

Editorial

Dear Readers,

Welcome to Volume 17, Issue 1 of the *Journal of STEM Education: Innovations and Research*. With the year 2016 just beginning, comes forth many new modifications within our world of education, which is portrayed in different articles throughout this journal. As another year of hard work and dedication has gone by, marks the departure of my previous editorial assistant, Sarah Russell, and welcomes the arrival of my new editorial assistant, Alexandria Jackson, who has just transferred to Auburn University and is furthering her education here as a Business Administration major. We look forward to seeing what the future holds for us, from this point on.

Although there have been minor changes within our editorial staff, the enormous determination and diligence from all of our author's still resides. With that being said, the articles within this journal provide readers with further knowledge about the benefits and insight in which students gain through STEM education, as well as different tactics to improving one's ability to learn through educational research.

In "A Study of the Impact of the Siena College Tech Valley Scholars Program on Student Outcomes", author Larry Medsker analyzes 38 students, involved in the Tech Valley Scholars Program, as an experimental group for a study in order to decide whether or not being involved with that program is beneficial in improving their academic success.

Next, in "An Engineering Research Program for High School Science Teachers: Year Two Changes and Results", author Brian DeJong writes about a program at Central Michigan University that focuses on research experience for teachers, so that they can comprehend different engineering concepts as well as constructing "instructional material" that abides by the new Generation Science Standards, so that they can educate their science students back at their schools.

In the next article, authors Charles Cox, Birdy Reynolds, Christian Schunn and Anita Schuchardt all come together to discuss different methods that help students successfully solve Biology equations with the use of design methods from Engineering as well as Mathematics.

In "A Social Cognitive Approach to Understanding Engineering Career Interest and Expectations among Underrepresented Students in School-Based Clubs, Sandra Dika explores a study in which researchers analyze how the level of interest in studying engineering and "expected educational attainment" amongst low income students that are involved in MSE (materials science and engineering) Clubs affects these students ability to receive job positions within this field in the future.

Following Dika's article, in "The Development of Pedagogical Content Knowledge in First-Year Graduate Teaching Assistants", authors Thomas Judson and Matthew Leingang discuss how first year teachers can better understand how their students think and comprehend what is being taught to them.

In "The Influence and Outcomes of a STEM Education Research Faculty Community of Practice", author Louis Nadelson addresses the need to increase STEM faculty expertise in STEM education and goes in to discuss the development of Faculty Learning Community (FLC), which concentrates on increasing knowledge and experience within STEM research.

In the article "Learning Beyond the Science Classroom: A Roadmap to Success" authors, Laura Starr and Dennis Minchella write about how The College of Science at Purdue encourages their students to involve themselves in "co-curricular high impact activities" within their academic schedule, as a way to engage in learning outside the classroom.

Lastly, for this edition we included a book review, in which Dr. Kenneth Reid of Virginia Tech evaluates the book "Teaching and Learning STEM: A Practical Guide", written by Dr. Richard Felder and Dr. Rebecca Brent.

In closing of the spring semester, I hope that this edition benefits you all in efforts to encourage a plethora of involvement and learning through STEM education and research, in and outside of the classroom. With that being said, if you have any questions, comments or concerns about our journal, please contact us at jstem@gmail.com. On my behalf, my editorial staff and I wish you all a wonderful semester!

Regards,

P.K. Raju

Editor-in-Chief