



From the Editor

As the world moves forward while attempting to find relief from the debilitating effects of the global SARS-CoV-2 (Covid 19) pandemic, PK-12 schools, STEM institutions, organizations, researchers, higher education departments, and informal education programs are still trying to visualize what the “new educational order” will look like and from those perspectives rethink or even rewrite their strategic plans and curricula. We are seeing the emergence of a “new” type of educational experience for students world-wide that includes connections to real world problems on an everyday basis, which is exactly what STEM education presupposes, particularly in problem-solving, including engineering design. It is unfortunate that it took a global emergency to make this change, which is long overdue.

The *Southeast Asian Journal of STEM Education’s* parent organization, Southeast Asia Ministers of Education Organization (SEAMEO) Regional STEM Education Centre (STEM ED) is engaged in an evolving strategy of designing and offering face-to-face, digital, and hybrid projects, workshops, and conferences. The SAJSE is also changing, not only in its reach, but also in its design. Within another month, the journal will take on a new, and we think more attractive look. We welcome your comments.

This issue contains articles by authors from around the world, who are--or have been--involved in exciting STEM research studies and projects. We are pleased to showcase them on the following pages.

Edward M. Reeve analyzes the current state of the world in light of the pandemic and argues in his article the crisis demands that STEM be at the center of every school’s curriculum in order to deal with *real* world problems. **Apichart Intha and Kongkiti Phusavat** describe an exciting outdoor STEM project for underprivileged students in a Bangkok school that not only solved a major health issue but also created an income source for the students. Their article is inspiring, in that it shows that students who are often overlooked because they are not college-bound, can create STEM-based small businesses that are also Earth-friendly. Another exciting project, in which a university and a local school district joined forces to create a STEAM school in the U.S. is described by **Bhaskar Upadhyay, John Alberts, Kara Coffino, and Andrew Rummel**. Mathematics educators **Thierry Dana-Picard, Sara Hershkovitz, Zsolt Lavicza, and Kristof Fenyvesi** analyze the “golden section” ratio, present examples of where it has been used in architecture, the locations of ancient structures on Earth’s “great circles,” and even in calendars; they give suggestions for engaging students in studying the golden section using the popular online app GeoGebra. **Jeff Weld**, who was senior White House advisor for the U.S. five-year STEM Education strategic plan, shares his views on the process of this important endeavor, and how it will positively impact *all* students, particularly those who are skilled in STEM fields but who are not university-bound. The article is reprinted by permission from CADRE (Community for Advancing Discovery Research in Education).

My thanks go to the authors and also to the reviewers and proofreaders who, as always, helped make this issue one of high quality. Seeing the final formats in an issue does not show the countless hours and often weeks of revisions that go into each article through conversations between the authors, the editor, and the reviewers. I hope you enjoy the articles. We welcome your comments. I wish you a very peaceful, productive, and SAFE 2021!

John Stiles, Editor in Chief