Annotated Bibliography #2

Presenter(s) name(s): Elizabeth Gaul and Raquel Pino
Date: December 4, 2018
Theme: Females in STEM Subjects
Topic: Female Role Models In Stem Literature: A Well-rounded Approach.

#1. *Vherses*, by J. Patrick Lewis, illustrated by Mark Summers (Creative Editions, 2005, #32pp.)
Summary: Vherses is a poetry picture book about the “celebration of outstanding women”. Among the women in this book that relate to our theme are Amelia Earhart the aviator, Anne Morrow Lindbergh the aviator, Rachel Carson the marine biologist/environmentalist, and Jane Goodall the zoologist.

Summary: All By Herself is a poetry picture book about “14 girls who made a difference”. The women in this book that relate to our theme include Amelia Earhart the aviator, Rachel Carson the marine biologist, and Maria Mitchell the astronomer.

ISBN: 0-618-06892-9
Summary: More Spice Than Sugar is a poetry book about “feisty females”. In the book the women who relate to our theme are Sylvia Earle the deep ocean explorer, Amelia Earhart the aviator, Elizabeth Blackwell the physician, and Clara Barton the pioneering nurse.
#4. *Herstory*, by Katherine Halligan, illustrated by Sarah Walsh (Simon & Schuster Books For Young Readers, 2018, #112pp.)
ISBN: 978-1-5344-3664-0
Summary: *Herstory* is a history book that lists all of the accomplishments of women throughout history. The women in this book that relate to our theme are Elizabeth Blackwell the physician, Marie Curie the scientist, Rachel Carson the biologist/environmentalist, Ada Lovelace the first computer coder, Hypatia the mathematician and astronomer, Rosalind Franklin the chemist who discovered DNA, Mary Anning the palaeontologist, Katherine Johnson the NASA mathematician and physicist, Dorothy Hodgkin the chemist, Dian Fossey the scientist, Valentina Tereshkova the first woman to travel in space, and Amelia Earhart the aviator.

#5. *Women In Science*, by Rachel Ignotofsky, illustrated by Rachel Ignotofsky (Ten Speed Press, 2016, #127pp.)
ISBN: 978-1-60774-976-9
Summary: *Women In Science* is a book about “50 fearless pioneers who changed the world”. Each woman has her own page with information about her and what she has accomplished. There is also a page titled “Statistics In STEM” which lists the number of women in the STEM field as well as information on the Gender Gap. At the end of the book there is a list of more women in science, a glossary, and an index.

#6. *Super Women*, by Laurie Lawlor, illustrated by Laurie Lawlor (Holiday House, 2017, #58pp.)
ISBN: 9780823436750
Summary: *Super Women* is a book about “six scientists who changed the world”. In this book are Eugenie Clark the ichthyologist, Gertrude Elion the biochemist and pharmacologist, Katherine Johnson the NASA mathematician and physicist, Marie Tharp the geologist and oceanographic cartographer, Florence Hawley Ellis the anthropologist, and Eleanor Margaret Burbidge the astrophysicist.
Summary: *Lives Of The Scientists* is a book that has a different scientist throughout the book and each scientist gets a few pages. The people in this book that relate to our theme are Marie Curie the chemist and physicist, Barbara McClintock the genetics scientist, Grace Murray Hopper the pioneer in computer science, Rachel Carson the biologist and environmentalist, Jane Goodall the ethologist, and Chen Shiung Wu the physicist.

ISBN: 9781943147304
Summary: *The Girl Who Thought In Pictures* is a picture book about “The Story of Dr. Temple Grandin”. Temple Grandin is an American professor of animal science. As a young child Temple Grandin was diagnosed with Autism. She overcomes many obstacles in her path and finds a love for science.

#9. *I Am Jane Goodall*, by Brad Meltzer, illustrated by Christopher Eliopoulos (Dial Books For Young Readers, 2016, #39pp.)
ISBN: 9780525428497
Summary: This picture book is about the life of Jane Goodall the English primatologist and anthropologist. It begins when Jane was a young girl and continues on through her journey. There is also a timeline of Jane Goodall’s life at the end of the book.

ISBN: 9770544717138
Summary: *The Girl Who Drew Butterflies* is about “How Maria Merian’s Art Changed Science”. Maria Merian was a naturalist and scientific illustrator who studied insects. The book is filled with information about Marian, insects, sketches, maps, photos, and beautiful artwork.
ISBN: 978-0-8050-8937-0
Summary: *Summer Birds* is a picture book about the butterflies of Maria Marian. It tells Maria Marian's story of her study of butterflies and other insects. Maria Merian was a naturalist and scientific illustrator who studied insects.

