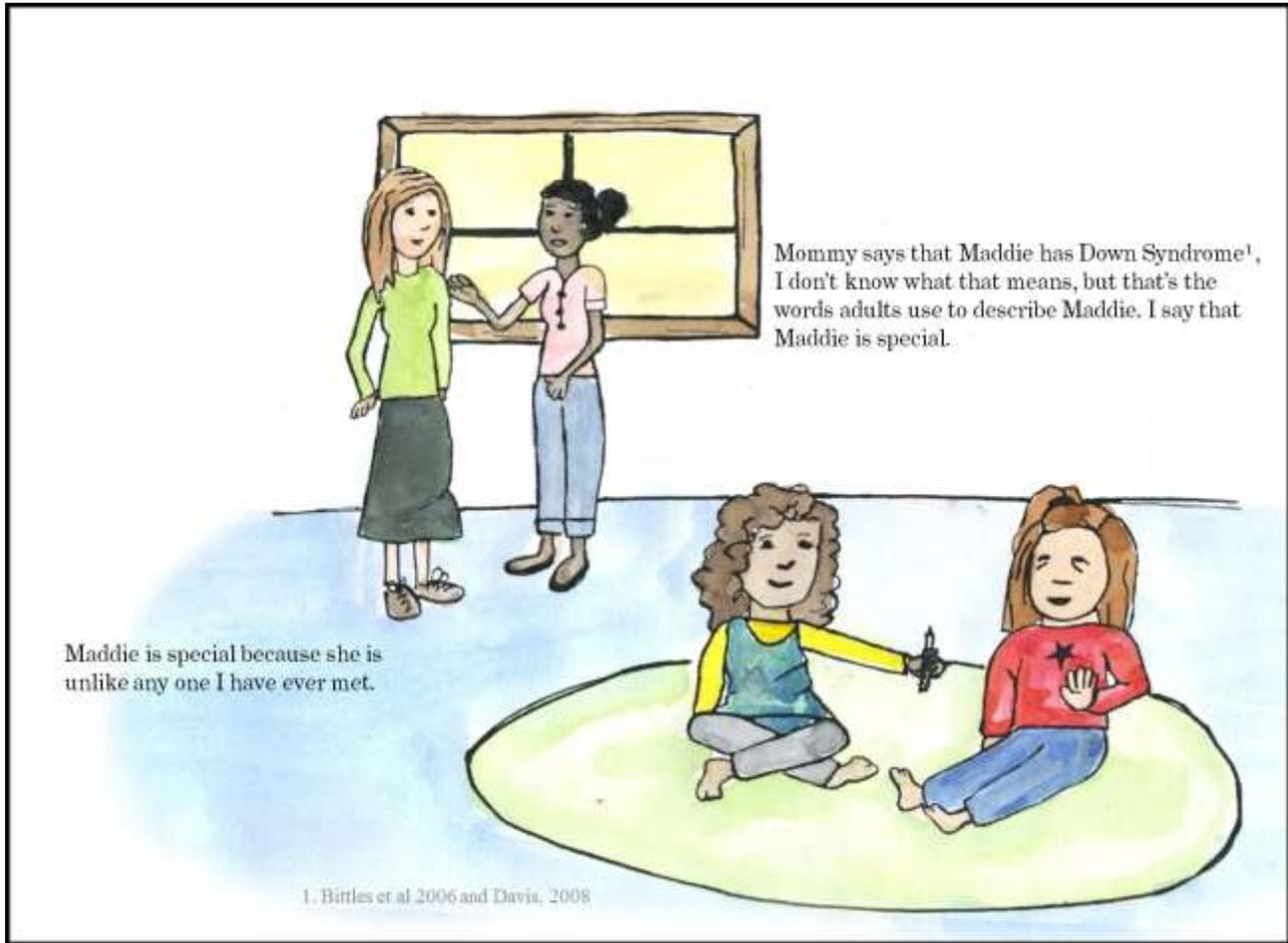
Appendices

Appendix A: Dancing With My Friend Maddie

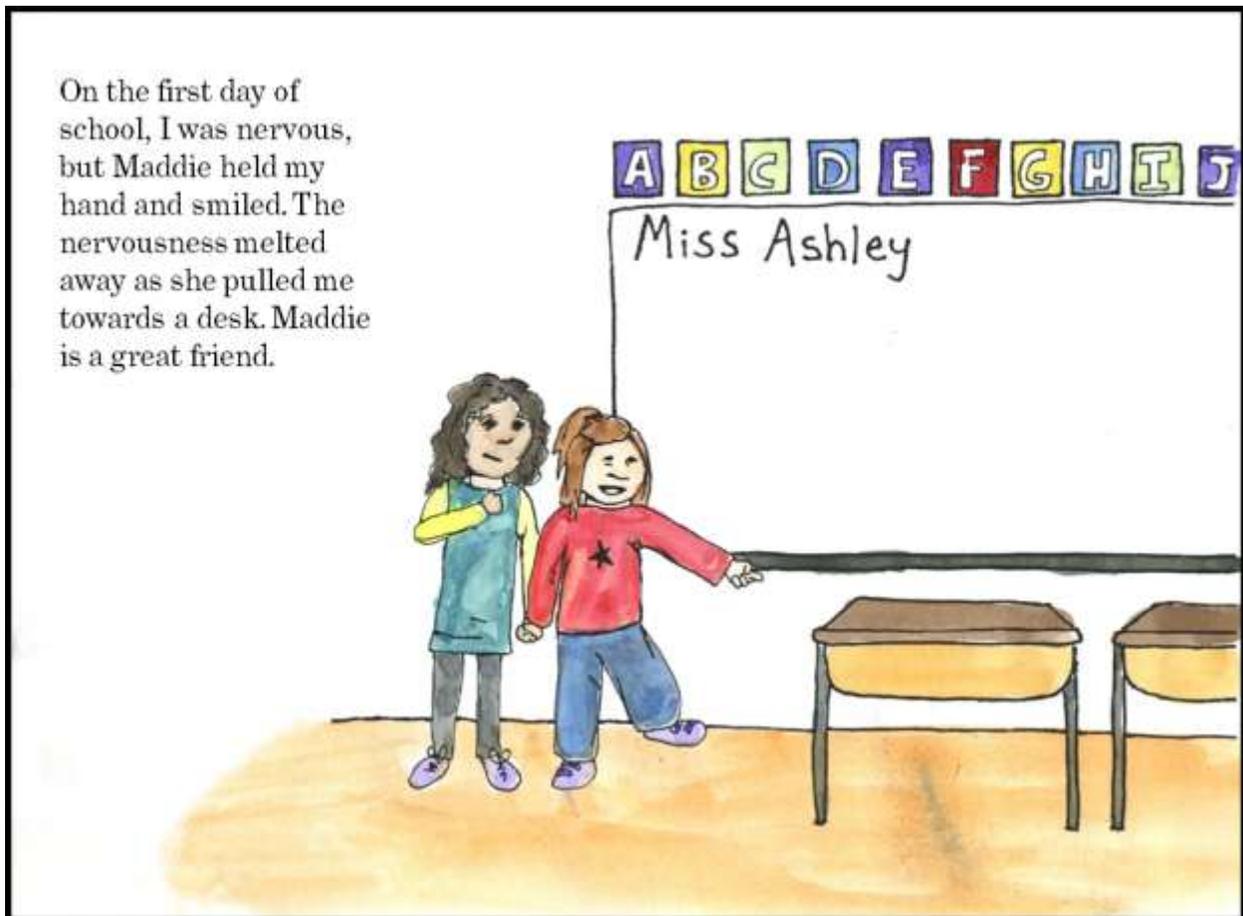


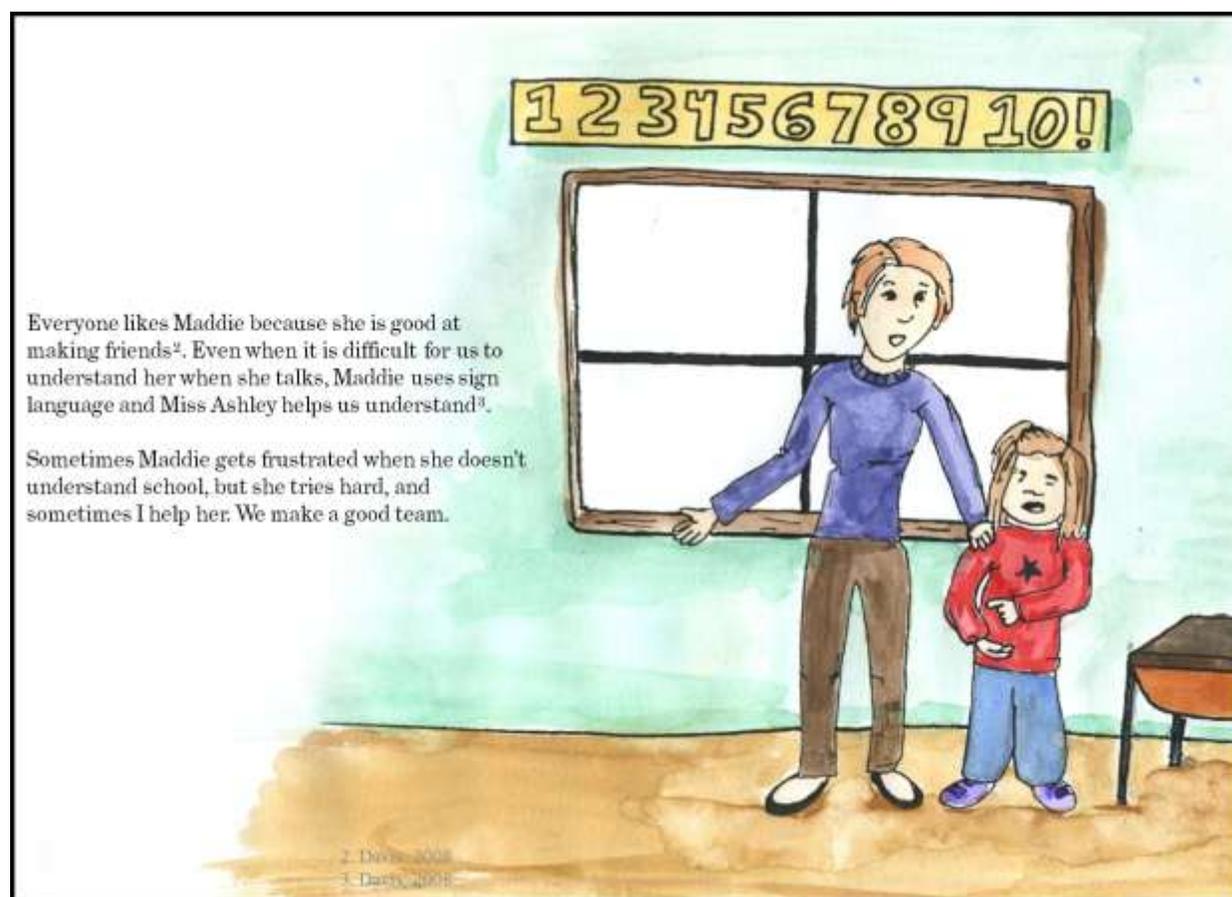
My name is Claire, and I have the best friend in the whole wide world, her name is Maddie. We have been best friends since we were born. This year we start first grade.

