

ZMATH 06679029

Greenwald, Sarah J.

Popular culture in teaching, scholarship, and outreach: The Simpsons and Futurama.

Dewar, Jacqueline (ed.) et al., Mathematics education. A spectrum of work in mathematical sciences departments. Cham: Springer (ISBN 978-3-319-44949-4/hbk; 978-3-319-44950-0/ebook). Association for Women in Mathematics Series 7, 349-362 (2016).

Summary: Subject to thoughtful analysis of the benefits and challenges, popular culture can be an ideal source of fun ways to connect students and the general public to mathematics. My colleague Andrew Nestler and I created, class-tested, and widely shared activities related to the Twentieth Century Fox television show The Simpsons. The scholarship of teaching and learning (SoTL) provides us with an analytic framework to develop, improve, and share our activities. We designed the activities to introduce or review important mathematical concepts and engage students. Later I expanded my interest into Futurama, another Twentieth Century Fox television show. I will describe informal outreach activities connected to both programs, including our educational website Simpsonsmath.com and my interactive lecture that audiences have accessed worldwide from a Futurama DVD. I will summarize the reception of my work by departmental colleagues, the institution, and the mathematical community. I will reflect on how this work has affected students and general audiences. I will also consider the direct and indirect impacts on my career and the unique challenges and rewards of working with popular culture in teaching, scholarship, and outreach.

Classification: A80 A90 D40

Keywords: popular culture; outreach; SoTL; The Simpsons; Futurama

doi:10.1007/978-3-319-44950-0_24