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WOW REVIEW

READING ACROSS CULTURES
VOLUME XIV, ISSUE 2

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Global Perspectives on STEM

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WOW Review: Volume XIV, Issue 2
Winter 2021
Global Perspectives on STEM

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Introduction and Editors' Note

In my office I have a pair of enormous blue glasses with blue lenses. When I teach students about perspective, I put on my oversized glasses that turn my world blue and talk about looking through a different lens to change my view. The books in this issue act like my blue glasses, because they present differing perspectives about science, technology, engineering, and mathematics and how they change the way we look at and interact with our world.

In several titles, a change in perspective generates a change in action. Through verse and dynamic images, *We Are Water Protectors* uses an Indigenous lens to argue that we have a responsibility to keep our water supplies clean in order to sustain human, animal, and plant life. The same sense of responsibility permeates the biography of Temple Grandin who literally got down on all fours to view walkways and chutes from a cow's perspective. Her life and work in *The Girl Who Thought in Pictures* share how her unique perspective made feedlot operations and the beef industry more humane. In both books a change in perspective prompts action, whether protesting a pipeline crossing a water table or herding feedlot cattle in a circular pattern that is less frightening. In *When Sophie Thinks She Can't*, a change in perspective is encouraged when Sophie's teacher introduces her to the power of yet, as a growth-mindset that supports her journey towards thinking of herself as a mathematician.

Responsibility is also part of *The Water Princess*, and the story challenges readers' perspectives about daily fetching and cleaning water. According to Georgie Badiel, on whose childhood in Burkina Faso the story is based, a water princess is someone who can see the joy and the playfulness in the lengthy daily chore of carrying water for the family. Also anchored in a family dynamic, the Spanish language text, *El fuertecito rojo* (a translated version of *The Little Red Fort*) involves a perspective change for three boys. When their sister Ruby decides to build a fort, she tries to enlist the help of her three brothers, who initially refuse. Instead an adult techie, carpenter, and handyperson help her design the fort, collect supplies, and build the structure until her brothers realize they could help and earn the privilege of enjoying the fort.

Perspective is presented in some titles through the simple act of noticing. In *My Forest is Green*, an award-winning story of a walk in the forest, readers' perspectives about living organisms change as a young boy explores his nearby forest, records through drawing or rubbing what he sees, and describes the diverse sizes, colors, and textures he discovers. In a book geared for problem-solving, *Molly and the Mathematical Mysteries* uses flaps and other paper engineering to help readers solve questions involving principles of math such as symmetry, characteristics of geometric shapes, and the Pythagorean theorem. The solutions Molly finds all begin by looking closely and noticing.

Our final title involves a change in perspective at a regional level. *Solar City* is the story of the world's largest solar power plant at the edge of the Sahara Desert in Morocco. The narrative tells the story of two girls heading to the power plant on a field trip. As they prepare, readers learn about the ways their Berber community has changed because of nearby technology. Their perspectives about sustainability become more expansive as they learn about solar power.

We invite you to savor these books and consider writing and submitting a review.

Volume 14, Issue 3 – Open theme (Spring 2022) – submission deadline: May 15, 2022. The editors welcome reviews of global or multicultural children’s or young adult books published within the last three years that highlight intercultural understanding and global perspectives.

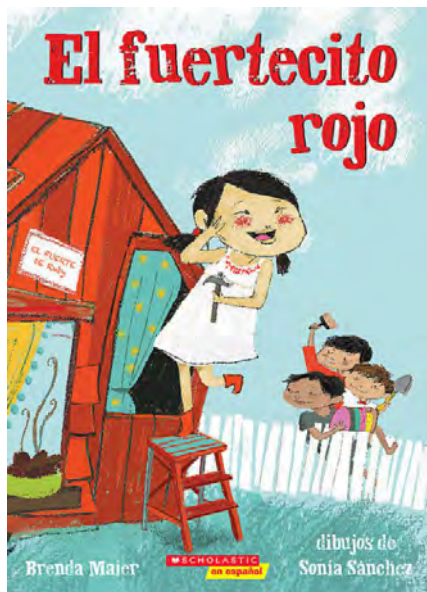
Volume 14, Issue 4 – Themed issue on Trauma and Healing (Summer 2022) – submission deadline July 1, 2022. The editors welcome reviews of global or multicultural children’s or young adult books published within the last three years that highlight intercultural understanding and global perspectives. Our world is recovering from a pandemic that has led to trauma and a need for healing. This issue will address recovery with an emphasis on the healing journey from social or emotional trauma, a health-related issue, or an emotional issue.

