

Editorial

Dear Readers,

Welcome to our December edition Volume 21, Issue 3. I hope our readers are staying safe and healthy during these unprecedented times.

To begin the new edition, Thomas O. Williams Jr., Jeremy Ernst and Louis Rossi write about how STEM classes are adapting to higher volumes of students with disabilities. Read about their findings in "Instructional Readiness in the Inclusive STEM Classroom."

Next in the edition is an article about how the beliefs of STEM educators effects their students' educational experience. Anne Lucietto, Emily Schott and Liza Russell record their research in the article, "STEM Educators: What do they Believe about Teaching their Students?"

The third article written by John T. Solomon, Eric Hamilton, Vimal Viswanathan and Chitra R. Nayak, delves into a learning framework called "Knowledge and Curriculum Integration Ecosystem" at a prominent HBCU. The results of this framework can be found in the article "On the Use of Brain-Based Learning Protocols in Fluid Mechanics."

The next article by authors M.W. Ahmed, Y. Anderson, T.G-Goins, G. Hollowell, E.T. Saliim, T. Sangutei, B. Simpson, P. Spence, D. Whittington, and S.L. White discusses an interdisciplinary science course for non-science majors created to diminish negative perceptions toward science and promote crucial science-related skills. To learn more about this course, read "Promoting STEM-Literacy by Designing Interdisciplinary Courses for Non-Science Majors."

The fifth article in this edition by authors Martha Escobar and Mohammed Qazi, who write about a program designed to assist STEM students at underserved schools learn about technology and how it can change their communities. More information on the BUILDERS program can be found in the article, "BUILDERS: A Project-Based Learning Experience to Foster STEM Interest in Students from Underserved High Schools."

The sixth article in the edition, "Application of a Collective Impact Model for Latinx Students' Access to STEM Higher Education in Northeast Tennessee Region" was written by author Mohammad Moin Uddin. The article looks at ways to improve Latinx students' participation in STEM fields.

The seventh article in this edition is written by Angie Hodge-Zickerman, Janice Rech, Kelly Gomez Johnson, and Neal Grandgenett. The article, "Campus STEM Innovation from a Foothold in Mathematics: Lessons Learned from a Place Where it Happened" is about how one university has become a leader in the STEM field and the journey the university went through to make that happen.

The following articles are non-refereed, valuable contributions to the STEM field.

First, Peggy Boylan-Ashraf writes about the failure rates of students in the engineering field and some of the factors that contribute to the high levels. You can find more information in the article "Failure Rates in Engineering Service Courses."

In the second article, author Srinivas Kilambi outlines the five steps for a successful technology start-up. These steps are explained in the article, "Engineering Entrepreneurship: From a Great Idea to a Big Exit."

The final article, "STEM Retention: A Retrospective of Three Civil Engineers," was written by authors Ross Corotis, Benjamin Corotis and Lindsay Corotis. This article gives a unique perspective on retention in the engineering field from three civil engineers that are in the same family.

We would like to thank our associate editor Eliza Banu, content editorial assistant Sarah Franklin, layout editorial assistant Amy Clark and format editor Wally Ridgway for their continued efforts throughout the year.

If you have any comments or questions, please send them to jstemed@gmail.com. If you are interested in publishing your own research, please visit our website jstem.org for instructions.

We hope our readers and their families continue to stay healthy and have a happy new year,

Thank you,

P.K. Raju

Editor-in-Chief

Telephone: (334)-332-5197