



Investigating Visual Disabilities through the Perspectives of Disabled Artists

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This curriculum unit is recommended for:
Language Arts/3rd grade

Keywords: blindness, low vision, vision impairment, disability, art, Monet, Degas, cataracts, retinal disease, human echolocation, Braille, communication.

Teaching Standards: See [Appendix 1](#) for teaching standards addressed in this unit.

Synopsis: Our students need to appreciate the differences that make us unique and the things we have in common that unite us. This unit first explores what it means to be disabled. This invites discussion about how some disabilities are easy to see while we need to be more informed to understand other disabilities that are not easily visible. This curriculum unit goes into depth about low vision and blindness using balanced literacy strategies. Students will debunk common misconceptions about blindness, they will see what it looks like from the perspective of the visually disabled person, and become familiar with relevant vocabulary which they will apply in writing. Ultimately using what they learn about visual disabilities, they will study the art of Monet and Degas to see how their work changed over time as their changes in eyesight evolved due to cataracts and retinal disease. The unit will be guided through the inquiries of the students as they are naturally curious about what it would be like to be blind. Students will better understand Braille, human echolocation, Seeing Eye dogs, and biographical information about other blind people throughout history. The activities strive to guide students to become stronger readers, writers, listeners, and speakers.

I plan to teach this unit during the coming year in 11 students in Horizons 1st and 2nd grades.

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Investigating Visual Disabilities through the Perspectives of Disabled Artists

Lucy Beabe

Introduction

With no prompting whatsoever, one of my students posed a question as he entered my classroom recently. “If you’re blind, does that mean you can’t open your eyes?” Within hearing range, several other students started to ponder his question and came up with queries of their own surrounding blindness. “How do you read Braille? Can you go to college if you’re blind? How can you type if you can’t see the keyboard?”

Stereotypes of blind people often dominate literature and popular culture, and my students’ questions are valid. How else will they learn if they don’t ask? They seek these truths, and I feel it is my responsibility to help them learn about people who are different from them. Blindness and visual impairments were obviously topics of interest that had not been explored before and would be a good starting point for learning about people with disabilities.

Unintentionally, my students’ brutally honest inquiries had provided me with inspiration for what I should teach them using my own learning experiences from the Charlotte Teachers Institute. The seminar I am part of meets each week at the Bechtler Museum of Modern Art. Approaching literature and works of art in the Bechtler collection while relating Disability Studies, we have learned about the history of disability; how mental and physical disabilities are defined and represented in various art forms; as well making connections and sharing reactions to works of literature and art either by or depicting people with disabilities.

As I began thinking about how to answer their questions, my mind raced with ideas to teach my students about what it means to be visually impaired; helping them understand the broad range of visual impairments that exist; what people with vision impairments are able to do independently and how they make necessary modifications to thrive as active members of society; what contributions they have made to society through the arts; as well as how it would feel for them to be visually impaired, noting the impact that would create in their daily lives.

Prior to this epiphany, I had considered teaching my students about a variety of disabilities. Subsequent to witnessing firsthand how intrigued my students were about learning more about blindness, it suddenly became clear that I should focus on low vision and blindness, topics in which my students’ enthusiasm was met by a profound lack of

knowledge. By concentrating on disabilities related to vision, I could go in much greater depth. This would make a more intense impact than just skimming the surface of several other disabilities. As I created this unit, I was actively constructing a template for how to engage my students in studies of other disabilities in the future. There will be some definite differences as they explore other disabilities, but they will have some common themes. They will be able to compare and contrast what these disabilities are and what they entail, common misconceptions about them, the histories behind them, figures throughout history who have had these disabilities, stigmas associated with these disabilities, and generally how people with these disabilities function in society.

In order to accomplish my self-imposed goals I knew I didn't want to merely have my students listen to me lecture, read about visual impairments, and call it a day. This didactic method would deprive them of memorable learning experiences. Acknowledging my students' attention spans, learning styles, and need for rigor, I knew I needed to find innovative ways to pique their curiosity. I decided what better way to engage my students on this journey, than to explore the study of disabilities through the life stories and oeuvre of blind and visually impaired artists using balanced literacy strategies and their curiosities to guide the focus of the unit.

Balanced Literacy			
Reading	Writing	Listening	Speaking

Despite the non-existence of these specific topics within our mandated curriculum standards, I perceived this as a challenge to create a cross curricular unit aligned with Common Core State Standards. After all, with the fairly recent inception of the Common Core State Standards there has been a shift from a greater emphasis on fictional text to expository text. To complement this shift, my unit will include: reading and understanding the biography of Claude Monet; reading and understanding informational text, charts, and diagrams about the eye and various vision impairments, analysis of changes in works of these artists over time through the progression of their visual disabilities, and in learning about Braille and Seeing Eye dogs as they understand more of what life would be like if they were blind or had low vision. Writing will be part of this unit to show understanding as they build knowledge about visual disabilities while making connections along the way.

Purpose

In creating this curriculum unit, I am determined to provide learning experiences that will allow my students to appreciate and understand how people with disabilities are different in some ways, but also much they can find in common. My students will understand blindness and low vision through reading expository text, as well as responding orally and in writing to show their understanding, connections, and interpretations. They will

make connections to various vision impairments as they study the changes in visually disabled artists' work over time. Word study will be an integral part of this unit, to ensure my students understand what they are reading and discussing. The unit in its entirety will take approximately five weeks. There may be some discrepancy as to the amount of time it takes in different classrooms, depending how much time is devoted to the unit and how it is modified to incorporate more specifically what the group of students is curious about.

I want my students to have a better understanding about what a blind person sees. I want them to recognize that "blindness ranges from legal blindness with 20/200 acuity or severely restricted field to total blindness, with many varying degrees in between."¹ I believe it is important for my scholars to move beyond myths and misconceptions about blindness as they become more informed.

Overall, I want my students to establish connections to the differences and similarities they have to people with disabilities. Rather than solely reading about what it means to be blind or to have low vision, I want them to experience what life would be like if they had trouble seeing and how that would impact their daily lives. My specific emphasis within this unit will be on visual disabilities, although as aforementioned, this is a starting point for my plans to teach my students about other disabilities in the future.