María V. Acevedo-Aquino, co-editor
Susan Corapi, co-editor

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El fuertecito rojo (Spanish Edition of *The Little Red Fort*)

Written by Brenda Maier

Illustrated by Sonia Sánchez

Scholastic, 2018, 37 pp

ISBN: 978-1338269017

El fuertecito rojo is adapted from the traditional tale of *The Little Red Hen* and is available in both Spanish and English editions. Set in the U.S., the story begins with a young Latina girl named Ruby who has an incredible imagination for engineering and is prompted to use many household items to create inventions. These creations are also solutions to problems she encounters. As Ruby explores her home for projects, she comes across several old wood panels in her yard. Ruby poses a question to her brothers about who could help her construct a fort using those panels. She invites her brothers,

Oscar Lee, Rodrigo, and José, but they are not interested in helping. Even though she asks her brothers at every point of the design process of the project, they still refuse to help her. Although her brothers refuse, the illustrations depict adult family members (perhaps her father, mother, and grandmother) helping Ruby with the fort. At the end of the story, Ruby asks her brothers if they would like to play in her fort and they agree. However, Ruby reminds her brothers that they did not help at any stage in the planning and construction of the fort and so she will enjoy it on her own. When the brothers realize the consequences of their lack of involvement in constructing the fort, they surprise her by creating additional items, such as a flower bed and a mailbox, and painting the entire fort red. Ruby realizes that her brothers should be granted the opportunity to enjoy the fort and invites them in.

The text and illustrations of this book are complementary to assist young readers in clearly comprehending the characters' feelings and actions throughout the story where critical themes such as challenging gender norms, engaging in the engineering design process (EDP) and valuing the funds of knowledge (Gonzalez, Moll & Amanti, 2005) are central. The story challenges gender-related expectations by portraying Ruby as a young female who engages in innovation and problem-solving using STEM processes and practices. The narrative also highlights common gender-based struggles by depicting Ruby's siblings as three male brothers who are inquisitive but constantly challenge Ruby's knowledge and ability to construct a fort. The illustrations accurately depict the facial expressions and body language used throughout the story to show the brothers' resistance to their sister's ingenuity.

The text and illustrations also help readers understand the engineering design process (EDP), which requires 1) asking 2) imagining 3) planning 4) creating and 5) improving solutions to problems. The narrative builds as Ruby engages in every stage of constructing the fort and can help young readers understand the EDP in a developmentally appropriate way. The story also presents "building and construction" as a family fund of knowledge, which can help readers view STEM in an interrelated and transdisciplinary way. The illustrations capture Ruby learning and practicing these funds of knowledge by using tools and technologies with her family members. These family practices can strengthen a young readers' imagination for STEM engagement. The illustrations show a culturally

diverse and multigenerational family supporting STEM activities. This support is depicted through the father, mother, and grandmother as experts who are present in our homes and hold cultural and linguistic knowledge that can lead young readers to develop socially conscious and culturally relevant ways to engage in STEM learning.

A text that extends a young reader's interest in STEM and is complementary to *El fuertecito rojo* is the story *Dreaming Up: A Celebration of Building* by Christy Hale (2012), focusing on how young children can construct or build in ways that support their imagination and develop problem-solving approaches through creativity and exploration. A culturally relevant text that extends Maier and Sanchez's work is *My Very Own Room/Mi propio cuartito* by Amada Irma Pérez (2008). In this bilingual book, a young Latina's family helps her construct a space for privacy to read her favorite books. Like Ruby, she demonstrates her STEM approach using household technologies to construct her own room.

Brenda Maier is an author and a gifted and talented education specialist whose storytelling is inspired by her five children. Brenda observed them building a fort which led her to adapt the folktale of *The Little Red Hen*. She lives in Oklahoma, U.S.

Sonia Sánchez, born in Spain, is an award-winning illustrator who uses traditional and digital brushes to provide texture in her paintings to evoke emotion and actions. She has received twice the Society of the Illustrator Original Art Show award and was nominated for an Eisner Award.

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Gonzalez, N., Moll, L. C., & Amanti, C. (2005). *Funds of knowledge: Theorizing practice in households, communities, and classrooms*. L. Erlbaum Associates.

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The Girl Who Thought in Pictures: The Story of Dr. Temple Grandin

Written by Julia Finley Mosca

Illustrated by Daniel Rieley

The Innovation Press, 2017, 40 pp

ISBN: 978-1943147304

“Parents get so worried about the deficits that they don’t build up the strengths, but those skills could turn into a job.” (www.templegrandin.com)

Have you ever felt an overwhelming frustration when trying to get someone to understand what you want to communicate or where you are coming from regarding your thinking and actions? It all makes complete and perfect sense to you. How can anyone not understand? That is how everyday felt to Temple Grandin as a young white child born in Boston, Massachusetts. She was bullied, made fun of, misunderstood, and sent away because those around her could not understand her. Temple was diagnosed with autism at an early age. Luckily, she crossed paths with a mentor who encouraged her and motivated her to figure out her strengths instead of focusing on her struggles. She became interested in science and animals. She understood animals and animals understood her. She later invented a new apparatus for farming (curved chute system for cattle) and went on to earn multiple college degrees despite her challenges. She persevered and overcame the labels that society placed on her. She succeeded. After the story, readers can learn more about Dr. Temple Grandin by visiting the author’s “Fun facts and tidbits from the author’s chat with Temple” timeline, and “About Dr. Temple Grandin” biography.

