Editorial

Dear Readers,

Welcome to our next issue of the year (Volume 14, Issue 3) for the Journal of STEM Education: Innovations and Research. Readers will find that our authors' excellent research continues and we have six intriguing articles in this issue that describe several new approaches to improving students' learning through hands-on experiences and exposure to real-world case studies.

To begin the issue, in "The Nexus Between Science Literacy and Technical Literacy: A State by State Analysis of Engineering Content in State Science Standards," Catherine Koehler, Elias Faraclas, David Giblin, David Moss and Kazem Kazerounian explore how engineering concepts are represented in secondary science standards across the nation. Through their study, they examine how engineering concepts are infused into the standards from 49 states and the District of Columbia.

In "Elementary Educator's Perceptions of Design, Engineering and Technology," Noemi Mendoza Diaz, Monica Cox and Stephanie Adams examine the elementary teacher perceptions of design, engineering and technology. The authors outline this mixed-methods pilot study and its qualitative and quantitative results that suggest a variety of factors teachers view as having a certain impact on student success in STEM fields.

Barbara Christe also discusses impact on student success in "The Importance of Faculty-Student Connections in STEM Disciplines: A Literature Review." She examines the importance of good professor-student relationships in science, engineering and mathematics programs.

Cheryl Page, Chance Lewis, Robin Autenrieth and Karen Butler-Purry bring us "Enrichment Experiences in Engineering (E3) for Teachers Summer Research Program: An Examination of Mixed-Method Evaluation Findings on High School Teacher Implementation of Engineering Content in High School STEM Classrooms." Their study evaluates the E3 Teachers Summer Research program at Texas A&M University to determine the value of the program as a catalyst for STEM teachers' professional development.

A look at mathematics education of engineers is taken in "Practicing Engineers' Perspective on Mathematics and Mathematics Education in College," by Nermin Tosmur-Bayazit and Behiye Ubuz. This case study was performed to develop a better understanding of a practicing engineer's point of view in order to inform curriculum reforms in mathematics education of current engineering students.

Finally, Terry Dubetz and Jo Ann Wilson of Florida Gulf Coast University, explore the importance of acknowledging the 'untapped pool of domestic human resources' for the STEM industry in "Girls in Engineering, Mathematics and Science, GEMS: A Science Outreach Program for Middle-School Female Students." They explore the GEMS program, which is a series of science and math workshops offering hands-on activities to female, middle school students.

As the fall semester starts, I hope all of our readers can look upon the last semester and see true accomplishments and learning among their students and use suggestions from our authors in future semesters. As always, we welcome comments, questions, and suggestions related to the journal, sent by email to jstemed@gmail.com.

Regards,
P.K. Raju
Editor-in-Chief