

# Editorial

Dear Readers,

We would like to welcome you to our newest edition, Volume 19: Issue 1. In this edition, we will continue to explore ways to improve the field of STEM education on a variety of stages: from kindergarten programs, to college communities, to teacher development.

To begin, authors Narayan Kripa Sundararajan, Olusola Adesope, Andy Cavagnetto study a five week collaborative concept mapping plan in a kindergarten classroom. Their observation of its increased effect on critical thinking skills can be read in, "The Process of Collaborative Concept Mapping in Kindergarten and the Effect on Critical Thinking Skills."

From kindergarten to high school, authors Mustafa Icel and Dr. Matthew Davis study the effects of "senioritis" on high school seniors and discover the benefits of a K-16 partnership with local colleges. This can be reviewed in their article, "STEM Focused High School and University Partnership: Alternative Solution for Senioritis Issue and Creating Students' STEM Curiosity."

Our next article, "Enhancing Learning Power in First-Year Courses for Students Majoring in STEM Disciplines," shifts to first year college students. Authors Robert Koch, John Kucsera, Kathryn Bartle Angus, Kimberly Norman, Erica Bowers, Pradee Nair, HyeSun Moon, Afshin Karimi, and Susamma Barua Mail implement an academic program that includes a First Year Experience for both undeclared majors and science/math majors.

Authors Malcolm J. D'Souza, Kevin E. Shuman, Derald E. Wentzien, and Kristopher Roeske acquired a National Science Foundation S-STEM grant in order to fund a scholarship based, mixed co-hort learning community. The benefits of this community can be read in their article, "Working with the Wesley College Cannon Scholar Program: Improving Retention, Persistence, and Success."

Next, the study, by Paran Rebekah Norton, William Bridges, and Karen High, observes the impacts of policy changes on DFW rates. This study can be reviewed in, "Impact of Course Policy Changes on Calculus I DFW Rates."

A chief concern in the STEM field is diversity, which is why authors Sophie Pierszalowski, Rican Vue, and Jana Bouwma-Gearhart have highlighted three strategies for increasing institutional diversity. These strategies can be studied in, "Overcoming Barriers in Access to High Quality Education After Matriculation: Promoting Strategies and Tactics for Engagement of Underrepresented Groups in Undergraduate Research via Institutional Diversity Action Plans."

In order to further improve the field of STEM Education, teachers must continue to grow and develop within their field. Authors Bradley Bowen and Teresa Shume discuss the benefits of a teacher externship in their article, "Educators in Industry: An Exploratory Study to Determine how Teacher Externships Influence K-12 Classroom Practices."

Finally, authors Laura Frost, Ludwika Goodson, Jackie Greene, Tanya Huffman, Tanya Kunberger, and Brian Johnson Mail explain their implementation of a program designed to develop teachers by creating a community. More can be read about this in, "SPARCT: A STEM Professional Academy to Reinvalidate the Culture of Teaching Section Articles."

In closing, I invite you to share any comments by telephone or via email at [jstemed@gmail.com](mailto:jstemed@gmail.com). In addition, I would invite you to consider our journal for publishing your research pertaining to the STEM field, feel free to submit manuscripts at [jstem.org](http://jstem.org). We hope you enjoy this edition!

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Editor-in-Chief