The story focuses on strengths in individuals and situations and how to overcome challenges and struggles. The narrative is in playful poem fashion with stanzas packed with imagery, feelings, and emotions. The illustrations do a fantastic job of highlighting Temple throughout the story. The adults and other children in the story are drawn as if in zoom with the majority of their bodies off the page, creating a feeling of isolation for Temple. She is different and not included. However, when the images include animals, they are shown full body. She is a part of them and they are a part of her. Mostly, colors of nature and animals are shown throughout the illustrations with some red and orange in the mix to depict anger and frustration. The stairway is symbolic and representative of the obstacles that Temple must overcome to be a part of the world that surrounds her.

With the growing need for the portrayal of women and those with disabilities/struggles, this book would be a wonderful read aloud to tie into both social justice and social emotional learning lessons within the classroom. Other relevant books that pair well with Temple Grandin’s story are *Malala Yousafzai: Warrior with Words* (Karen Leggett Abouraya and Susan Roth, 2018), which tells the story of Malala Yousafzai who is a fearless proponent of the right for education for women. Another pairing would be *Sonia Sotomayor: A Judge Grows in the Bronx* (Jonah Winter, 2009), which

depicts the story of Sonia Sotomayor who rises above oppression and her socioeconomic class to become the first Latina Supreme Court Justice. Finally, *Susan Laughs* (Jeanne Willis and Tony Ross, 1999), beautifully captures the many normal everyday things that Susan does, not revealing until the very end that Susan has a disability.

Julia Finley Mosca knows a bit about writing and crafting messages to make an impact. She spent much of her career as a copywriter and journalist. She also worked for renowned companies such as Yahoo! and American Greetings. She has several books highlighting important successes in STEM related fields, such as *The Doctor with an Eye for Eyes: The Story of Dr. Patricia Bath* (2017), *The Girl with a Mind for Math: The Story of Raye Montague* (2018), and *The Astronaut with a Song for the Stars: The Story of Dr. Ellen Ochoa* (2019). Not only are Mosca's books a refreshing historically rare portrayal of women doctors and scientists, but she also highlights the successes of multicultural women.

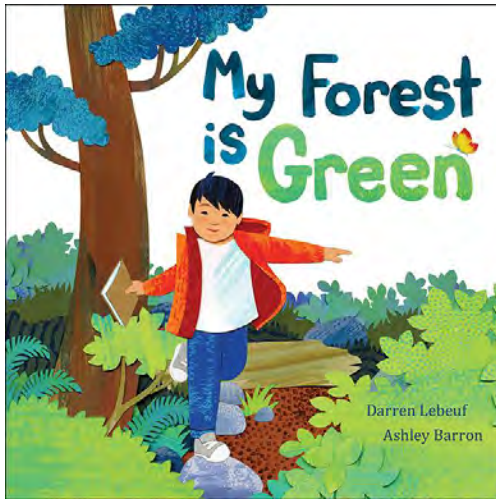
Daniel Rieley is an illustrator from London, England. He loves to travel and explore the world and nature. He has illustrated all of the above-mentioned books by Mosca. He utilizes different media in his work such as ink, pencil, and watercolor. More information about Julia Finley Mosca and Daniel Rieley can be found at <https://www.amazingscientists.com/authorillustrator>

Sarah Pittmon, Texas Woman's University

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My Forest Is Green

Written by Darren Lebeuf

Illustrated by Ashley Barron

Kids Can Press, 2019, 32 pp

ISBN: 978-1771389303

Darren Lebeuf uses gender-neutral language in *My Forest Is Green* to describe the delight children experience as they explore their surroundings. In the spirit of the written text, this review remains gender-neutral. This is a story about a child who lives in an apartment in front of a big urban forest. A child spends a lot of time in the forest observing, touching, smelling, listening, and probably tasting, even though it is not

explicitly referenced in the story. Though questions are not voiced, the descriptive adjectives invite readers to be curious and ask questions (How does the rain taste as it falls on a drawing?) This child is also an explorer who attentively follows a line of ants as they carry away a pencil (How much weight can an ant carry?), a curious inquirer who hugs trees to perhaps estimate their diameter, and a photographer who has an intricate photo of a caterpillar eating a leaf (How does a caterpillar know which leaves to eat?) It also seems that the child visits the forest throughout different meteorological seasons. That might explain the different clothing: short pants, closed shoes, raincoat, and an interesting trapper or aviator hat/bobble hat! (How does a fox survive extreme cold?)

This child is also an artist, who uses language to describe the forest, “My forest is green. Twisty green, shiny green, jagged green and wavy green” and relies on a range of artistic mediums to bring the forest home. The child’s home is a vivid representation of the colors, lines, shapes, textures, spaces, and designs of nature. Sometimes, the child paints “carefree red” ladybugs or “spotted” turtles. Other times the young ecologist creates a collage to showcase the variety of fallen leaves that make the forest so “crispy.” Many times, the child draws the wonders of the forest in a sketchbook. This notebook depicts a bird singing, a deer posing, and mushrooms (What other animals and plants could live in the urban forest?) The author and the illustrator are from Canada, so this urban forest appears to be located somewhere in Canada, raising questions such as whether there a difference between a rural and an urban forest.