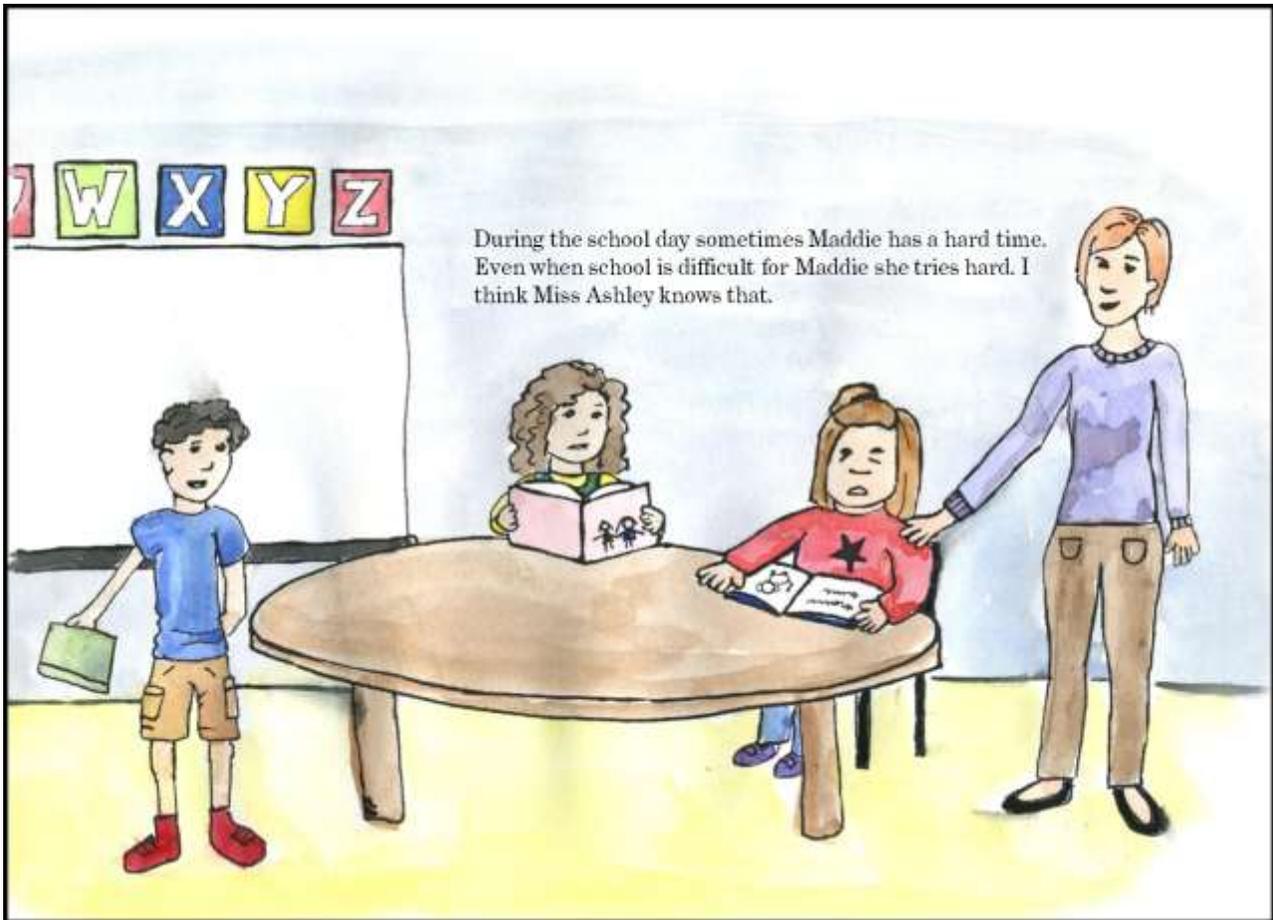




On the first day of school, I was nervous, but Maddie held my hand and smiled. The nervousness melted away as she pulled me towards a desk. Maddie is a great friend.



