First Opinions Second Reactions

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First Opinion: Catalyzing Girls' Interest in Forensic Science

Yasuda, Anita. Illus. Allison Bruce. *Forensics: Cool Women Who Investigate*. Nomad Press, 2016.

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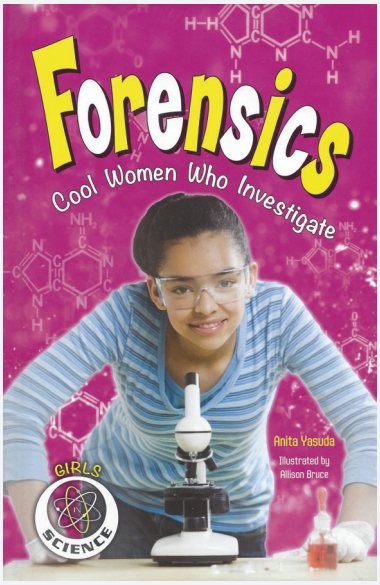

A long-standing challenge in science education has been encouraging young people, specifically girls and underrepresented minorities, to pursue careers in science in an effort to meet the demands of global competition. While women receive over half of the bachelor's degrees awarded in the biological sciences, they receive far fewer undergraduate degrees in the computer sciences (18.2%), engineering (19.2%), physics (19.1%), and mathematics and statistics (43.1%) (National Science Foundation, "Women, Minorities, and Persons with Disabilities"). In her informative book entitled *Forensics: Cool Women Who Investigate*, Anita Yasuda attempts to address this concern by introducing elementary and intermediate-level readers to the field of forensic science. By bridging young girls' interest in forensic science with their potential science career trajectories, Yasuda provides a rich, comprehensive overview of what forensics is, the historical roots of the field, and, more importantly, what a job as a forensic scientist involves.

Forensics includes a variety of interactive features to promote interest in and knowledge of forensics. This text includes an extensive, historical timeline of forensics; a comprehensive glossary of terms; and a chance to further explore forensics through the inclusion of QR codes that link readers to online primary sources. Female scientists are the driving force of this text.

Yasuda profiles three professional forensic scientists by describing their educational background, career preparation, tools of the trade, an account of a typical day as a forensic scientist, and sound advice to young scientists. Six additional women are showcased to reinforce how and why they entered the field. For example, Emma Hergenreder is a graduate of Penn State who entered forensics because of her love of the field that was developed through high school science classes and the television show, *CSI: Crime Scene Investigation*. "Ask and Answer" questions are inserted throughout each chapter and are designed to foster discussions about students' personal interests, values, and beliefs as they relate to solving everyday problems and potential career pursuits. Peppered with cultural references, readers are transported from ancient Babylon, to Qin Dynasty China, to 1940s France, and guided through historical advancements made in forensic science while learning about its many practical applications. Specialized fields of study within forensics are described, introducing readers to areas such as crime scene investigation, osteology, forensic anthropology, and forensic entomology.

It is important to note that this book is not your typical storybook or traditional trade book for elementary science education. Rather, it is an elementary school career resource designed to inform children, more specifically girls, about the many facets of a career in forensic science. A fourth or fifth grade science teacher may use this as an ancillary text to complement a unit on scientific problem solving and further help students connect what they learn in the classroom with real-world applications. For example, Yasuda's profile of Christine Gabig-Prebyl, a crime scene investigator, gives an authentic account of how a scientist must gather and analyze physical evidence, or what is referred to as "trace evidence," to link a suspect to a victim or a crime scene. School personnel such as guidance counselors and school librarians may also find this text useful when encouraging girls to pursue a career in science. Informal science education programs, both after-school and summer initiatives, may also be a good venue for the use of this book.

With the surge of television shows, movies, and books, forensic science has become a popular area of interest for many students and their science teachers. *Forensics* is an example of an informational text that extends what children may see on the screen and further inform them of the important historical roots, career opportunities, and job specifications of a forensic scientist. Equally important are the significant contributions women have made in forensic science. We believe *Forensics* is an encouraging text that has the potential to both catalyze and sustain girls' interest in science.

Works Cited

National Science Foundation. "Women, Minorities, and Persons with Disabilities in Science and Engineering," http://www.nsf.gov/statistics/2015/nsf15311/. Accessed July 2016.

About the Authors

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