School Background

Barringer Academic Center is a partial TD magnet elementary school located in the west part of Charlotte, NC. Barringer is very unique in that it is home to four distinctive programs; including an Academy for students living in the geographic area near the school (grades K-5), a Learning Immersion program for grades K-2, a Talent Development program for certified students (grades 3-5), and the Horizons program for the identified highly gifted (grades K-5).

Barringer's population is diverse and sets us apart from other schools. Our differences unite us and we learn from each other in meaningful ways. Within Barringer, all teachers serving certified gifted students either already have their gifted certification or are in the process of earning it, showing our staff's dedication to providing meaningful instruction aligned with the needs of the students we serve. Our team of facilitators (TD, math, and literacy) are an asset to our school's varied programs, providing guidance and resources to meet all of our students' needs effectively. Our approximately 655 students come from a multitude of areas in Charlotte. Many magnet and Horizons families drive a distance to keep their children challenged. Students' families are overall supportive and many give readily of their time and talents to the Barringer community.

I am one of five Horizons teachers at my school and like my Horizons colleagues; I am responsible for teaching my students at a minimum of two grade levels above in all

subject areas and keeping them challenged. Further, my kindergarteners work at a minimum of a 2nd grade level in all subject areas, and my 1st graders work at a minimum of a 3rd grade level in all subject areas. Instruction is modified according to the individual needs of the children. Much of their work is self paced. The students that will be participating in this unit of study are part of the Horizons program for the highly gifted at the elementary level. Barringer houses the elementary Horizons program for all of Mecklenburg County. In order to qualify for this rigorous program, students must work consistently at a minimum of two grade levels above in all subject areas. The admission in itself is rigorous. Candidates must submit specified test results and a portfolio of work samples highlighting their writing, math, and reading abilities. If the test results and portfolio samples satisfy particular criteria, students must also then go through an interview with a Horizons teacher to determine their most appropriate educational placement.

As previously mentioned, within my classroom, literacy instruction for my first grade students is guided through the third grade Common Core State Standards. In order to address these standards, we follow the balanced literacy approach using novel studies, educational magazines, non-fictional text, project based learning, discussions, opportunities to report orally, word work, and writer's workshop. My students are able to collaborate in small groups as well as work independently as they become better readers, writers, listeners, and speakers. Novel studies and expository text projects typically integrate science concepts and/or crucial events throughout history, allowing for exciting cross-curricular connections. I am fortunate to have this flexibility in what I teach to address the Common Core Standards, as I reach out to my students keeping multiple intelligences, higher level thinking, and integrated literacy at the heart of my teaching philosophy. It is through this flexibility that I am able to cover the standards and go beyond to find concepts of great interest to my scholars while building their knowledge in language arts.

Learning Objectives

Throughout the activities I have created within this curriculum unit, I have interwoven third grade Language Arts Informational Text and Writing Common Core State Standards to nurture discoveries about visual disabilities as my students consider the commonalities and differences they have with people with disabilities.

As my students see, read, and hear about the lives and work of visually disabled artists through online resources as a class, in biographies, and in articles; they will make inferences from reading non-fiction text at or above the third grade reading level, comprehend and analyze text, learn about the motivation and character traits of these artists, and discuss what they have read. They will determine cause and effect as they see what causes cataracts, macular degeneration, and retinal disease, as well as what effects result from these conditions. They will also see cause and effect in the work of Monet

and Degas, as their art changed as they both experienced deteriorating vision. My students will explore the theme of change over time in relation to how people with visual disabilities have coped and what technologies are useful for them to perform daily tasks such as Braille, Seeing Eye dogs, and human echolocation.

They will follow the 3rd grade Common Core Writing Standards as they respond in writing to literature and non-fiction text read, use word processing skills to process their responses, write from alternate points of view, and take part in collaborative research projects applying what they have read about and discussed.

Strategies

Interactive Read Aloud

Student engagement is high with whole group read alouds as my students are held accountable as they listen and are called upon to interject frequently. They gain great exposure to vocabulary as we read and discuss, making connections along the way. To ensure my scholars are actively participating as listeners, I offer opportunities for them to make inferences aloud as we read. This informal method of assessment is done through asking provocative questions corresponding to the text I am reading. I invite students to chat with their neighbor after raising higher level thinking based questions as we read. I randomly call a pair of students to offer what they have shared with the whole group. Sometimes during an interactive read aloud I ask my students to sketch what we have read as a means for discussion and to understand what they have gotten out of what I have read. I ask for them to make connections to other texts as well as personal connections. As we read, I allow them to make predictions about what will happen next, keeping the suspense and intrigue elevated. These connections, predictions, and thoughts can be recorded in response journals as I read to them.

KWL Chart

This chart takes a relatively unknown topic and allows scholars to record what they already know about the topic, what they are interested in learning more or discovering about this topic, and also it provides space to record what has been learned. Under **K** they record what they already know, under **W** they write down what they are interested in learning more about, which helps guide my lesson planning process, and under **L** they write things they have learned throughout the unit. I like to make these charts easily accessible so they can constantly add to them through the entire unit from introduction to culmination.

Interactive Word Wall

I want my students to feel deeply connected with vocabulary pertinent to our activities and discussions. I will have a pocket chart at the front of the classroom devoted to placing vocabulary words related to our unit on blindness and low vision. I will encourage my students to use these words in their daily writing and discussions. I will also have an open bulletin board available for them to post reactions and connections to content learned. This will allow them to make meaningful ties rather than just reading about visual disabilities with no strong connections.

Integrating Art

By allowing my students to sketch as we read, or after being prompted by a specific question, I am providing them with the opportunity to respond in an alternative way, rather than in the conventional oral discussion or written form. Getting to know each child's learning style is essential and this can be a wonderful way for students to show their thinking. My students will also have the opportunity to create a texture collage within this unit. This will allow them to realize that art can appeal to different senses, not limited to what is seen by the eye alone.