The illustrations are cut-paper collages that carefully depict curvy pebbles, a crowded nest, a flattened centipede, two plum tomatoes in a vine, a long leaf-print curtain that decorates the common living space of the apartment, and more. Acorns, leaves, rocks, and sticks hang from a thick white string that is hung across the room. What else could the child bring from the forest inside the blue bucket? The feathers probably came in the bucket too! The readers will notice that the child transforms several of the rocks into beautiful paperweights. The collages of the human characters highlight straight black hair, crescent shape eyes, and beige skin.

My Forest Is Green can be paired with books about urban forests like *A Forest in the City*, by Andrea Curtis (2020), an informational picturebook about the complex relationship between trees

and cities. Another pair could be books about different kinds of forests such as *Over and Under the Rainforest*, by Kate Messner (2020), set in Costa Rica's tropical rainforest. *My Forest Is Green* could also be read alongside stories that address young children as explorers of the forest, such as *The Hike* by Alison Farrell (2019), the story of three multiracial female characters who keep detailed observational notebooks as they venture through Buck Mountain, Wyoming.

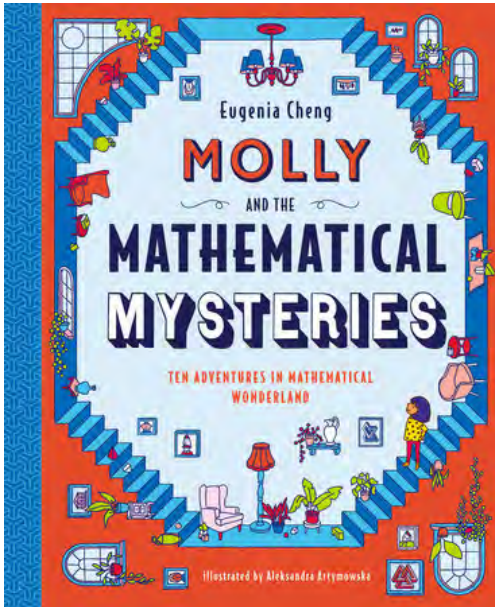
Darren Lebeuf is an author, illustrator, and professional photographer of families and weddings who grew up in rural Alberta, Canada. *My Forest Is Green* is his first picturebook. He is on Instagram @darrenlebeuf and Facebook @darren.lebeuf. Canadian artist, Ashley Barron, has illustrated over 12 picturebooks. Additional information on her work can be found in her website (<http://www.ashleybarron.com/>). Lebeuf and Barron collaborated on two additional books: *My Ocean Is Blue* (2020) and *My City Speaks* (2021) which was also published in Braille and received the Schneider Family Award for depiction of disabilities.

María V. Acevedo-Aquino, Texas A&M-San Antonio

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Molly and the Mathematical Mysteries: Ten Interactive Adventures in Mathematical Wonderland

Written by Eugenia Cheng

Illustrated by Aleksandra Artymowska

Candlewick, 2021, 30 pp

ISBN: 978-1536217100

This nonfiction global picturebook utilizes both a narrative story and excerpts on mathematical concepts to show that math is more than numbers and equations. Under the guidance of author Eugenia Cheng, herself a mathematician, and illustrator Aleksandra Artymowska, readers quickly learn that math is an adventure and can upend what is considered impossible.

This mathematical adventure begins with Molly, a young girl with a dark blue haircut, discovering a note in her bedroom, directing her to follow a rabbit through a rabbit hole. She is taken to many different rooms and places that are indicative of mathematical concepts like patterns, shapes, dimensions, number combinations, symmetry, and fractals. Each page represents a specific mathematical concept and along with the storyline following Molly there are multi-paragraph excerpts explaining in very accessible terminology that specific concept. When Molly finds herself in The Garden of Hidden Shapes the illustrations and the excerpt on Tiling Shapes, help reinforce the concept of how certain shapes can fit together to make other shapes. Readers learn about equilateral triangles and tessellations by following Molly through a green hedge maze in an estate garden.

The true genius of the book lies in its format as it requires an active, not passive, reading audience to truly understand the math presented in it. It is an oversized picturebook, and the pages are thick cardstock. Each page spread is vivid, colorful, intricate, and interactive as readers are invited to open the multiple pop-ups and flaps, revealing the “secret” of mathematics as described on the page. The notes, which can be flipped up like real envelopes, end up being clues that point readers to what they should be searching for and manipulating within the pages. For example, in the spread about patterns and Latin Squares, the note instructs Molly and readers to open the long, rectangular pop-ups and connect and weave them as a way to help understand the concept of Latin Squares.