#12. *Rachel Carson and Her Book That Changed The World*, by Laurie Lawlor, illustrated by Laura Beingessner (Holiday House, 2012, #32pp.)
Summary: This picture book is about Rachel Carson’s life and journey to becoming a marine biologist and environmentalist. She is also known for her book *Silent Spring* which described the harmful side effects of pesticides on the environment, which lead to the start of the environmental movement.

ISBN: 9781585369867
Summary: *Out Of School And Into Nature* is a picture book about “The Anna Comstock Story”. Anna Comstock was an American artist, educator, conservationist, and a leader of the nature study movement.

ISBN: 978-1-4814-1600-9
Summary: *Solving The Puzzle Under The Sea* is a picture book about “Marie Tharp Maps the Ocean Floor”. Marie Tharp was an American geologist and oceanographic cartographer. She created the first scientific map of the Atlantic Ocean floor. She also helped to confirm the theory of plate tectonics or continental drift.
#15. *Swimming With Sharks*, by Heather Lang, illustrated by Jordi Solano (Albert Whitman & Company, 2016, #30pp.)  
Summary: *Swimming With Sharks* is a picture book about “The Daring Discoveries of Eugenie Clark”. Eugenie Clark was an American ichthyologist. Ichthyologist is the branch of zoology that studies fish. She is known for her research on sharks and is known as the “Shark Lady”. She was also a pioneer in using scuba diving to gain research.

#16. *Mary Had A Little Lab*, by Sue Fliess, illustrated by Petros Bouloubasis (Albert Whitman & Company, 2018, #28pp.)  
Summary: *Mary Had A Little Lab* is a picture book about a young girl who preferred to invent things rather than play outside with others. She decided to make herself a machine to create a pet to keep her from getting lonely. Mary’s lab and her pet sheep soon received much attention!

#17. *Interstellar Cinderella*, by Deborah Underwood, illustrated by Meg Hunt (Chronicle Books LLC, 2015, #32pp.)  
ISBN: 978-1-45212532-9  
Summary: *Interstellar Cinderella* is a picture book about a young girl who dreams about fixing rockets. She fixed robots, dishwashers, and studied ship repair. With the help of a fairy godrobot she is able to go to the prince’s ball where she repaired the prince’s ship. After declining the prince’s marriage proposal, she became his chief mechanic.

#18. *Cleonardo*, by Mary GrandPre, illustrated by Mary GrandPre (Arthur A. Levine Books, 2016, #38pp.)  
ISBN: 9780439357647  
Summary: *Cleonardo* is a picture book about “the little inventor”. Cleonardo Wren was the daughter of an inventor. She tried to work with her father on his inventions, but her ideas were never heard. She decided to make her own invention and show it at the festival. When her own father’s invention goes wrong, Cleonardo’s invention saves the day. Cleonardo and her father lived happily ever after inventing together.
Summary: This picture book is about a little girl named Dot who knows how to use her laptop, ipad, twitter, tags, surf the web, swipe, share and search. When she goes out into nature Dot can “reboot”, “recharge”, and “restart”. Dot learns how to use her technology out in nature.

Summary: *I Face The Wind* is a picture book about a child who asks questions about the wind. They make experiments to test their hypothesis on wind.

ISBN: 978-0-553-51143-7
Summary: *The Dinosaur Expert* is a picture book about a little girl named Kimmy and her love of Dinosaurs. She loves to study many things but her favorite are fossils. When she goes on a field trip to the museum, she is able to share all her knowledge and love of Dinosaurs.

#22. *Secret Coders*, by Gene Luen Yang, illustrated by Mike Holmes (First Second, 2015, #96pp.)
ISBN: 978-1626720756
Summary: *Secret Coders* is a graphic novel about three students who go to a mysterious school. They use coding to solve mysteries that the school founder left behind. A witty and logical book full of the coding basics with the fun of graphics and mystery!
ISBN: 978-0399556364
Summary: Goldie Blox discovers the diary of her grandmother and finds a list of 100 dares. Together with her friends, the Gearheads, she will complete 3 dares before her grandmother’s birthday as a gift! Goldieblox and her pals encourage building and engineering as a solution to their problems.