Visual Thinking Strategies

In addition to creating art, my students will look at pieces of art to interpret how the work of Monet and Degas changed as their vision worsened. Using Visual Thinking Strategies, they will be asked "What's going on in this picture?; What do you see that makes you say that?; What more can we find?"² This will allow them to interpret the art from multiple points of view, rather than me telling them what they are supposed to see. This will encourage my students to discuss the works of art I present, giving them a stronger voice as they analyze each piece using background knowledge and interpreting what they perceive.

Graphic Organizers

My students often need an organized structure to help them brainstorm and get their thoughts written down. Otherwise I hear a lot of "I don't know what to do" or "I don't know where to start." By providing graphic organizers, they see exactly what is expected of them and where to write. For some assignments, my students will brainstorm using graphic organizers and then discuss using what they have recorded. They will use a graphic organizer to record biographical information about 10 different people throughout history in this unit. They will also determine whether they think this person was visually impaired, just from seeing their picture which will get them thinking about stereotypes and prejudice.

Technology

I use a lot of web based resources to intrigue my students and keep them engaged in what we are learning. Within this unit, I will be showing various clips of visually disabled and blind people so they can see what these people have been able to accomplish, and to see what life looks like through their eyes using vision simulation websites. By projecting images and videos on the SmartBoard, my whole class has access to seeing whatever I am trying to present so they can be active participants in our discussions and so they can effectively complete assignments afterwards. My students will use computers, iPads, and tablets to conduct research. They will use word processing and Windows Movie Maker to create products, reflecting their understanding and connections to the content taught. As they use Windows Movie Maker, their involvement with digital storytelling will encompass higher level thinking. They will reflect on all they have learned and think about creative ways to pass on their knowledge to others, spreading awareness about better access in ways that will impact the disabled population.

Collaborative Projects

Using background knowledge and what they have learned in class discussions, I provide my students with opportunities to work together to complete assignments. Together they will use 21st century technology devices to research and understand common misconceptions about blindness. This way, they look beyond their limited perspectives and see what someone else has gleaned from our studies as well. Since my students are highly gifted, sometimes they struggle with social skills and working together provides opportunities for social interaction and problem solving. Many of my students prefer to work alone so these collaborative projects are vital as they learn how to listen to others' perspectives and value others' opinions and ideas while reaching compromises in the process.

Activities

Activity: Introduction to Disability Studies in the Elementary Classroom

I want to help my students develop a strong foundation for understanding various disabilities. Although my unit's sole focus revolves around blindness and low vision, I want my students to understand what the term disability means broadly. Using materials gathered from the Teaching Tolerance website³ we will discuss as a class what it means to be disabled. It is crucial that my students understand that some disabilities can be seen right away while there are other disabilities that are not as easy to recognize if you don't understand them. An overall goal I have for my students through our discussion guided through these Teaching Tolerance resources, is to initiate thinking about how they have things in common with people with disabilities.⁴ I will welcome their connections to disabled relatives, friends, and literary characters they have seen or have known. This theme will continue throughout this unit and throughout our future units on other disabilities. I believe this is a valuable discussion that is seldom conducted in the

elementary classroom. We see people with disabilities each day and by providing more information to our students, they are less likely to resort to having pity on people with disabilities, thus moving towards a stronger understanding and appreciation for what makes each of us unique and valuable members of society.

Throughout this unit of study, I will have an open bulletin board at the front of the classroom devoted to our discoveries about disability and blindness. This bulletin board will be interactive in that I will invite my students to: post their thoughts and feelings about what we are reading and discussing, place artistic representations of what they are feeling and understanding about blindness, post articles they have come across through our studies, and whatever else they are open to featuring that I approve and find pertinent. I want this bulletin board to be a collaborative effort that will show progress as we delve deeper into studying disability and blindness. I believe it is crucial for my students to be actively involved in what they are learning, and this will allow them to make strong and significant contributions that will help continue to build a sense of community in our classroom.

Disabled Fables is a children's book comprised of a collection of Aesop's fables rewritten and illustrated by people with developmental disabilities. The artists were able to choose a fable that they connected with, illustrate the fable, and then rewrite the fable in their own words.⁵ At the end of each short fable in the book there is a "What this story means to me" section that often gives insight into the artist's disability. I will read a few of these fables out loud to show my students that people with disabilities can be great authors and illustrators and that everyone has a voice to be expressed and heard.

Activity: What does a blind person see?

To introduce this unit, my students will begin by working through a KWL chart guided by the question "What does it mean to be blind or have other visual disabilities?" My students will be placed in pairs to do this activity. Under K, I will invite them to write down what they know about blindness and what it means if someone has a visual disability. Collaborating with their partner, they will also fill out the area under the W which will allow them to record things they are curious about learning through our study of low vision and blindness. I will then ask my students to organize their KWL chart in their binder. Throughout our unit, they will have access to this chart and they will be encouraged to go back and write things they learn along the way under the L part of the chart. Although the students are working in pairs, they will each get their own sheet. On the first day after my students have collaborated to fill in the first two columns, I will facilitate a class discussion to understand the baseline for what my students have in background knowledge and possible topics to include in our study of low vision and blindness as I read what they have written in the want to know column. I seek to use my students' questions and wonders to guide instruction. This will be a helpful tool in doing so.

K	W	L
What do you already know about blindness and visual disabilities?	What are you interested in learning more about related to this topic? What are your wonders and curiosities?	What have you learned through our study of visual disabilities?

Many people have a stereotype in mind when they picture a blind person. I want to see what my students are thinking, so I will provide them with time to draw what they think a blind person looks like. It could be someone they know or someone they have read about. It will be interesting to look back at these interpretations after they have learned more about people with visual disabilities and how people they may know have visual disabilities that they didn't recognize before, such as the artists we will be studying.