Some of the mathematical concepts may be too difficult for some readers to fully grasp; however, due to its interactive and playful nature, all readers are invited to play and engage, effectively sparking their curiosity around big ideas present in mathematical thinking. Some readers may not realize the concepts they are engrossed in, such is the nature of this exquisite text. Moreover, this book should be read and experienced front to back in order for readers to see how each topic feeds into the next. Multiple questions are posed on each spread as another way to spark questions, engagement, and exploration. At the end of the book there are two-page spreads dedicated to

further explaining, with the aid of Artymowska's detailed illustrations, the concepts readers investigated earlier.

To further explore the mathematical topics presented in *Molly and the Mathematical Mysteries: Ten Interactive Adventures in Mathematical Wonderland*, books on patterns, geometry, fractals, the Fibonacci Sequence, and the graphic artist whose mathematical works are present in this story, M. C. Escher, can be paired with it. This global STEM story can also be paired with *Swirl by Swirl: Spirals in Nature* by Joyce Sidman (2011), *Zachary Zormer: Shape Transformer* by Joanne Anderson Reisberg (2006), *Mysterious Patterns: Finding Fractals in Nature* by Sarah C. Campbell (2014), *The Rabbit Problem* by Emily Gravett (2010), and *Make Believe: M.C. Escher for Kids* by Kate Ryan (2018).

Eugenia Cheng is a British mathematician and pianist. While her previous books were geared towards adults, her mission is to bring advanced concepts in mathematics to a broader audience in a more accessible way. She is currently a Scientist in Residence at the School of the Art Institute of Chicago. More information about Eugenia can be found on her website (<http://eugeniacheng.com/>).

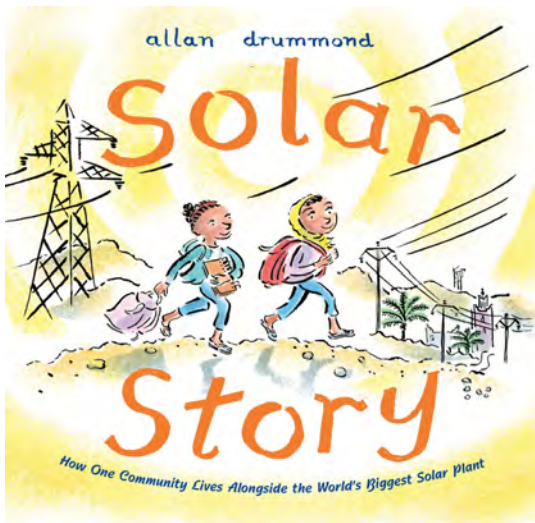
Aleksandra Artymowska is an illustrator and graphic designer based in Poland and Israel. She graduated from the Academy of Fine Arts in Warsaw, Poland. Her love of mazes and puzzles has translated to her graphic design work along with her other picture books, including *Alice in Wonderland: A Puzzle Adventure* (2020) and *20,000 Leagues Under the Sea: A Puzzle Adventure* (2019).

Sara Kersten-Parrish, John Carroll University

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Solar Story: How One Community Lives Alongside the World's Biggest Solar Plant

Written and illustrated by Allan Drummond

Farrar Straus Giroux, 2020, 32 pp

ISBN: 978-0374308995

Readers are transported to Ghassate, one of the villages on the edge of the Sahara Desert in central Morocco, near the world's largest solar power plant. Life in this Berber community has not changed much over the centuries. Families work together to farm palms, almonds, and other crops to feed themselves and their animals. But the construction and operation of the Noor solar power plant is

changing village life. Jasmine and Nadia are two classmates preparing to take a field trip to the nearby plant, so their teacher, Miss Abdellam, asks them big questions about solar energy and sustainability. During their visit, readers learn about the four phases of the plant, the 660,000 computerized mirrors following the path of the sun, and the different photovoltaic methods of concentrating the energy and collecting it in the solar towers. Later, as students reflect on their visit, readers learn how much village life is changing. The story concludes with Nadia's hope for one more change, access to the internet while in school.

Through the story of the power plant, Drummond invites readers to think about energy usage but also about change. As the girls do their homework and think about their field trip, they realize that the power plant has impacted sustainability in many ways besides using renewable energy instead of non-renewable fossil fuels. Better roads have given access to education that improves agricultural knowledge and increases crop yields and herd health. Training workers to build the plant structures gives skills that they can turn into small businesses (e.g., welding) that create jobs for others. Access to better health care increases life expectancy. The college built near the power plant offers education to learn manufacturing skills with wood, clay, and fabric. Drummond uses a sidebar to summarize what the girls realize and the Moroccan Agency for Sustainable Energy planned: the plant has impacted the "farms, wildlife, businesses, leadership, and culture of the communities nearby" but in a way that allows remote villages to thrive (p. 27). The changes from the construction of the power plant are positioned as positive by both the author and the characters even though the narrative and author's note acknowledge how profound the changes have been for this rural area.