ISBN: 978-1481432528
Summary: Most robots are made in Flinkwater, Iowa and when things start to go wrong, Ginger must find out why the robots are going haywire. Her own father is “bonked”, or is turned into a mental vegetable by the robots, and she teams up with boy-genius, Billy George to try to reign them in! This book is funny and has a little bit of everything: tech, adventure, animals and more!

ISBN: 978-1101873724
Summary: Hope Jahren is a geobiologist who tells us of her childhood in Minnesota where she first began to study and appreciate plants through her gathers laboratory. She combines her passion for science with her work and she shows us what amazing things can happen when those things are combined!

#26. *Click’d*, by [Tamara Ireland Stone](#), ([Disney-Hyperion 2017, #304pp.](#))
ISBN: 978-1484784976
Summary: Ally wants to enter her new app that she created at summer camp into a contest, but when she shows her friends the rule-breaking scavenger hunt app, it goes viral! She make more friends and everyone raves about her app. She must keep solve problems with the bugs in her code or everyones secrets will be released and she won’t win the contest. This a fun and thrilling book about coding and apps and the challenges faced when creating them.
#27. Ada Lace, On The Case, by Emily Calandrelli and Tamson Weston, Illustrated by Renee Kurilla (Simon & Schuster Books for Young Readers, 2017, #123pp.)
ISBN: 9781481485999
Summary: Ada Lace is a young girl in the third grade who is a scientist. She has just moved into a new town and neighborhood. One day, Ada’s neighbors dog goes missing! Ada and her friend Nina are on the case of the missing dog.

#28. Mary Anning’s Curiosity, by Monica Kulling, Illustrated by Melissa Castrillon (Groundwood Books, 2017, #115pp.)
ISBN: 978-1-55498-899-0
Summary: This is a historical fiction book written about the childhood of Mary Annings. In this story twelve year old Mary digs up a fossil of the Ichthyosaurus. In real life Mary Anning discovered the Ichthyosaurus. Mary Annings discoveries made her one of the worlds greatest fossilists. Even Charles Darwin used her work to prove his theories.

#29. Zoey And Sassafras: Dragons and Marshmallows, by Asia Citro, Illustrated by Marion Lindsay (The Innovation Press, 2017, #96pp.)
ISBN: 978-1-943147-08-3
Summary: This is a story about a young girl scientist named Zoey. Zoey discovers that her barn in the backyard is a place where animals go to for help. One day she discovers a new animal has come to the barn for help, a baby dragon! Zoey will use all of her science knowledge, experiments, science journals, books, and her thinking goggles to figure out what he needs to feel better.

ISBN: 978-0-375-87064-4
Summary: This story is about a young girl named Ellie. One day a boy shows up at school who looks just like her scientist grandpa. Has he finally uncovered the secret to eternal youth?
ISBN: 9781328809568
Summary: A story about Sylvia Acevedo as a child and her journey to becoming one of the first Latinx to graduate with a masters in engineering from Stanford, and female rock scientists at NASA’s Jet Propulsion Laboratory.

ISBN: 978-0-547-92771-8
Summary: Mechanica is a sixteen year old inventor who discovers a secret workshop in her cellar. A “cinderella” story who wants to escape with the help of her inventions and mechanical little horse. But maybe she doesn’t want a prince after all.

ISBN: 978-0-8050-8841-0
Summary: Calpurnia and her grandfather who is a naturalist have many adventures together. She explores the world around her with a little help from a microscope.
Molly A. Schlesinger & Rebekah A. Richert (2017): The Role of Gender in Young Children’s Selective Trust of Familiar STEM Characters, Media Psychology.

Preschool age children learn from the characters they see in media. They establish trust with characters of their own gender and the lack of female STEM interactive females could impact their interest or trust in STEM subjects.


Introducing children to engineering between ages 3-7 with books and activities can increase their self-efficacy in the field and can lead to the pursuit of careers in the growing engineering field.


A study of science books and the gender gap still prevalent in STEM fields. Masculine pronouns and language still used than female even though more female characters outnumbered the males. Gender-Neutral animals outnumbered both genders.


A study of pre-kindergarten classrooms on students engagement with STEM subjects. Findings support the inclusion of STEM based learning experiences for young children.


Article showing the benefits of science trade books to help the comprehension of science learning for preservice and STEM teachers. Also provides ideas on how to pick effective books and ideas on lesson plans.


Article discusses benefits of using literature to teach mathematics with greater comprehension and to relieve math anxiety. Offers example books and lesson plan ideas.