Activity: Were they visually impaired? At First Sight

After they finish their work, I will show them photos of ten famous people throughout history. Some of which having visual disabilities and some of them not. The photos will include: Nikki de Saint Phalle, Stevie Wonder, Harriet Tubman, Captain John Smith, Galileo Galilei, Andrea Bocelli, Marla Runyan, Jackie Kennedy Onassis, Helen Keller, and Doc Watson. I will give my students [a chart labeled from 1-10](#) (*chart can be accessed through that hyperlink*) and they will write whether they think the person is/was visually impaired. After I have shown the images, we will go through each one and I will give a brief history of each one that was visually disabled using <http://www.disabled-world.com/artman/publish/famous-blind.shtml> and telling them what their vision impairment was (if they have/had one). As active listeners, they will record each person's name on the chart and some information learned through their biography. This will establish an opportunity to discuss prejudice and how we should treat people equally, as well as showing notable blind or visually impaired people from various time periods, cultures, and professions.

Activity: From the Point of View of Tommy

I will ask the question, "What do you think blind people see?" I will give some time for my students to discuss this in small groups as I rotate and listen to each group. Afterwards, we will watch a brief clip of a blind film critic, Tommy Edison, that explores "What do blind people see?" from his point of view. <http://www.youtube.com/watch?v=ZDHJRCtv0WY> There are several more of these brief clips by Tommy Edison on YouTube through <http://www.youtube.com/watch?v=bbiim4OaqDg>. As my students come up with more questions about blindness, they will record them in their response journals. We will either

do research to find the answers or since Tommy has a strong presence through social media, they will pose their questions through Twitter and/or Facebook to him.

Activity: What does a legally blind person see?

A common misconception is that if someone is blind they see complete darkness. In reality, the range of blindness extends from “legal blindness with 20/200 acuity or severely restricted field to total blindness, with many varying degrees in between.”⁶ A person is identified as being legally blind “...when he sees at twenty feet, with the strongest lenses, what someone with perfect vision sees at two hundred feet (20/200 vision).”⁷ In order for my students to comprehend and appreciate what this means, we will walk outside to experience what it would be like to be legally blind. Ahead of time, I will mark off a specific point that is 200 feet from another designated point where we will be standing. I will set up a sign that says “How would your life be different if you were legally blind?” Once my students have had an opportunity to see what the sign looks like at that distance, they will slowly walk closer until they are twenty feet away. They will reflect on what the differences were in seeing the signs from two hundred feet away and twenty feet away, once we return to the classroom in their response journals and then as a group discussion using what they have written.

Activity: Visual Impairment Vocabulary

Learning about low vision and blindness, my students will encounter unfamiliar vocabulary. Understanding terminology related to visual disabilities will help them have a stronger grasp for what they are learning. What does it mean to be legally blind? How is that different from having low vision? To address these questions, I will start a list of vocabulary and we will discuss the terms as a group. My students will be responsible for looking up and recording the definitions in their own words, to deepen understanding and to discourage short-term memorization. They will be creating picture dictionaries that will be readily accessible throughout the unit to add to as new terms arise. In addition to the picture dictionaries, I will post the vocabulary on a word wall at the front of the classroom so they get used to seeing these new words. They will be encouraged to use them appropriately in class discussions and writing assignments. To help them understand what these terms mean, I will bring up examples on the Smart Board for them to see what I am talking about. Once we discuss the terms as a group, they will write what the words mean and have space to make a picture to help them remember the connection(s) they have made. (See preliminary list of vocabulary words at the end of this unit.) Taking it a step further, they will create a memory game with the vocabulary learned. Designating words on one index card and definitions on the others, they will play a memory style game with each other. This will help them access their understanding for the terms and it will give them a chance to make connections to the vocabulary with their friends as they play together, deepening their understanding of the vocabulary studied.

Activity: Vision Simulations

As my students come across common vision impairments such as cataracts, glaucoma, macular degeneration...etc... I want them not only to understand what they mean, but ultimately what it would look like if you had these impairments. To provide more familiarity with these other somewhat unknown impairments, as a class I will show them websites with various fields of vision projected. They will see through the eyes of someone with these vision impairments so they don't generalize all vision impairments to seeing black. They will use the following web resources to see vision simulations of what it looks like to have a visual disability. <http://webaim.org/articles/visual/lowvision> <http://www.visionaware.org/section.aspx?FolderID=6&SectionID=116&DocumentID=3393> By seeing what it looks like to have various visual disabilities, my students will see that being blind or being partially sighted has a broad range. This will provide a basis for them to think about how their life would be different with some of these conditions.

Activity: Art from the Eye

Once they see what it looks like from someone's perspective with cataracts (like Claude Monet, who we will be studying) using a vision simulation website, each child will create a piece of art in response. I will guide them to draw a full page sized blank eye, afterwards going over it in black marker so the outline stands out. Inside the eye, they will draw and color what they believe someone sees when they have cataracts. They will create this art based on what they have defined and seen about cataracts. This will help them as they learn about artists who have trouble seeing due to cataracts.

Activity: Answering Questions about Blindness

Since the idea for this unit was derived from a student asking me if a blind person can open their eyes, I want to provide time for more of my students' questions to be heard and answered. The book *Do You Remember the Color Blue? And More Questions Kids Ask about Blindness* by Sally Hobart Anderson will be studied. The questions posed within this book to the author are: "How did you become blind? Was it scary at first? If your eyes don't see, do they work at all? How does your dog work? How did you meet your husband when you couldn't see him? Is it hard to be a blind parent? Would you rather be blind or deaf? How do you read? How do you write? When you lost your sight, did you seek out blind friends? Do people treat you differently? Has being blind changed you? and Do you remember the color blue?" Given that many of my students' questions are covered within this book, they will have their questions answered from a blind person's perspective.

Activity: Myths vs. Truths about Blindness

More than 285 million people are visually impaired; 39 million being blind and 246 million having visual impairments.⁸ Staggering statistics such as these help give kids a better idea of how many people have impaired vision. Along with a great deal of statistical data available, there are many myths and stereotypes presented and associated with blindness and visual impairments. In our world, people question what a blind person is capable of doing independently. The Iowa Department for the Blind has seen that “the real problem of blindness is not the physical loss of eyesight but the misconceptions society holds about the loss of sight.”⁹

I will put my students in groups to explore through research and discuss myths or common misconceptions about blindness. They will be each be given a website to investigate using our classroom computers, iPad, and tablets. Along with these devices, they will be given a [graphic organizer](#) (*follow hyperlink to access*) that will help them separate fact from fiction.