Possible book pairs include Drummond's other books in this series that emphasize creative conservation measures in communities. *Energy Island* (2011) describes how the Danish island of Samsø invested in and uses wind energy for its power needs. *Green City* (2016) explains how Greensburg, Kansas, was rebuilt after a tornado destroyed most of the town. Greensburg townspeople decided to rebuild green, so they used conservation techniques to save water, used renewable energy sources like solar and wind power, and built circular structures to minimize future wind destruction. *Pedal Power* (2017) describes the grass roots movement to provide safe bicycle lanes in Amsterdam in the Netherlands, revolutionizing traffic patterns that kept people safer and reduced pollutants. Other possible book pairs include Molly Bang's *My Light* (2004) and

the other titles in the *Sunlight* Series, written in collaboration with MIT biology professor Penny Chisholm: *Living Sunlight* (2008), *Ocean Sunlight* (2012), *Buried Sunlight* (2014), *Rivers of Sunlight* (2017). The books describe the interconnectedness of life with solar energy.

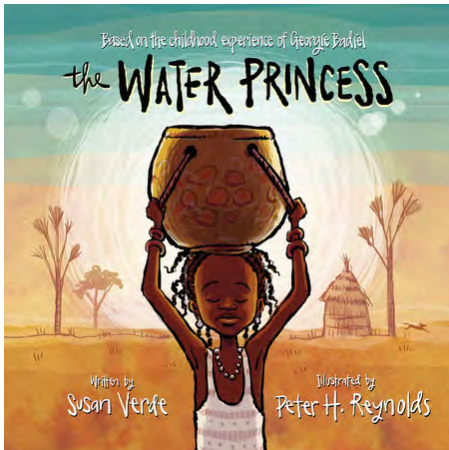
Alan Drummond is from Suffolk, England. He originally worked as a reporter but then studied illustration at the Royal College of Art where Quentin Blake was one of his tutors. After spending time in the U.S., he returned to England where he currently lives with his family. His concern for sustainability is evident through the energy titles he has written, and the careful research he does is described in the back matter. In the author's note in *Solar City*, he encapsulates what he learned in his statement, "solutions to our energy and sustainability challenges can be found everywhere and require a global perspective from the start." So, he profiles wind energy in Denmark, solar power in Morocco, human pedal power in Amsterdam, and green energy in Kansas. More information about his picturebooks and artwork can be found on his website (<https://www.allandrummond.com/>).

Susan Corapi, Trinity International University

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The Water Princess

Written by Susan Verde

Illustrated by Peter H. Reynolds

G.P. Putnam's Sons, 2016, 40 pp

ISBN: 978-0399172588

The story of *The Water Princess* begins with Gie Gie telling the readers what she can do. Gie can tame the wild dogs, she can make the tall grass sway, and when she dances, she can make the wind play hide-and-seek. But there is one thing Gie Gie cannot do and that is make the water come closer. Every day early in the morning, Gie Gie and her mother place pots on their heads and

walk very far to fetch water. While they walk, they entertain themselves by singing and dancing. Gie Gie and her mother are not the only ones who walk far; there are other women who spend almost the entire day fetching water from the well. The water they collect is not clean water. When they get back home, they boil the water in order to drink and cook with it. But they quickly run out of the water so, day after day, they repeat the journey. This story is based on the childhood of Miss Africa 2004, Georgie Badiel, in Burkina Faso. She is also the founder of the Georgie Badiel Foundation (<https://www.georgiebadielfoundation.org/>), dedicated to giving access to clean drinking water in Africa.

The story touches on multiple issues such as access to clean water and gender inequality. The book uses poetic words and colorful illustrations to bring awareness to the lack of clean drinking water in many countries. Gie Gie compares the wind and grass to the water. The wind and the grass are natural resources that come with no struggle, unlike access to water. The problem Gie Gie and her mother face is not just the location of the water well but also that the water they collect is not clean or safe. The double-spread illustration where Gie Gie's mother is filling her pot with the dirty water shows the concern on her face.

Although the story never mentions it directly, the illustrations send the message of gender inequality. They show women and girls waiting in line, foreshadowing the future of girls. Nowhere in the illustrations are men or boys depicted as fetching water. Fetching water is assumed to be a women's job.

The illustrations show the huts they live in and miles they walk to get water. Gie Gie sings and dances on her way to the water demonstrating some of the joy and playfulness of the routine, but her shoulders also ache and her feet cramp as she returns home from the long journey and the weight of her water pot. The author and the illustrator conclude the story on a positive and hopeful tone when Gie Gie says "I am Princess Gie Gie. My Kingdom? The African sky. The dusty earth. And, someday, the flowing, cool, crystal-clear water." As easy as the wind reaches every corner of the world, one day everyone will have access to clean drinking water.

