

Editorial

Now is a crucial time for science, technology, engineering, and math education. While public discourse and debates have begun to focus on other key issues, the *Journal of STEM Education: Innovations and Research* continues to emphasize the tremendous value in equipping students with the best available knowledge in the STEM disciplines. We believe that students who receive a strong understanding of these areas create brighter futures for themselves and their communities. All of our contributors, whose prompt and diligent work has allowed us to release this timely issue, share the commitment to prepare science, technology, engineering, and math students to excel in an ever-changing global workplace. This issue's five articles inform readers about expanding the availability of higher education, two different programs for improving the quality of learning in particular STEM courses, uniting educational institutions with real-world industrial employers, and understanding the impacts individual learning styles can have on student performance.

First, Kumar Yelamarthi and P. Ruby Mawasha examine the challenge of recruiting and retaining a diverse student population in the STEM fields and professions in their article, "A Pre-Engineering Program for the Under-Represented, Low-Income and/or First Generation College Students to Pursue Higher Education." Their study found that ethnic minorities are severely under-represented, so Wright State University created a program for seventh through tenth graders to learn about STEM and prepare for college. Yelamarthi and Mawasha's article reveals the results of this program after twenty years of continuation.

In "Impact Assessment of Problem-Based Learning in an Engineering Science Course," Karim J. Nasr and Bassem H. Ramadan discuss the application of a new instructional strategy in a thermodynamics course at Kettering University. The course was entirely restructured to focus first on practical material, while theoretical concepts were applied just-in-time as students discovered the need for them. This article explores the project's approach, classroom environment, challenges, assessment, and results.

The focus of Al-Amyan, Al-Azzam, and Abu-Hamattah's "Prospective Industrial linkage at Aquaba State University College, Jordan" is one of particular importance to LITEE, this journal's developer: the article investigates the interaction between Aquaba University College and local industry from the perspective of the local labor market's demand for skilled labor. The authors discuss and recommend strategies for industrial linkage mechanisms.

Alka Harriger reflects on possible strategies for encouraging both women and men to pursue careers in Information Technology in her article, "Finding Success through SPIRIT." The Surprising Possibilities Imagined and Realized through Information Technology (SPIRIT) program at Purdue University offered multiple educational programs for high school teachers, counselors, and students in July, 2008. Here, the author analyzes the SPIRIT plan, results, and success in receiving funding from NSF.

Finally, we conclude this issue with a discussion from S. Keith Hargrove, John A. Wheatland, Duowen Ding, and Cordelia M. Brown on "The Effect of Individual Learning Styles on Student GPA at Morgan State University." In this article, the authors delve into a topic pertinent to all educators—the relationships among students' learning styles, majors, genders, and academic performance. In performing this study, the authors attempted to discover what consideration course designers should give to learning styles when designing engineering curricula.

I am pleased to publish this set of articles that highlight the importance of STEM education in today's world, as well as some projects that are working to improve it. I also look forward to learning about future work and advancements and receiving further comments and input regarding these and other issues.

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