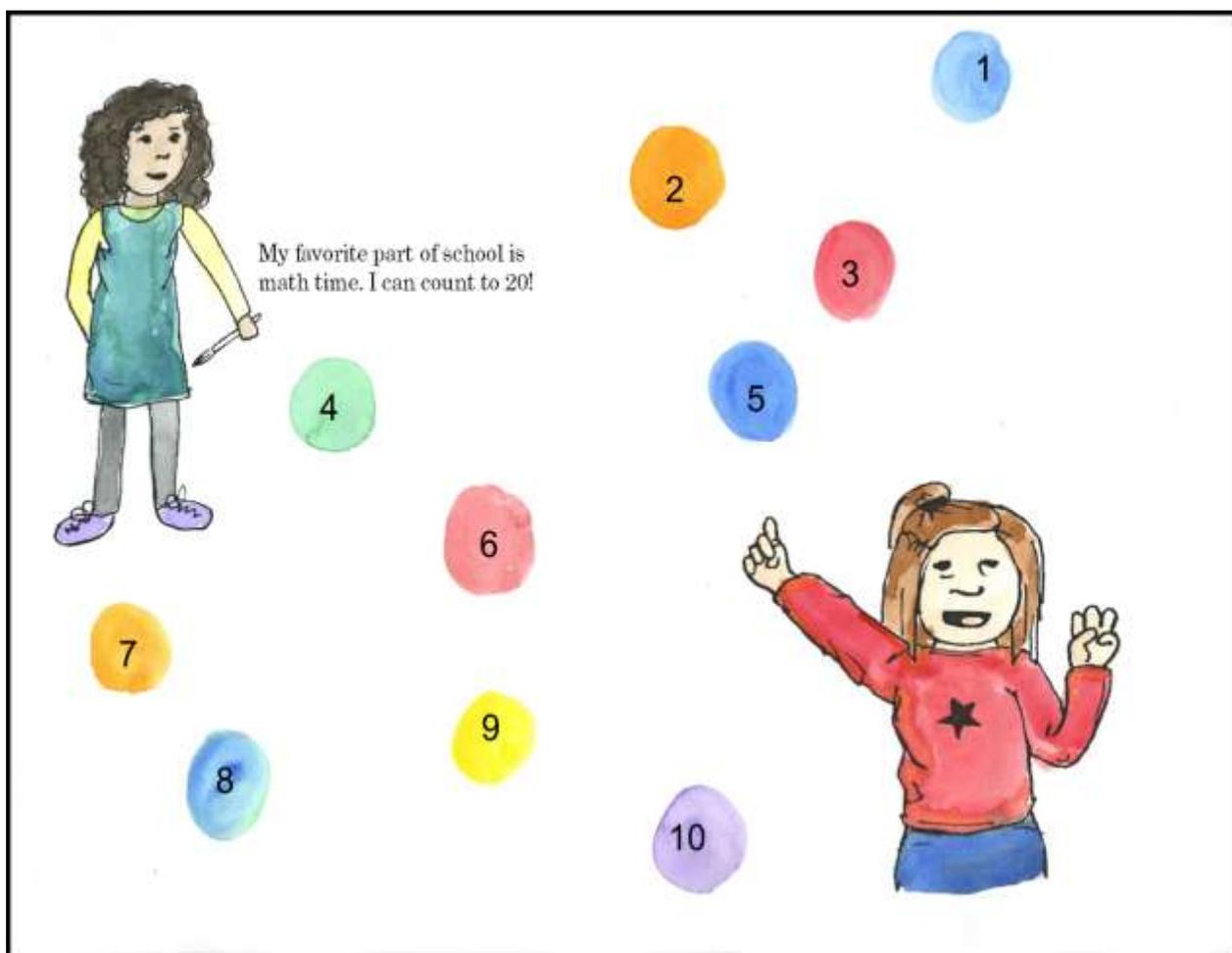


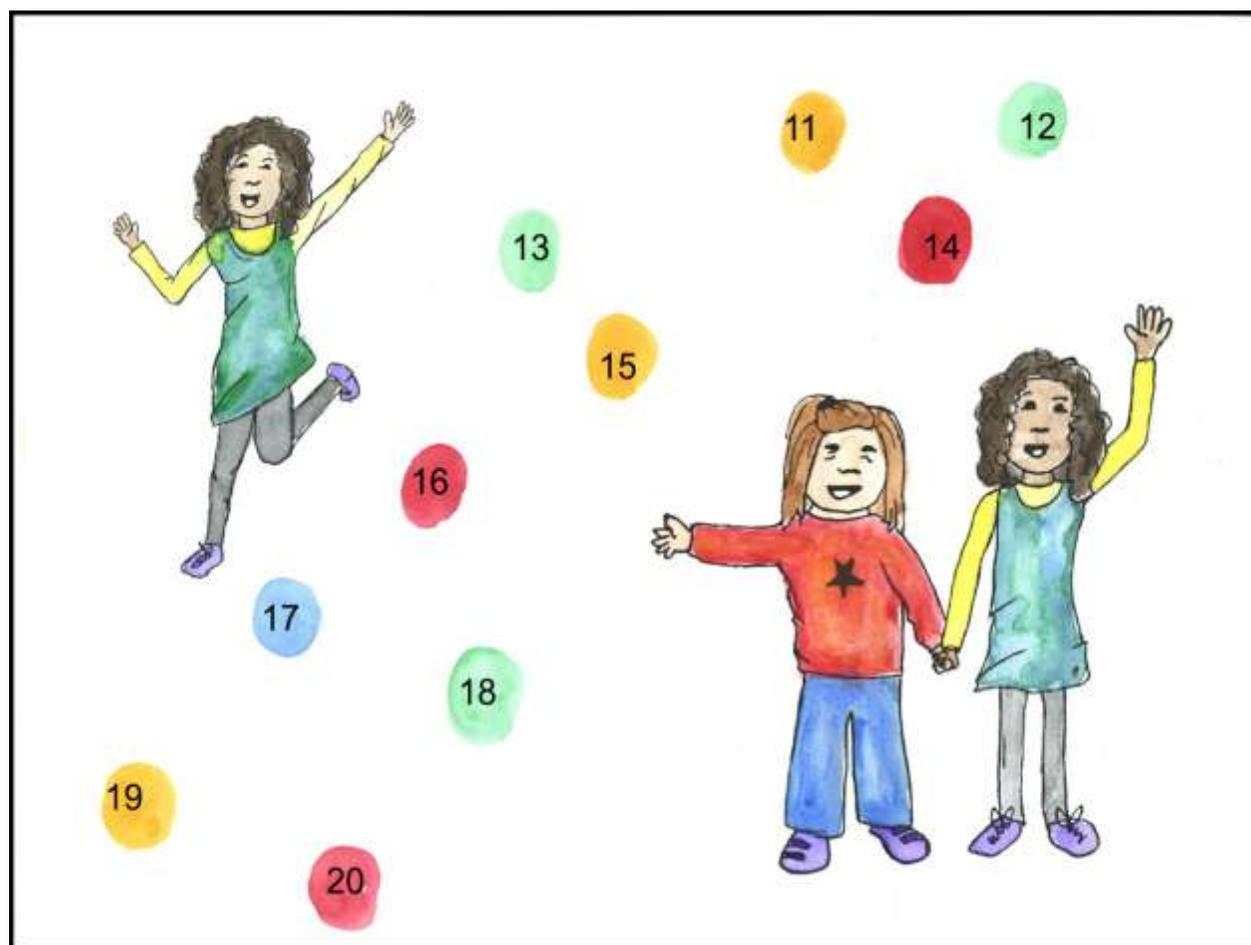


Maddie's favorite classroom activity is craft time, especially finger painting. Sometimes using art supplies like pencils, markers, crayons, and paint brushes is hard for Maddie⁴, but finger painting is easy and fun!



4. Kearney's and Gentile's (2002) and
Dolva et al. (2004)





Maddie's favorite part of the school day is recess. In the classroom, Maddie sometimes has a hard time, but at recess she is free to run and jump and play and no one has to help her.



We glide
down the
slides, and
fly through the
air on the swings.
We giggle as we swing
on the monkey bars

Sometimes, at recess I play with the big kids. Maddie doesn't like playing with the big kids because they are too competitive and Maddie gets upset⁵. Instead of playing with the big kids Maddie likes to dance and cheer me and others on. Maddie is a good friend.