Authors like Verde realize the importance of teaching readers about the outside world, creating a "sliding glass door" (Bishop, 1990) that allows them to experience the lives of others through literature. The following books are doors that address social issues with strong female characters who

take action to transform their lives and their communities. In *Mama Panya's Pancakes* (Mary and Rich Chamberlin, Julia Cairns, 2005) Mama Panya tells the story of hunger and how sharing what little one has can make a difference. In *Beatrice's Goat* (Page McBrier and Lori Lohstoeter, 2000) Beatrice cares, cooks, and cleans for her younger siblings while other children her age attend school. The story addresses the issue of access to education through Beatrice's desire to attend school just like the other children in her village. Finally, several titles in the CitizenKid series address access to clean water. *Mimi's Village and How Basic Health Care Transformed It* (Katie Smith Milway and Eugenie Fernandes, 2012) tells the story of how poverty affects multiple aspects of life. It's about a little girl who drinks unclean water and ends up sick, teaching that clean water doesn't come with ease and health care is not accessible to all, and how a young girl can lead big changes to benefit many. *Ryan and Jimmy and the Well in Africa that Brought Them Together* (Herb Shoveller, 2006) tells the story of the founding of Ryan's Well, an organization that works with Georgie Badiel's foundation to bring clean water to rural villages. One last book pair is the sequel, *Water is Here* (Georgie Badiel Liberty & Oksana Kupriienko, 2019), in which Gie Gie advocates for a well near her village.

Susan Verde has written numerous children's books. Some of the well-known titles include *I Am Courage: A Book of Resilience* (2021), *I Am One: A Book of Action* (2020), *I Am Love: A Book of Compassion* (2019), *I Am Human: A Book of Empathy* (2018), *I Am Peace: A Book of Mindfulness* (2017), and *I Am Yoga* (2015). The common message that echoes in her *I Am* series is that of building oneself spiritually, mentally, emotionally, and physically. She has also written on topics that pertain to humanitarian and environmental issues.

Peter Reynolds is a Canadian author, illustrator, and storyteller. He is known for titles like *The Dot* (2003), *Ish* (2004), and *The Word Collector* (2018). Reynolds and Susan Verde are used to writing books together. Their collaboration includes *I Am Peace* (2017), *I Am Human* (2018), and *I Am Courage* (2021), among others. His books advocate for the nurturing and protection of the creative spirit across all ages. Reynolds and his twin brother, Paul, launched the Reynolds Center for Teaching, Learning, and Creativity (RCTLC), a nonprofit organization that encourages creativity and innovation in teaching and learning. For more information about Peter Reynolds, visit his website (<https://www.peterhreynolds.com/>).

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We Are Water Protectors

Written by Carole Lindstrom
Illustrated by Michaela Goade
Roaring Book Press, 2020, 40 pp
ISBN: 978-1250203557

An Ojibwe girl, surrounded by hues of blue to symbolize water, represents the resilience of the people standing together, hand in hand, behind her. The bold colors grab the reader’s attention and compel them to keep reading. *We Are Water Protectors* tells the story of a young girl and her community fighting for the protection of their natural environment. As the story begins, we see multiple women collecting water from

a river. The image of a grandmother teaching her granddaughter about the importance of water is depicted next to the women. This book was written to raise awareness about the struggle and resilience of Native populations in relation to earth’s wonders. In Ojibwe culture, children are taught at a young age that they come from water as well as how “water is the first medicine” and it deserves to be protected and respected (Author’s Note). They learn of a “black snake” that will be the cause of harm towards their land. The snake that is discussed symbolizes oil pipelines installed in paths that will bring destruction and harm to Mother Earth. Throughout the book, communities come together toward the common goal of protecting nature and getting rid of this snake before it does any harm.

In 2016, one of these “black snakes” was an issue at hand. The Dakota Access Pipeline wanted to install these lines in a region with burial grounds and water sacred to the Standing Rock Sioux Tribe in the Dakotas (Wehelie, 2016). Natives were weary of oil leaks that cause damage to wildlife, water, and plants in the region. At first, only a few residents camped out in protest of these pipelines, but it soon turned into a movement that brought together over five hundred Indigenous Nations to stand up and fight for clean water.

This story is brought to life through the colorful watercolor illustrations. Each image enhances the narrative of protecting nature. The different hues of blue, purple, green, orange, and black, bring Mother Nature to life and depict how the darkness from the black snake can quickly deteriorate its beauty. The illustrations in this colorful narrative show a young girl fighting for those who cannot fight for themselves: “the winged ones, the crawling ones, the four-legged, the two-legged, the plants, trees, rivers, lakes, the earth.” She stands alongside her community to protect the natural environment at a time where technological advancement is viewed as more important. This timeless tale can be used to teach about Indigenous activism as well as environmental justice (Cappiello, 2021).

We Are Water Protectors involves activism, culture, and the environment as some of its key themes. *The Boy Who Grew a Forest: The True Story of Jadav Payeng* (Sophia Gholz and Kayla

Harren, 2019) is a similar read that includes environmental activist themes. It follows the story of this young boy who wanted to make an impact against the deforestation occurring in his home in India. Another similar read, *The Lorax* (Dr. Seuss, 1971), tells the story of how the Once-ler learns the importance of the trees and the consequences that come from deforestation.

