

Editorial: Life of Women in STEM: Biographical Picturebook

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“Windows and mirrors” (Botelho & Rudman, 2009) refers to the way in which people perceive and understand themselves and others in relation to social group membership. Social group membership, such as race, gender, or sexual orientation, can function as a window or a mirror. When a person belongs to a socially dominant group, their membership acts as a window through which they see the world, providing them with a clear and unobstructed view. Conversely, when a person belongs to a socially marginalized group, their membership acts as a mirror that reflects their marginalization and prevents them from seeing the world clearly. Botelho and Rudman suggest that individuals from socially dominant groups can use their privileged position to act as allies and create more inclusive environments, while individuals from socially marginalized groups can use their experiences to bring attention to systemic inequalities and advocate for change.

This theory explains why the movie *Black Panther* (2018) resonated with many Black people. The film, which had a predominantly Black cast and crew, showcased a vision of a technologically advanced and prosperous African nation, which was empowering for Black people to see on the big screen. Additionally, the film portrayed a positive representation of African culture, which is often misrepresented or stereotyped in Western media. The movie was also groundbreaking for the representation of minority women in Hollywood. Princess Shuri, a brilliant tech inventor, became an inspiration for young Black girls, someone to look up to who looks like them. Historically, women from minority groups have been subjected to gender and

racial biases that have limited their opportunities for advancement and recognition. Women from minority groups have also been subjected to discriminatory practices, harassment, and exclusion from professional networks that are critical for career advancement in STEM.

Still, it is hard to 'see' minorities in the media without any bias or stereotyping. Recent debates around Disney's decision to cast Halle Bailey, a Black actress, shows the tension between underrepresentation and tokenism surrounding the issue of minorities 'being seen' in the scene. While many argue that casting her is an important step towards more inclusive and representative storytelling, others view this decision as an example of 'tokenism' – where just changing the race without entire context will be enough to be seen as 'diverse'. Moreover, media, books, entertainment, and other forms of pop culture produce and replicate distorted images from previous eras that have a significant impact on shaping people's perceptions. Culturally sustaining pedagogy (Paris & Alim, 2017) understands that culture is not fixed or static, but rather is dynamic and fluid. This means that cultures are constantly evolving and changing over time. Individuals and communities have the agency to shape and redefine their cultures based on their experiences. Thus, understanding the culture based on an individual's unique qualities, context, and experiences is crucial.

Media depicted minority women with their own distorted storytelling. Asians in media are destined to be Kung Fu warriors, exaggerated secondary characters, convenience store owners in Kim's convenience, or Crazy rich Asians. At best, they were 'Parasite' or 'Squid Game' – which are too violent and not representing our daily lives. One common portrayal of Asian women in science fiction is the "Dragon Lady" trope, which portrays them as cunning and

manipulative. This stereotype has been perpetuated in popular science fiction shows and movies such as Blade Runner and The Matrix. In these depictions, Asian women often serve as the "femme fatale" character, using their sexuality to manipulate the male protagonist. This year was very lucky for me to find amazing representations of Asians in the media – from ‘Beef’ and ‘Everything everywhere all at once’. Metaphor for the immigrant Asian American experience, everything everywhere all at once made all of us burst into tears, by deeply engaging life and experiences commonly shared among Asian families.

Aside from these representations, I’d like to see more real-life, vivid experiences, challenges, struggles, and achievements of woman in the STEM field, where they previously been overlooked. The current collection starts from one big question: Where are all the women in the STEM field? Can we see the windows and mirrors clearly, without distortion? In the current collection, I would like to study and review STEM biographical picturebook shows one’s life trajectory with major narrative events.

About the Author

Wonki is a post-doc researcher working at Purdue CIE (Center for Instructional Excellence). Her research interest is self-efficacy, diversity, and teacher education. She is interested in culturally responsive pedagogy, structural equation modeling, and educational equity. She is a crazy plant lady who talks to her plants about life, the universe, and everything.