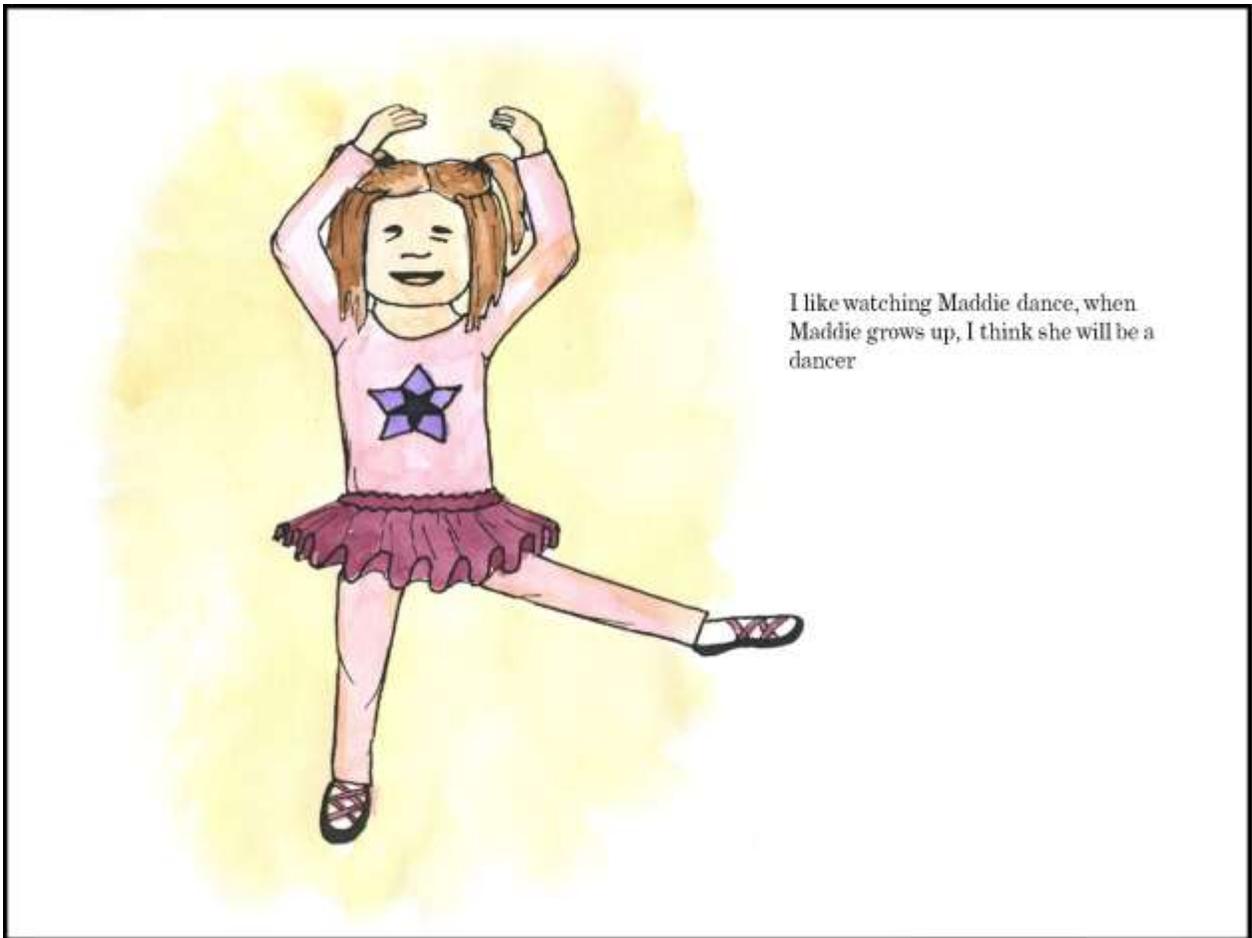


5. Murray and Ryan-Krause, 2010

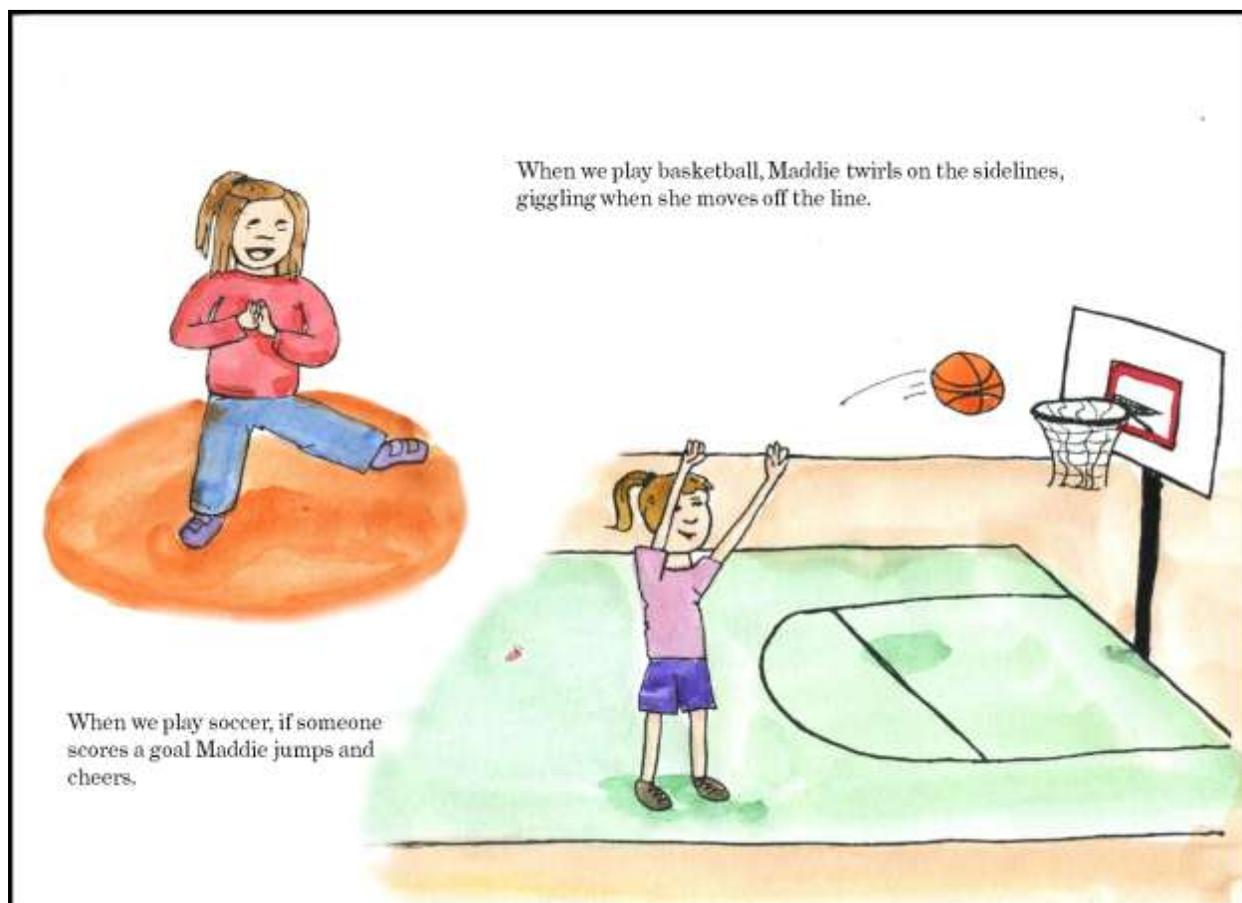
At recess sometimes I dance with Maddie while she cheers others on. She even teaches me some moves. Her Mom says that it is good that she is able to be active and find something she enjoys⁶.