Author Carole Lindstrom was born and raised in Nebraska as Anishinaabe/Métis and is enrolled in the Turtle Mountain Band of Ojibwe. In the Ojibwe culture, women are known for being the protectors of water, which is greatly shown in this narrative. In the Author's Note, Lindstrom explains that "this book was created as I became increasingly aware of the many tribal nations that are fighting oil pipelines from crossing their tribal lands and waterways."

Illustrator Michaela Goade is of Tlingit descent and is tribally enrolled in the Central Council of the Tlingit and Haida Indian Tribes of Alaska. She has won many awards for her mesmerizing illustrations, including the 2018 American Indian Youth Literature Best Picture Book Award for *Shanyaak'utlaax: Salmon Boy* and the Caldecott medal for *We Are the Water Protectors*. She is the first Indigenous illustrator to win this prestigious award. Her illustrations reflected the significance of traditional teachings in the Ojibwe/Anishinaabe culture. To portray the Ojibwe culture throughout the story Goade had the young girl, the protagonist; change into a traditional ribbon skirt when rallying the people.

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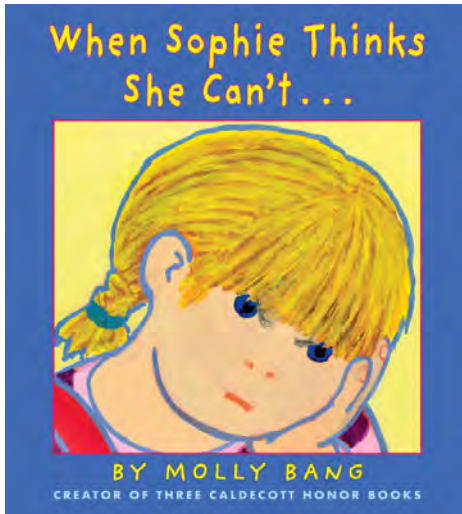
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When Sophie Thinks She Can't

Written and illustrated by Molly Bang
Blue Sky Press, 2018, 32 pp
ISBN: 978-1338152982

When Sophie Thinks She Can't introduces the power of YET to support children's growth mind set and the importance of productive struggle through the lens of thinking like a mathematician. We are re-introduced to the main character, Sophie, whom we know from other titles, *When Sophie gets Angry – Really, Really Angry* (2004) and *When Sophie's Feelings are Really, Really Hurt* (2015). In this story set in the U.S, blond-haired Sophie struggles because she doesn't view

herself as smart. Sophie's teacher encourages her diverse classroom of students (in both race and ability) to share their beliefs about what smart means. "What's the ONE word on the board? SMART. 'How do we become smart?' asks Ms. Mulry. Nobody knows the answer. They all think you have to be born smart."

The power of YET is leveraged in this story as a way to think beyond what students think they can't do when it comes to mathematical problem solving. "Now's the time to use the Most Important Word. That word is... YET. You haven't figured it out.... YET. Keep working! Keep trying, and you will." This story illustrates what happens to Sophie when she feels the uncertainty, fear, and anxiety of not knowing how to solve a problem, YET. Creating an environment and attitude of a growth-mindset in the classroom is the main theme of this story, which focuses on the power of YET as a way of learning through productive struggle. Hansen (2011) encourages teachers to support students by being open to learning the new in this complicated world. Sophie explores the new in her learning and grows because of moving beyond her struggles. By the end of the story, she takes this learning-mindset home to her father by helping him with a problem he thinks he can't solve.

Molly Bang portrays the struggle that Sophie encounters by exploring difficult tasks. Other books that look at struggle through the power of YET include *Jabari Jumps* (Cornwall, 2020) and *Flight School* (Judge, 2014). These stories can be reconstructed by looking at the texts through a mathematical lens. Other books in which the story can be reframed so the reader is encouraged to think like a mathematician (Muhammad, 2020) are *Where the Wild Things Are* (Sendak, 1964) where students explore time; *A Squash and a Squeeze* (Donaldson, 2016) can be used to explore special relationships; *Grapes of Math* (Tang, & Briggs, 2004) can be used for creative problem solving.

Bang, who has three Caldecott honor books, illustrates this latest Sophie story in the same expressionistic artistic style as her other two stories using gouache in lively, brilliant paintings. Of particular interest is how she uses an illustrated text font to indicate the struggles that Sophie feels. "I can't" is portrayed in a huge, expressive font highlighted with jagged edges to indicate frustration. You also see the frustration when Sophie indicates that she is "NEVER smart at

MATH.” The mathematical symbols are illustrated in a very distorted view to portray Sophie’s frustration at not understanding the problem. Bang’s unique illustrations of the font support the main theme of overcoming struggle.

In the backmatter of the book, Bang acknowledges Dr. Ann Stern who teaches growth mindset to teachers and who encouraged Bang to write this book. In the past 10 to 15 years, Bang has become concerned with children’s lack of knowledge about scientific principles and has collaborated on science themes with MIT Professor of Ecology, Penny Chisholm. These books include *Rivers of Sunlight* (2017) and *Buried Sunlight* (2014).

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