Second Reaction: Reach for the Stars


*Amy Leitze*

*Look Up! Henrietta Leavitt, Pioneering Woman Astronomer* is a beautifully illustrated picture book biography written by Robert Burleigh and illustrated by Raúl Colón. After a brief look at Henrietta Leavitt’s wonderings about the stars in her early years, Burleigh and Colón focus on Leavitt’s work life at the Harvard College Observatory in the late 1800s. In this era, there were few women in science and many restrictions were placed on the work that women could do. Leavitt was not permitted to work with the telescopes and was instead required to “work and not think” while making calculations alongside the other women. Leavitt’s curiosity and perseverance kept her motivated, making observations and calculations outside of work regarding the blinking stars she observed in the night sky. These observations and calculations led to groundbreaking understandings of stars and the measurement of distances in space.

At first glance, *Look Up!* seems to be a picture book for very young children. It is fairly short in length at only 32 pages, and many of those pages have limited or no text at all. The most text-heavy pages are three pages at the end that contain more specific information and facts about Henrietta Leavitt’s life and work, as well as other astronomy facts and resources. Several websites, including amazon.com recommend the book for preschool through third grade or
Based on these recommendations, my first audience for this book was my almost six-year-old son. He listened intently to the story and enjoyed the pictures. When we talked about the book, it became clear to me that though he was able to understand the basic ideas that she was a woman scientist and that she’d studied the stars; he missed all of the deeper themes and meaning in the text.

I also had the pleasure of reading this text with a group of pre-service teachers who have a concentration in teaching reading to elementary students. During a discussion about text complexity, we analyzed this book. My students noted that it has a Lexile score of 600, which would place it in the band for second to third grade. At first, they felt that it did not require much background knowledge for students to understand the text, but after further discussion, they revised their opinions. There are many difficult and content-specific vocabulary words, including: Galileo, Copernicus, galaxy, asteroids, eclipse, and cosmic dust. Near the book’s end, Burleigh writes that Leavitt knew “it was the same beautiful and mysterious sky—but now it is so much bigger!” (unpaged). In my experience with second graders, they would likely be inclined to take this statement very literally without some instruction as to the meaning behind it. After our discussion, my students and I would recommend this text as a part of a unit of study in the upper elementary (4th–5th) grades.

The real beauty of this text is that it could be used in many different units: an astronomy study, a study of perseverance, or even a study on injustice and equality. My students also pointed out another benefit to this text: It is non-fiction, but with its narrative writing style and rich illustrations, it feels more like a work of fiction. This would make it an ideal selection to use with students who are reluctant to read non-fiction work.

As a part of the preparation for a trip to the planetarium, one of my students used this text with a group of fifth grade students. While discussing the text with students, a couple of female students remarked, “I liked it because it showed a woman doing something that the men couldn’t do.” And “I like that it was a true story that shows women doing science.” Other students were impressed by the scientific information contained in the text. “It was interesting because there were stars and space and galaxies.” “It was amazing that she was the first to prove that there were galaxies other than the Milky Way.”

I am pleased to have been able to add Look Up! to my collection of texts to use with students. Its beautiful illustrations and versatility make this text appealing, but it’s really the theme of reaching for the stars and pursuing your dreams in spite of adversity that makes this text a winner in my book.

Works Cited

About the Author

Amy Leitze has taught second grade at Cowan Elementary School in Muncie, Indiana for the past eight years. She is pleased to have now returned to her alma mater, Ball State University, where she is teaching literacy education courses to elementary education undergraduate students. In her spare time, she enjoys spending time with her family, reading, and cooking.