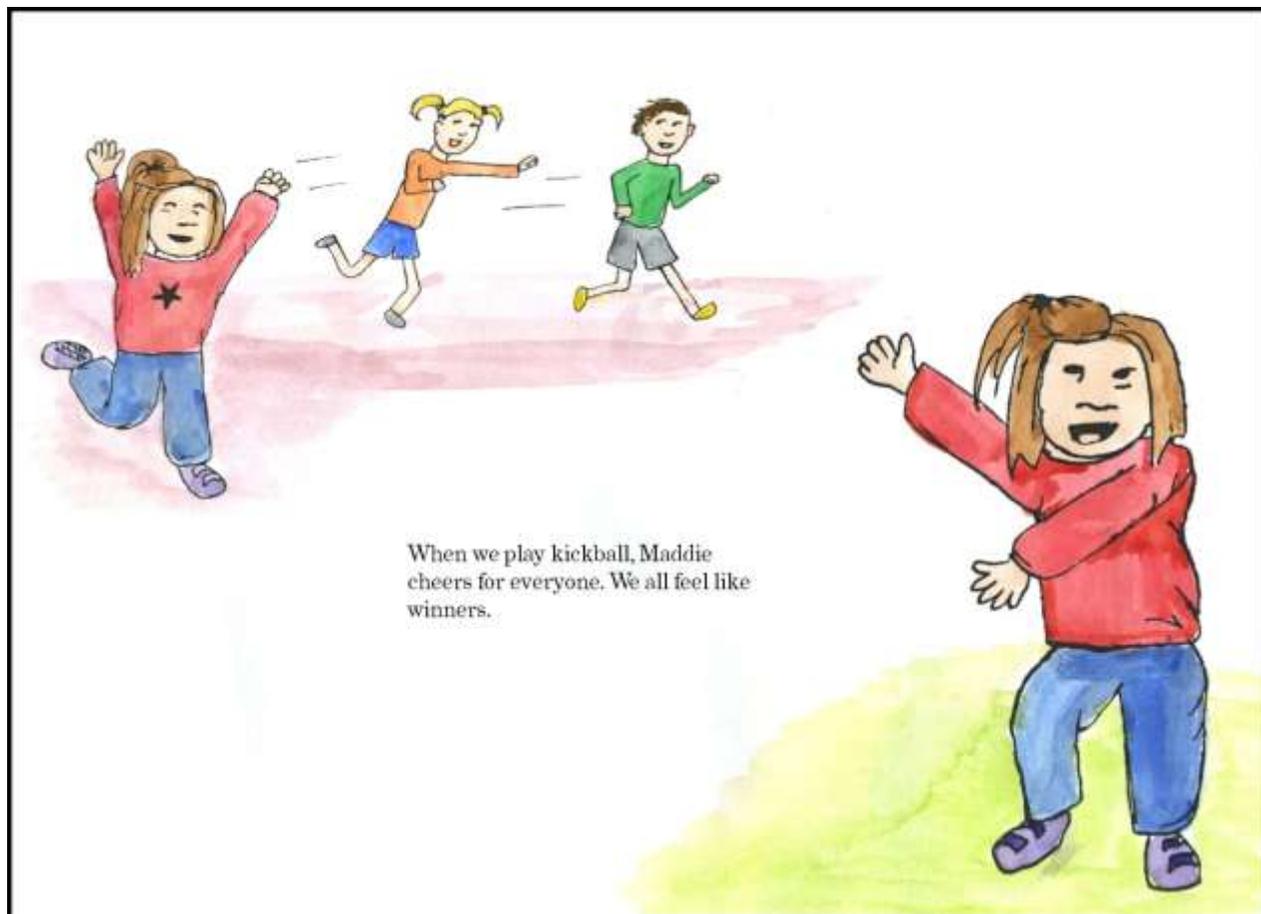


6. Winell (2003)



I like watching Maddie dance, when Maddie grows up, I think she will be a dancer





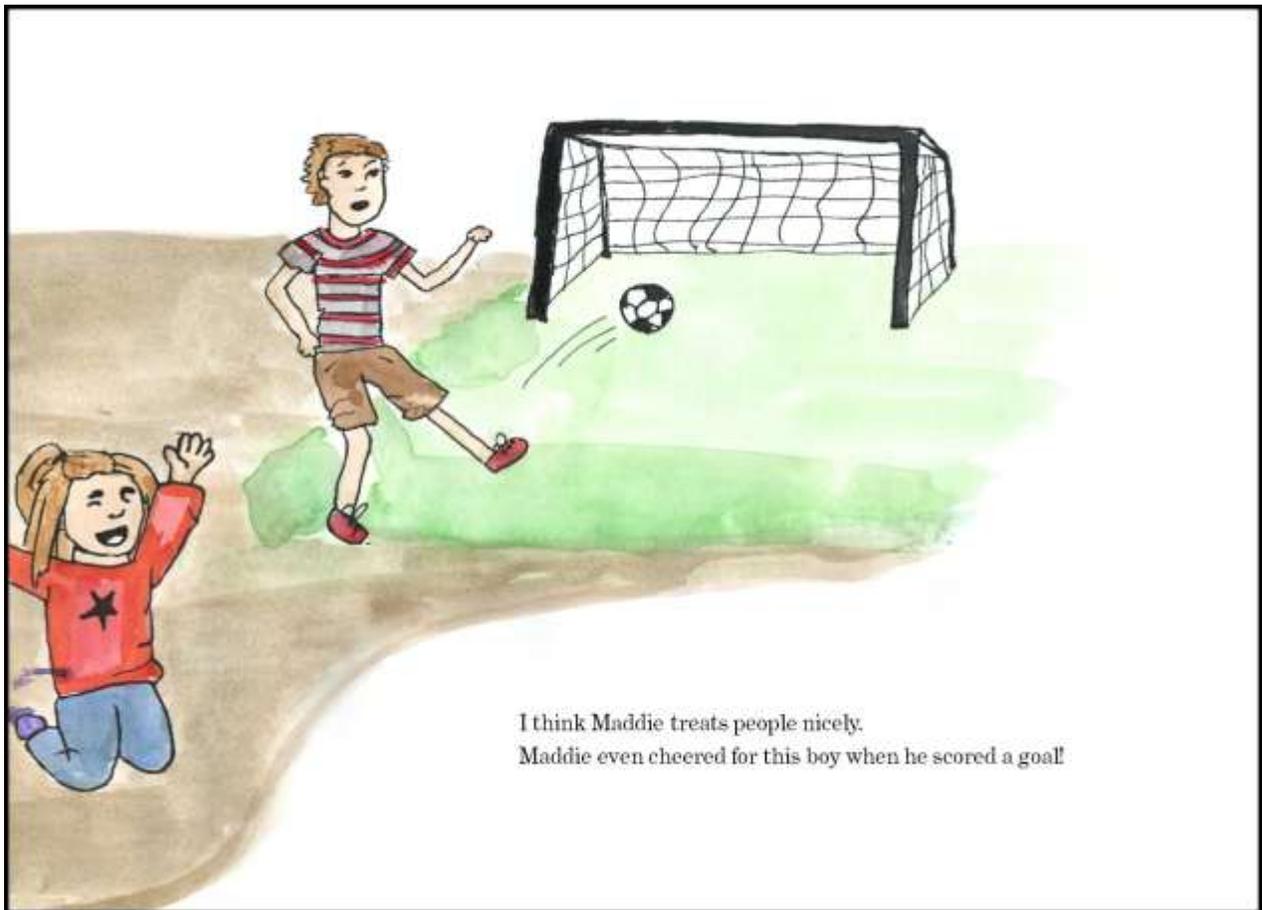
One day when we were playing soccer, a fifth grader made fun of Maddie for not playing with us'. He said that she must be too slow and too big to play with us. He was mean.

