Editorial

Dear Readers,

We are delighted to welcome you all to our first edition in 2017, Volume 18 Issue 1. This specific issue focuses on the importance of improving the study habits of students who want to pursue a career within the STEM field in order to prepare them for future job positions.

We begin this issue with an article by, author Anju Gupta who discusses the importance of recruiting students that are in STEM majors in order to fill the gap within the STEM workforce, in the article, "Introducing Chemical Reactions concepts in K-6 through a hands-on food spherification and spaghetti–fication experiment".

Next, in the article, "Identifying Students' Expectancy-Value Beliefs: A Latent Class Analysis Approach to Analyzing Middle School Students' Science Self-Perceptions", authors Karen Nylund-Gibson Julia Phelan, Marsha Ing, and Richard Brown analyze a study which organizes information about students' expectancy-value achievement motivation in order to help parents and teachers identify specific entry points to motivate and support students' science aspirations.

Following this article, author Peggy C. Boylan-Ashraf discusses a study that analyzes the importance of a new paradigm in teaching large introductory, fundamental engineering mechanics (IFEM) courses that combine student-centered learning pedagogies and supplemental learning resources, in the article, "Can Students Flourish in Engineering Classrooms".

Next, in the article, "Long-Term Impact of the E3 Summer Teacher Program', authors Robin Autenrieth, Chance Lewis, and Karen Butler-Purry talk about a summer teacher program called The Enrichment Experiences in Engineering (E3), which is designed to provide engineering research experiences for Texas high school science and mathematics teachers.

Following this article, author Elizabeth A Cudney discusses the ways that students should prepare for the competitive workforce in the article, "Evaluating the Impact of Teaching Methods on Student Motivation.

Next, in the article authors Roxanne Greitz Miller and Ashley J. Hurlock analyze a case study in order to find out what institutional factors reported by 'STEM-Promising' females, defined as females who completed at least one Advanced Placement (A.P) STEM course in high school, have influenced their decision to attend their non-research-intensive undergraduate institution

Next, in the article," Strategies for Achieving Scale within Communities of Practice Aimed at Pedagogical Reform in Higher Education", authors Adrianna Kezar and Sean Gehrke discuss the ways that four undergraduate faculty of STEM help to reform communities of practice in order to grow and expand their impact as they attempt to perfect reforms in higher education.

Following this article, authors Shelley Ann Phelan, Shannon M Harding, Amanda S Harper-Weatherman talk about the importance of a STEM Program called, BASE (Broadening Access to Science Education), in which 24 women from lower income participate in a hands-on two-week residential summer science experience, in the article," BASE (Broadening Access to Science Education): A Research and Mentoring Focused Summer STEM Camp Serving Underrepresented High School Girls.

Similarly in the article The Virtual Steel Sculpture - Limit State Analysis and Applications of Steel Connections", authors Karen C. Chou, Saeed Moaveni and James D Sapp talk about the development of the Virtual Steel Sculpture, which was implemented for students who are interested in learning more about steel connection design.

Lastly, to close this edition, authors Michael C Savaria and Kristina A Monteiro complete a critical analysis of an engineering syllabi at a 4-year public university which includes student learning course outcomes, connections to topics outside of engineering, encouragement of faculty-student or peer relationships and much more, in the article, "A Critical Discourse Analysis of Engineering Course Syllabi and Recommendations for Increasing Engagement among Women in STEM".

In closing, we hope that you all are more aware of the need to heavily prepare students of all different demographics at an early age so that they are prepared for future jobs in the STEM field. As always, we welcome your comments and wish you a wonderful spring semester.

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