Each group will be given a different website:

- <http://www.dhs.wisconsin.gov/blind/adjustment/mythsblindvisual.htm>
- <http://www.theiris.org/resources/faqs/misconceptions-and-myths-about-blindness>
- <http://www.afb.org/section.aspx?FolderID=2&SectionID=7&TopicID=116&SubTopicID=70&DocumentID=2887>

They will write down two myths that were factual, two myths that were untrue, and what they found to be surprising. Their findings will be shared as a whole group after they conduct their research and complete their graphic organizers within the small groups.

Afterwards we will explore two representations of blindness as a class: one false and one true. The first is the notion that if someone is blind, that means their other senses are greatly enhanced. The second is that someone who is visually impaired can lead a normal life independently. We will come up with strategies to determine which one of these representations is true and which one is false. Evidence will need to support the claims and discussion will ensue.

Activity: Living with Blindness

Using the book *Buddy-The First Seeing Eye Dog* by Eva Moore, my students will read independently as they understand the origin of Seeing Eye dogs. I will be in contact with local Seeing Eye dog agencies and try to get someone to visit our classroom to make a strong memorable connection to Seeing Eye dogs and the role they play in the lives of visually impaired and blind people. I will bring in (or show a picture of) a white tipped cane and explain how this is utilized by the blind. If a guest speaker comes in, I will encourage them to discuss other items of use in their daily lives, in addition to the cane.

After reading the book independently, they will be asked to write a story from the point of view of Buddy. What was it like to have this role in history? What is entailed in being a Seeing Eye dog? I will allow my students to search for online resources to help them with further background information about Seeing Eye Dogs in the form of websites and books.

Activity: Can blind people be artists?

My students will ponder this question and record their thoughts in their response journals. Afterwards I will show them this video clip about blind artist, John Bramblitt http://www.cbsnews.com/8301-18563_162-20037973.html . After they watch this, they will record their reactions to the video clip in their response journals and then we will share these through a class discussion. I will play the video clips provided through this website (<http://www.lighthouse.org/about-low-vision-blindness/vision-simulator>) to show my students that people with disabilities, just like anyone else, are capable of making beautiful music and expressing themselves creatively. This will be another way of seeing how people with disabilities have so much in common with non-disabled people and how we shouldn't have preconceived notions of what people may or may not be capable of.

Activity: Experiencing Art through the Senses

We will enjoy the book *Lucy's Picture* by Nicola Moon, illustrated by Alex Ayliffe as an interactive read aloud. This book is about a little girl who is determined to make meaningful art that her blind grandfather can appreciate and understand with his other senses. I will ask the children to bring in random materials prior to this activity and they will create texture collages as they respond through art to what we read. By using more than just sight, my students will see first-hand how important it is to utilize the other senses to create and value art. They will be encouraged to close their eyes and experience each others' collages by feeling and listening to their friends describe what they created and why.

Activity: The Need for Access

To help my students understand that museums need to provide access to people with disabilities, I will emphasize the need for greater access for the blind and visually disabled. We will talk about what it might be like for someone who is blind to go to the Bechtler Museum of Modern Art and ultimately what a museum visit is like for people with various disabilities. Using a print of Pablo Picasso's *Femme au Chapeau* (1962) from the Bechtler collection, my students will be divided into two groups. The first half of the class will see the print of the work of art, and the other half of the class will see what it would be like, firsthand, to be blind in a museum. The first group will write a description using their senses and elaborative detail, to describe the piece of art

extensively. While the second group is waiting, they will discuss and record in their response journals, ideas and reactions to what it would be like to go to an art museum as someone who is visually impaired or blind. They will think of possibilities to make museums more accessible and meaningful for the visually impaired. These ideas will be recorded in their response journals and shared as a class. Once the first group is finished writing their descriptions of the print, they will give their writing to the second group. The second group will sketch what they visualize from the descriptive writing of the first group. While the second group is sketching, the first group will have the opportunity to write their thoughts about making museums more accessible and meaningful for the visually impaired. The following chart provides an organized sequence to follow to complete the activities mentioned.

Group 1	<p>Task 1: Describe the print in your own words using elaborative detail.</p> <p>Task 2: In your response journal: Write about how you could make art museums more accessible for visually impaired or blind people? How could you make art museums more meaningful for visually impaired or blind people?</p>
Group 2	<p>Task 1: In your response journal: Write about how you could make art museums more accessible for visually impaired or blind people? How could you make art museums more meaningful for visually impaired or blind people?</p> <p>Task 2: Given the written description from group one, sketch what you think the print looks like.</p>

After group two has completed their sketches, the print will be revealed. Students will talk in pairs about how close or how far off their sketches were. They will ponder the question, “How did this make them think differently?” Class discussion will follow to talk about alternate ways museums can be more accessible for people with various disabilities. This could turn into a project based learning experience, as students devise plans to make their schools more accessible for people with disabilities.

Activity: The Visual Disabilities of Claude Monet and Edgar Degas

As my students continue to understand more about blindness and visual disabilities, I want them to make connections to artists they recognize. One of the best-known

examples is the French Impressionist Claude Monet (1840-1926), whose cataracts were a major problem at the end of his life.¹⁰ My students will see the connection Monet has to cataracts as they read *Who Was Claude Monet* by Ann Waldron. This biography brings up points about Monet's failing eyesight in his later years, announcing that painting was one of the only sources of joy left in his life.¹¹

My students are familiar with the art of Claude Monet. I have his one of his Waterlilies paintings proudly displayed in my classroom in addition to other works of art by Kandinsky and van Gogh. As I teach my students about low vision and blindness, they will learn about cause and effect through Monet's experience with failing eyesight in his later years. When Monet was 78 years old in the year 1918, he said that he "he longer perceived colours with the same intensity, [and he]...no longer painted light with the same accuracy."¹² He became enraged and disgusted by his work. This often resulted in him destroying his own paintings because they failed to follow his vision of what he was hoping to create.¹³ Monet had cataracts which changed the way he saw different colors because cataracts are "like thick layers of film that cover the irises."¹⁴ With this deterioration in vision, Monet's ability to perceive color accurately diminished. His palette went from soft pastels to gloomy and severe browns and reds.¹⁵ Monet's family could see how frustrated he was and they persuaded him to get surgery to help improve his vision. This resulted in two eye surgeries and new glasses.