Instead of getting upset, like I would have, Maddie simply said,

"I like dance."



7. Okagaki et al. 's (1998)



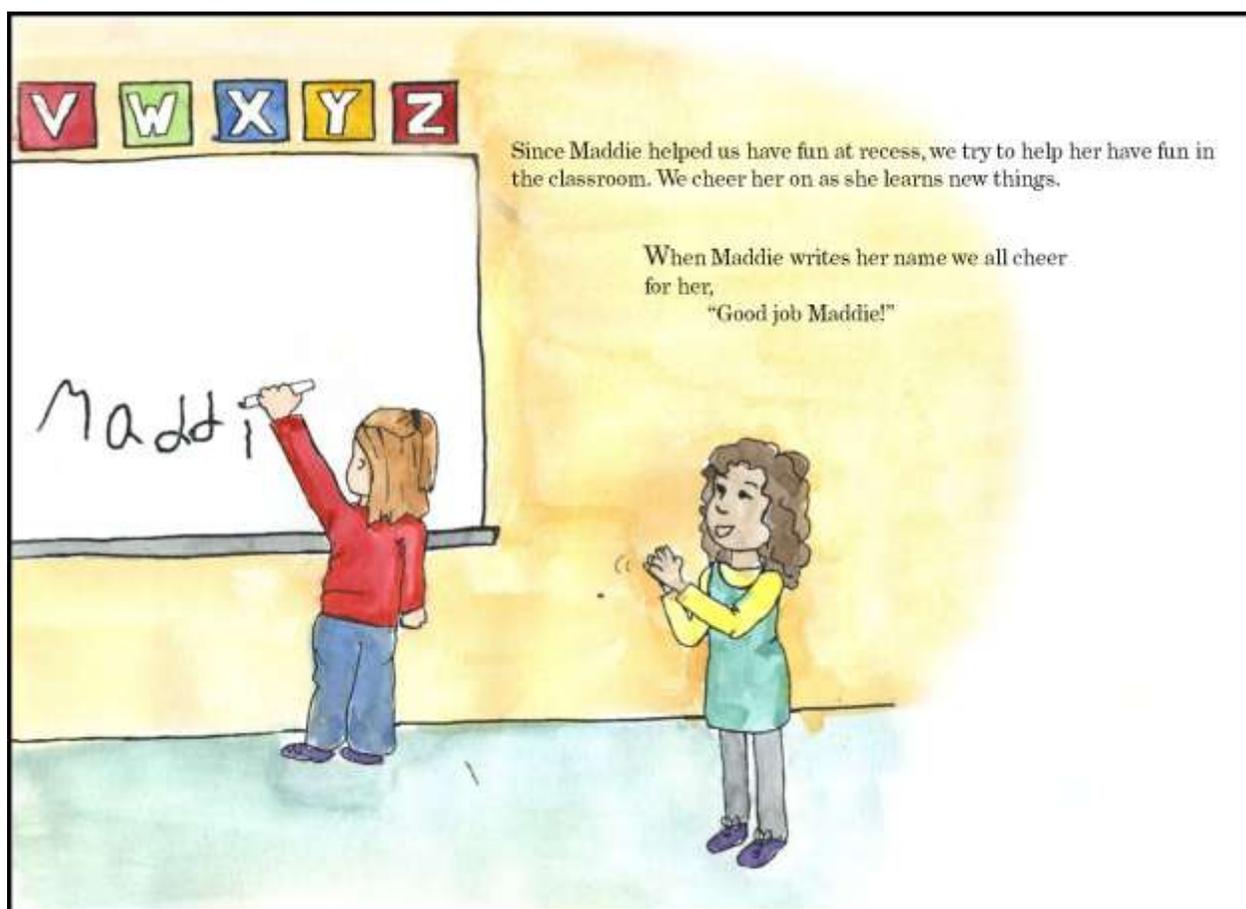
I think Maddie treats people nicely.
Maddie even cheered for this boy when he scored a goal!



After that, I started dancing with Maddie on the sidelines every time the older kids played at recess.

Then, lots of kids joined! Even the fifth grader came and joined us dancing. Maddie is a good teacher. Maddie cheered us on as we learned to dance. Everyone had lots of fun and we made lots of new friends. We even became friends with the fifth grader.



