

Editorial

This issue (40-3) has two sections; the first is a special issue on Case-Based Learning in Engineering and Applied Science Education guest edited by Professor Faiez Alani – McMaster University, Hamilton, Ontario, Canada, and Professor Gabriel Acien – University of Almeria, Almeria, Spain. I would like to thank them for devoting time and effort to this task. The special issue has six contributions by authors from: China, Sweden, Canada, and Korea.

The second section has contributions in various topics including: Entrepreneurship, Assessment, Team-Based Learning, STEM, Graphics Interpretations, Student Engagement, Student Outcomes, Modeling, Visual Patterns, Eye-Tracking, Industry 4.0, Self-Efficacy, Competence Development, Career Path, Life-Satisfaction, Race & Gender, and Choice of Major. The authors are from institutions in USA, Israel, Mexico, Saudi Arabia, Egypt, China, Malaysia, Thailand, and Serbia.

I would like to thank all the authors for their valuable contributions and I hope that the readers find both sections of this issue to be interesting and useful.

I was delighted to know that the second edition of *Teaching and Learning STEM: A Practical Guide*, by Richard Felder and Rebecca Brent, is now available in print (hard cover) and in Kindle formats.

The book has 329 pages and it was published by Jossey-Bass in March of this year. It expands on the first edition addressing such issues as effective practices in synchronous, asynchronous and online classes, and educational applications of artificial intelligence.

The second edition, as was the first, is very well-written and organized. It is divided into three main parts; Courses, Teaching Courses, and Facilitating Skill Development. They are preceded by a helpful and practical introduction that guides the reader to get the most out of the book.

Among the many other topics, the book provides answers to these practical questions:

- How should one prepare to teach a new course or improve on an existing one?
- How can one plan and conduct a class that actively engages all the students, regardless of how many are in the class?
- How does one make good use of modern instructional technology tools and artificial intelligence in face-to-face, online, and hybrid courses?
- How can one help students develop skills in problem-solving, communication, creative thinking, critical thinking, high-performance teamwork, and self-directed learning?
- How should one assess students' acquisition of high-level knowledge and skills and conceptual understanding?
- How can one address the learning needs of students with diverse backgrounds and skill levels?

The book is an excellent practical guide and reference for teaching and learning STEM. It provides up-to-date knowledge to both practitioners and researchers.

Out of curiosity, I checked what ChatGPT has to say. Here is the result (with some editing):

The second edition of the book: *Teaching and Learning STEM: A Practical Guide*, by Richard Felder and Rebecca Brent is a comprehensive resource that offers practical strategies and insights for educators in science, technology, engineering, and mathematics (STEM) fields. It covers a wide range of topics, including instructional design, assessment techniques, active learning strategies, and fostering inclusivity in the classroom. This edition incorporates updated research, new case studies, and additional tools for effective teaching and learning in STEM disciplines. Overall, the book remains an indispensable resource for educators seeking to improve their teaching practices and enhance student learning outcomes in STEM disciplines.

Ahmad Ibrahim