Various researchers believe that Monet's unique style of Impressionistic painting in his later years was due to his cataracts.¹⁶ My students will be given a print of Monet's "Water Lily Pond, 1899" to compare with his "Japanese Bridge, 1923-1925". They will make conclusions as to the effects of cataracts on Monet's work as they prepare for a writing assignment. My students will write a persuasive piece to support whether or not they believe cataracts played a role in his artistic style. They will express their ideas and observations about the similarities and differences between the paintings, in written form.

Monet was not the only artist at this time to have trouble with his vision and continue painting. Edgar Degas "suffered retinal disease, probably macular degeneration, for nearly half his life."¹⁷ As a national guardsman in the Franco-Prussian War, he started to notice a blind spot in his right eye.¹⁸ By 1890 his left eye showed signs of weakening as well. "Light dazzled him. He tried to use peripheral vision to compensate for his loss of central vision."¹⁹ As his vision worsened, his paintings showed became increasingly rougher.²⁰ As my students and I research collaboratively on the Smart Board using online resources and searches, they will learn more about retinal disease and macular degeneration. With these visual disabilities, "the shading and contrast of images becomes less defined and blurriness increases" as the disease progresses.²¹

A great deal of Degas' art is shown indoors in the opera or on ballet stages. This is because his visual disabilities made it hard for him to endure bright sunlight outdoors and these indoor settings allowed him to be more in control of managing the amount of

light.²² Degas modified the mediums he created his work with as his vision deteriorated. He chose to use pastels rather than oils, and he started venturing to take part in sculpture, printmaking, and photography.²³ It is easy to see the progression of Degas' decline in vision as you study his works of art over time. "Woman with Chrysanthemums" painted in 1865 depicts a woman and flowers in great detail. When you look at "Two Dancers" which was painted between 1890 and 1898, there is far less evident detail and much broader brush strokes.²⁴ I will bring a print of these two works to have my students discuss the differences in Degas' work over time. They will use their background knowledge of visual disabilities to conclude what caused these changes and to predict what some of his other works look like from different periods in Degas' career.

Activity: How Do Blind People Read?

As we encounter signs on walls throughout our school, my students are often curious about Braille. They will research Louis Braille both online and by using books from the school library. The small groups will be responsible for teaching the rest of the class about the life of Louis Braille, the prevalence of Braille and how many visually impaired people rely on Braille to read, different technological resources available for people with visual disabilities to go about their daily lives more independently, and different communication methods available for people with different disabilities. Products will be done in Power Point, written as a report, written as a newspaper, shown through art, or presented orally.

Activity: Human Echolocation

As a class we will read *Stellaluna* by Janell Cannon. After reading, we will talk as a class about echolocation by using the expository information on this website on the Smartboard: <http://animal.discovery.com/animal-facts/echolocation-info.htm> I will also show them a brief video on www.brainpop.com that can be accessed by searching for echolocation. <http://www.brainpop.com/science/diversityoflife/bats/preview.weml>

Once I see that my students understand what echolocation is all about in relation to bats, I will pose the question to them, "how could blind people use echolocation to help find things?" I will give my students time to discuss possible answers to this question in small groups. Then I will call them to the carpet to see a video of a blind man named Daniel Kish using human echolocation to help identify objects following this link: <http://www.cnn.com/2011/11/09/tech/innovation/daniel-kish-poptech-echolocation/> My students will be encouraged to write their reactions in their response journals. As a class, using Notebook software on the Smartboard, or on the regular white board, we will compare and contrast human echolocation and echolocation used by animals.

Activity: Culminating Project

Culminating the unit, my students will explore and reflect on the theme of being unstoppable and how that relates to the people we studied through this unit. Some possible questions I will have them ponder and use as they create a final product are: How did these artists in particular work with the difference of vision they had? What have they learned from the challenges of these artists? How would my students' lives be impacted by a visual disability? What myths proved false about blindness were surprising? Were there other misconceptions needing further research? How can greater access for people with disabilities be made in schools and in other places in the community? How would life be different with a visual impairment?

Actively involved in digital storytelling, they will use Windows Movie Maker to create a final product, showing what they have learned through our study of low vision and blindness and answering these questions along with others synthesizing what they have posed in their reading responses journals throughout the unit. They will be given choices of what to emphasize and they will be assessed through a rubric. Students will present these for parents at a viewing, as we give their families a showcase of what we have learned. Along with the Movie Maker presentations, their families will be encouraged to talk with their children about their response journals, discuss the vocabulary on the interactive word wall, peruse the postings on the bulletin board devoted to our study of blindness and low vision, and see the artistic responses as well as the written pieces done in response to our learning activities.

Vocabulary

Adventitiously Blind
Assistive Technology
Binocular Vision
Braille
Cataracts
Coloboma
Color Blindness
Congenitally Blind
Cortical Visual Impairment
Disability
Farsightedness
Functional Vision Assessment
Glaucoma
IDEA (Individuals with Disabilities Education Act)
Interventionist
Legally Blind
Low Vision
Macular degeneration
Monocular Vision

Nearsightedness
Ophthalmologist
Optician
Optometrist
Partially sighted
Refraction
Residual Vision
Retinopathy
Scotoma
Seeing Eye dog
Visual Acuity
Visual Field
White tipped cane

¹ "Misconceptions and Myths about Blindness." The Iris Network.
<http://www.theiris.org/resources/faqs/misconceptions-and-myths-about-blindness>
(accessed September 20, 2013)

² "Method and Curriculum." *Visual Thinking Strategies*. N.p., n.d. Web. 10 Oct. 2013.
<<http://vtshome.org/what-is-vts/method-curriculum--2>>.