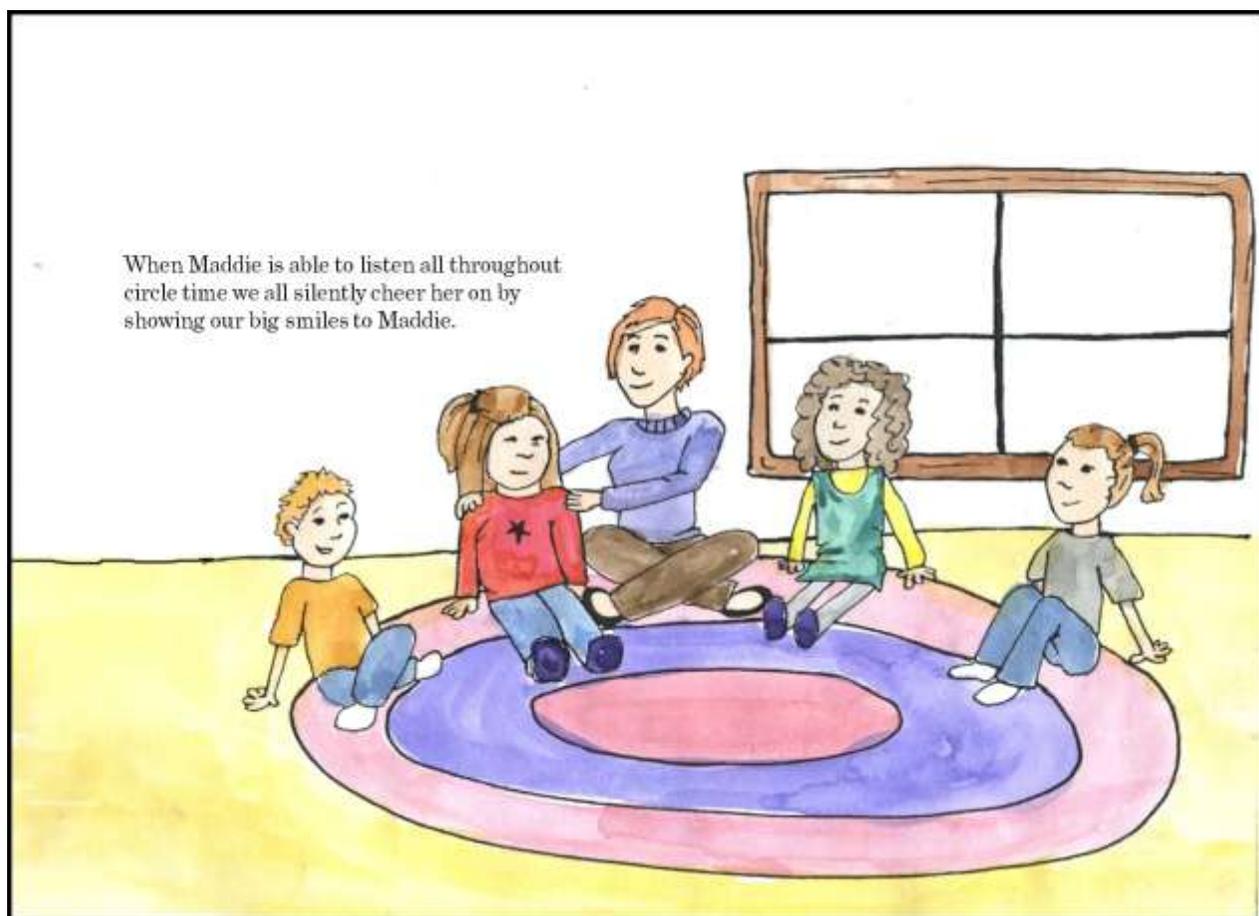


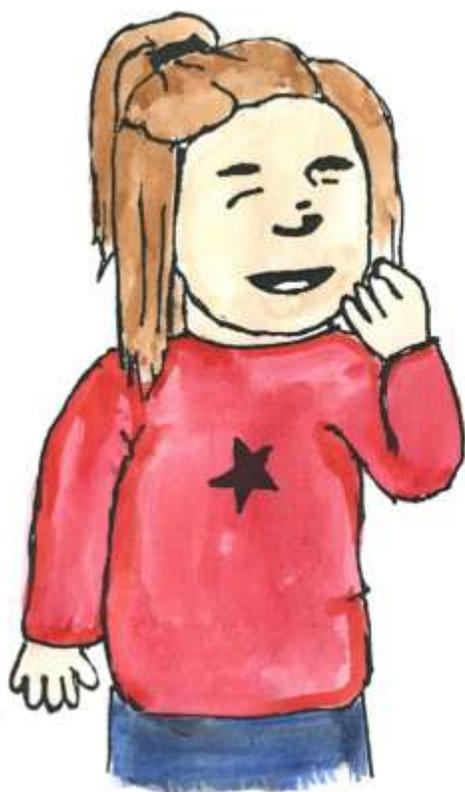
When Maddie counts to five we all cheer and jump up and down! "That's awesome Maddie!"

When Maddie speaks clearly so we all can hear her, we cheer for her,
jump up and down, twirl, and kick



When Maddie is able to listen all throughout circle time we all silently cheer her on by showing our big smiles to Maddie.





Maddie makes friends easily.
Maddie knows sign language.
Maddie has difficulty in school.
Maddie loves recess.
Maddie cheers for others.
Maddie is a dancer.

Maddie has Down syndrome.
Maddie is special.
Maddie is my best friend.

Citations

1. Davis (2008) states that Down syndrome is the most common genetic disorder. Down syndrome is a neurodevelopmental genetic disorder that is associated with physical anomalies. Bittle's (2007) research shows that there are on average 5500 infants born with Down syndrome in the United States each year. Life expectancy for the Down syndrome population has increased to an average of 60 in developed countries.
2. Fidler et al.'s (2009) research demonstrated that social development is a strength for this population. They are able to form true friendships and are known for being charming and sociable.
3. Davis et al. (2008) mentions one difficult area of development is language. Davis et al. suggest that this difficulty may be more influenced by the hearing difficulties than brain development because this population is able to use sign language and communicate effectively as well as increase their language development.
4. Kearney's and Gentile's (2002) study of prehension showed decreases in feedback and difficulty in grasping abilities. Dolva et al. (2004) discuss the difficult motor skills this population has which include fine motor skills such as using utensils and holding a toothbrush.
5. Murray and Ryan-Krause's research shows that the Down syndrome population prefers physical activity that involves independent achievement and is not directly compared to an opponent or teammate.
6. Murray and Ryan-Krause suggest people with Down syndrome are more likely to be obese than the general population. Many different characteristics attribute to this increase in obesity. Decreasing this association is difficult due to the physical and behavioral barriers. Many of the physical exercise or activities that children participate in to decrease the likelihood of obesity are

dangerous or not recommended for the DS population to participate in, all leading to this increased chance of obesity.

7. Okagaki et al. 's (1998) research found that inclusion schools show many benefits for children without disabilities through their ability to understand disabilities, and sympathizing.

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