Reflections from Noyce Scholars on their Route to STEM Teaching

Jennifer Whitfield, Texas A&M University, jwhitfld@tamu.edu
Manjari Banerjee, Texas A&M University, mbanerjee@tamu.edu
Hersh C. Waxman, Texas A&M University, hwaxman@tamu.edu
Timothy P. Scott, Texas A&M University, t-scott@tamu.edu
Mary Margaret Capraro, Texas A&M University, mmcapraro@tamu.edu

When the supply of well-trained professionals does not meet demand, stakeholders oftentimes focus on incentive programs to increase supply. The federal government has a few initiatives that incentivize college students to become teachers. One of the most well-known scholarship programs for perspective mathematics and science teachers is the Robert Noyce Teacher Scholarship Program. This scholarship program encourages talented STEM students to pursue teaching careers in mathematics and science by providing institutions of higher education funding to recruit individuals with strong STEM backgrounds who might otherwise not have considered a career in K–12 teaching. Using scholarships as a mechanism for recruitment and retention of teachers in high-need fields requires further research. Thus, the researchers at Texas A&M University designed a three-year, longitudinal, quasi-experimental, mixed-methods study to help determine the perceived effects, influences, and impacts the Noyce scholarship on its recipients. Across the three years of the study both quantitative and qualitative data were collected via surveys and interviews from 29 participants. The surveys were distributed to the participants each June from 2015 to 2017 and had a mix of ordinal, categorical, and open-ended questions. Results indicate that even though the Noyce Scholarship did not influence the scholars to choose teaching as a profession, or to teach in high-need schools, it has contributed to their persistence in high-need schools for the length of their obligation and in other personal, financial, and professional ways.

Smith, W. M., Lawler, B. R., Strayer, J. F., & Augustyn, L. (Eds.). (2018). *Proceedings of the seventh annual Mathematics Teacher Education Partnership conference*. Washington, DC: Association of Public and Land-grant Universities.