³ "Understanding Disabilities: Elementary Grades." Teaching Tolerance.
<http://www.tolerance.org/supplement/understanding-disabilities-elementary-grades>
(accessed September 20, 2013).

⁴ http://www.tolerance.org/sites/default/files/general/tt_learning_about_disabilities.pdf

⁵ *Disabled fables: Aesop's fables*. New York: Star Bright Books, 2004.

⁶ "Misconceptions and Myths about Blindness." The Iris Network.
<http://www.theiris.org/resources/faqs/misconceptions-and-myths-about-blindness>
(accessed September 20, 2013)

⁷ Alexander, Sally Hobart. *Do you remember the color blue?: and other questions kids ask about blindness*. New York: Viking, 2000.

⁸ "Prevalence of Vision Impairment." Lighthouse International.
<http://www.lighthouse.org/research/statistics-on-vision-impairment/prevalence-of-vision-impairment/> (accessed October 10, 2013).

⁹ "Misconceptions." Misconceptions. <http://www.blind.state.ia.us/print/121> (accessed October 10, 2013).

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- ¹⁰ Ravin, James. "The Visual Difficulties of Selected Artists and Limitations of Ophthalmological Care During the 19th and Early 20th Centuries (An AOS Thesis)." *Transactions of the American Ophthalmological Society* 106 (2008): 402-425.
- ¹¹ Waldron, Ann, Claude Monet, and Stephen Marchesi. *Who was Claude Monet?*. New York: Grosset & Dunlap, 2009.
- ¹² "The Artist's Eyes: Vision and the History of Art." Times Higher Education. <http://www.timeshighereducation.co.uk/books/the-artists-eyes-vision-and-the-history-of-art/409855.article> (accessed September 20, 2013).
- ¹³ Waldron, Ann, Claude Monet, and Stephen Marchesi. *Who was Claude Monet?*. New York: Grosset & Dunlap, 2009.
- ¹⁴ Waldron, Ann, Claude Monet, and Stephen Marchesi. *Who was Claude Monet?*. New York: Grosset & Dunlap, 2009.
- ¹⁵ "Continue Painting with Vision Loss." VisionAware. <http://www.visionaware.org/section.aspx?DocumentID=5839&FolderID=8&SectionID=119&TopicID=488> (accessed September 15, 2013).
- ¹⁶ See note 14.
- ¹⁷ Gugliotta, Guy. "Impressionist Painters." Simulations of Ailing Artists' Eyes Yield New Insights on Style. http://www.nytimes.com/2007/12/04/science/04impr.html?_r=0 (accessed September 10, 2013).
- ¹⁸ See note 16.
- ¹⁹ See note 16 above.
- ²⁰ "Eye Diseases Changed Great Painters' Vision of their Work Later in Their Lives" Stanford Report, April 11, 2007
- ²¹ "News." Eye diseases changed great painters' vision of their work later in their lives. <http://news.stanford.edu/news/2007/april11/med-optart-041107.html> (accessed September 15, 2013).
- ²² "Continue Painting with Vision Loss." VisionAware. <http://www.visionaware.org/section.aspx?DocumentID=5839&FolderID=8&SectionID=119&TopicID=488> (accessed September 15, 2013).

²³ See note 22.

²⁴ See note 22.

Appendix 1

Implementing Common Core Standards

3rd grade Common Core State Standards Reading Standards for Informational Text

RI.3.1 Ask and answer questions to demonstrate understanding of text

RI.3.2 Identify the main idea and key details

RI.3.3 Determine the relationship between series of historical events, scientific ideas or concepts or steps in a text using time, sequence, and cause/effect

RI.3.5 Use text features to locate information

RI.3.7 Use information from illustrations to demonstrate understanding of text

RI.3.10 Comprehend informational text and technical text independently and proficiently

RL.3.7 Explain aspect of text's illustrations

3rd grade Common Core State Standards for Writing

W.3.2 Write informative/explanatory text

W.3.6 With guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others

W.3.7 Conduct short research projects that build knowledge about a topic

W.3.10 Write routinely over extended time frames and shorter time frames for a range of discipline-specific tasks, purposes, and audiences

This curriculum unit will allow my students to explore and follow all of the 3rd grade Common Core Language Arts Standards listed above. Through meaningful learning activities they will be engaged in reading, writing, listening, and speaking as they develop a stronger understanding for what it means to be disabled and specifically what it means to be blind or visually impaired. They will use expository text to understand vocabulary relevant to visual impairments which they will apply in written response assignments. They will see the evolution of visual disabilities and the impact they had on the art of Monet and Degas. Independent study as well as collaborative projects will allow them to have a stronger appreciation for what it means to have low vision and how their lives would be impacted if that was their reality. Overall balanced literacy opportunities will help my students comprehend as they read using higher level thinking skills, and their knowledge will be assessed through written products, class discussions, and products using 21st century technology.

Classroom Materials

- Computers with internet access
- SmartBoard
- Blank KWL charts
- Blank drawing paper
- Crayons, markers, and colored pencils
- Photos of Nikki de Saint Phalle, Stevie Wonder, Harriet Tubman, Captain John Smith, Galileo Gallei, Andrea Bocelli, Marla Runyan, Jackie Kennedy Onassis, Helen Keller, and Doc Watson. (Can be tangible prints or projected on SmartBoard)
- Yard stick to measure 200 feet away from a designated point
- Sign saying “How would your life be different if you were legally blind?” to hold up 200 feet away from where students are standing.
- Blank bulletin board
- Materials to create interactive word wall with relevant vocabulary to the unit
- Blank eye template
- Prints of the following pieces of art:
 - *Femme au Chapeau* (1962) by Pablo Picasso
 - *Water Lily Pond* (1899) by Claude Monet
 - *Japanese Bridge* (1923-1925) by Claude Monet
 - *Woman with Chrysanthemums* (1865) by Edgar Degas
 - *Two Dancers* (1890-1898) by Edgar Degas
- White tipped cane used by someone who is blind or partially sighted
- Children’s book from library in Braille
- Materials to make texture collages
- Response journals
- Windows Movie Maker

Websites to Access

www.teachingtolerance.org To provide a foundation and introduction of disability studies in the elementary classroom.

