

Editorial

Dear new and returning readers,

Welcome to Volume 25, Issue 3 of The Journal of STEM Education: Innovations and Research. We at JSTEM hope you enjoy this issue and the amazing contributions from our authors.

The first article, “Searching for a New Homeland: How Geography Matters in the College Selection and Career Decisions of Computing and Engineering PhDs,” by McGee et al., explores the decision-making process of doctoral students and graduates with respect to their future career destinations.

“Student Research, Communication, and Scientific Reasoning in a Mathematics Enrichment Program” is by Wickliff et al. The Summer Ventures in Science and Mathematics (SVSM) program is an intensive four-week enrichment program for rising high school juniors and seniors and includes a student research component. This paper focuses on participants of this program enrolled in a mathematics course and investigates how a program with this focus impacts students’ ability to engage in research, communication, and scientific reasoning.

The third article in this issue is “CUBE: A Collaborative Undergraduate Biostatistics Experience to Bring Diversity and Awareness to the Field of Collaborative Biostatistics” by Lozano et al. The Collaborative Undergraduate Biostatistics Experience (CUBE) was built to increase awareness and bring diversity to the field of collaborative biostatistics. This article provides an overview of the key components of the CUBE curriculum, evaluation metrics, and results from the CUBE cohort of summer 2023.

Next is “INSPIRE program: Eleven Years of Promoting STEM and Healthcare Careers Among Low-Income, Under-Served, Minoritized High School Students.” This article is by Rasgado-Flores et al. and looks at the Influence Student Potential and Increase Representation in Education (INSPIRE) program, which is an eight-week summer, salaried program offering biomedical courses, career development seminars, parental engagement and hands-on original biomedical research performance.

In “Exploring the Influence of Industry-Led STEM Outreach on Career Perceptions Toward Manufacturing” the authors, Strimel et al., investigate children’s perceptions of manufacturing before and after two iterations of an industry-led STEM education event.

The sixth article is “Preparing Cybersecurity Camp Facilitators to be Culturally Relevant Mentor Teachers” by Tara Nkrumah. This study analyzes how mentor teachers perceive the professional development of culturally relevant pedagogy (CRP) in STEM informal learning spaces and analyzes the support needed to nurture practices of CRP.

In their article “Perceiving Advancement: An Exploration of Positive Experiences that Strengthened Undergraduate STEM Students’ Motivation During the COVID-19 Pandemic” the authors, Lamssali et al., explore positive experiences that strengthened undergraduate STEM students’ motivation to complete STEM course requirements during the pandemic.

The final article of this issue is “Transformation of an Introductory Biology Course Sequence to Improve Student Success in a Bottleneck Course” by Schaus et al. This study focuses on the 2017 curricular redesign of the biology major at Virginia Wesleyan University (VWU). The curriculum modification sought to address high failure rates in a gateway course, by intentionally sequencing and scaffolding student learning to improve student success and retention.

We would like to extend our appreciation to several staff members for their dedication to the journal. These include Format Editor Wally Ridgway, Editor Eliza Banu, Managing Editor Murty Raju, and Editorial Assistants Anastasia Johnston, Brandon DeLoach, and Abigail Ruma.

If you are interested in publishing your own research in our journal, please visit jstem.org for submission instructions. Please contact jstemed@gmail.com with any comments or questions, and our editorial staff would be happy to assist you. Thank you for reading!

Thank you,

Dr. PK Raju

Editor-in-Chief