<http://www.disabled-world.com/artman/publish/famous-blind.shtml> Resource with biographical information about famous blind people to use in activity with 10 figures throughout history. Students will determine whether or not the person is/was visually disabled and record some biographical information.

<http://www.youtube.com/watch?v=ZDHJRCtv0WY> Video of blind film critic Tommy

Edison answering the question “What do blind people see?”

<http://webaim.org/articles/visual/lowvision>

<http://www.visionaware.org/section.aspx?FolderID=6&SectionID=116&DocumentID=3393>

Use these websites to show students what it looks like from the eyes of someone who is visually impaired.

<http://www.dhs.wisconsin.gov/blind/adjustment/mythsblindvisual.htm>

<http://www.theiris.org/resources/faqs/misconceptions-and-myths-about-blindness>

<http://www.afb.org/section.aspx?FolderID=2&SectionID=7&TopicID=116&SubTopicID=70&DocumentID=2887> These three websites will be used in the collaborative activity where students will debunk myths about blindness.

http://www.cbsnews.com/8301-18563_162-20037973.html This shows a clip of blind artist, John Bramblitt.

<http://www.lighthouse.org/about-low-vision-blindness/vision-simulator>) Vision simulator

<http://www.visionaware.org/section.aspx?FolderID=6&SectionID=112&DocumentID=5672> Information about cataracts and cataracts surgery as well as what a person with cataracts actually sees.

<http://animal.discovery.com/animal-facts/echolocation-info.htm>

<http://www.brainpop.com/science/diversityoflife/bats/preview.weml> Expository information about echolocation.

<http://www.cnn.com/2011/11/09/tech/innovation/daniel-kish-poptech-echolocation/> Video and information about a blind man named Daniel Kish who uses human echolocation to help identify objects.

<http://psych.ucalgary.ca/PACE/VA-Lab/AVDE-Website/degas.html> Biographical information about Edgar Degas and detailed information about his retinopathy and obstacles with vision impairment.

Children’s Books

- *Disabled Fables: Aesop’s Fables*
- *Do You Remember The Color Blue? And More Questions Kids Ask about Blindness* by Sally Hobart Anderson
- *Buddy-The First Seeing Eye Dog* by Eva Moore, Illustrated by Don Bolognese

- *Lucy's Picture* by Nicola Moon, illustrated by Alex Ayliffe
- *Who Was Claude Monet* by Ann Waldron
- *Stellaluna* by Janell Cannon

Annotated Bibliography for Teachers

Alexander, Sally Hobart. *Do you remember the color blue?: and other questions kids ask about blindness*. New York: Viking, 2000.

Students will easily be drawn to finding answers for questions about being blind. This will be good inspiration for having my students come up with additional curiosities about being blind.

"Continue Painting with Vision Loss." VisionAware.

<http://www.visionaware.org/section.aspx?DocumentID=5839&FolderID=8&SectionID=119&TopicID=488> (accessed September 15, 2013).

Strong examples of Monet and Degas paintings before and after their visual impairments.

Disabled fables: Aesop's fables. New York: Star Bright Books, 2004.

This is a collection of Aesop's fables retold, written, and illustrated by people with developmental disabilities. After each story there is a section with information about how the story relates to the author's experiences and gives insight into living with their disabilities.

Gugliotta, Guy. "Impressionist Painters." *Simulations of Ailing Artists's Eyes Yield New Insights on Style*.

http://www.nytimes.com/2007/12/04/science/04impr.html?_r=0 (accessed September 10, 2013). Disabilities of several artists are discussed.

"Method and Curriculum." *Visual Thinking Strategies*. N.p., n.d. Web. 10 Oct. 2013.

<<http://vtshome.org/what-is-vts/method-curriculum--2>>. Visual Thinking Strategy questions will be asked as we study various works of art.

"Misconceptions." *Misconceptions*. <http://www.blind.state.ia.us/print/121> (accessed October 10, 2013).

This resource shows misconceptions and myths about blindness as well as the correlating realities. Attention is also given to how to talk to someone who is blind.

"Misconceptions and Myths about Blindness." The Iris Network.

<http://www.theiris.org/resources/faqs/misconceptions-and-myths-about-blindness> (accessed September 20, 2013).

Common misconceptions about blindness are shared through this online resource.

"News." Eye diseases changed great painters' vision of their work later in their lives.

<http://news.stanford.edu/news/2007/april11/med-optart-041107.html> (accessed September 15, 2013).

Michael Marmor used computer software to blur images of Degas' and Monet's work, showing what those artists may have seen with cataracts (Monet) and retinal disease (Degas).

"Prevalence of Vision Impairment." Lighthouse International.

<http://www.lighthouse.org/research/statistics-on-vision-impairment/prevalence-of-vision-impairment/> (accessed October 10, 2013).

Data regarding prevalence of vision impairments and blindness are given in depth within this website.

Ravin, James. "The Visual Difficulties of Selected Artists and Limitations of Ophthalmological Care During the 19th and Early 20th Centuries (An AOS Thesis)." *Transactions of the American Ophthalmological Society* 106 (2008): 402-425.

Discussion and examples of significant 19th and 20th century artists and the effects of vision impairments on their work.

"The Artist's Eyes: Vision and the History of Art." Times Higher Education.

<http://www.timeshighereducation.co.uk/books/the-artists-eyes-vision-and-the-history-of-art/409855.article> (accessed September 20, 2013).

Detailed information about Monet's cataracts Degas' retinal disease. Insight into how these visual impairments affected their art.

"Understanding Disabilities: Elementary Grades." Teaching Tolerance.
<http://www.tolerance.org/supplement/understanding-disabilities-elementary-grades> (accessed September 20, 2013).

Background information giving my students understanding about what disabilities are found within this resource. Strong handouts and ideas available within this site to help students communicate sensitively and appropriately regarding disability studies.

Waldron, Ann, Claude Monet, and Stephen Marchesi. *Who was Claude Monet?*. New York: Grosset & Dunlap, 2009.

Biography of Claude Monet for my students to make connections to his life and work.