

Call for Papers: Special issue on the why and how of integrated STEM (science, technology, engineering, and mathematics) education

Guest Editors:

Dr. Gillian Roehrig (University of Minnesota, USA)

Dr. Dilek Karışan (Aydın Adnan Menderes University, Turkey)

STEM (Science, technology, engineering, and mathematics) includes the study of various academic disciplines, particularly the four main disciplines of STEM, and the consistent integration between them. It has been argued that STEM education is important to prepare students for work in the globalization world, as well as promoting STEM literacy for all citizens. STEM programs have proliferated rapidly across the world with goals to meet STEM workforce demand, diversify and promote equity within the STEM fields, and promote a more STEM literature public. These programs include teacher education initiatives, the development of new STEM curriculum, the development of informal STEM programs, the development of STEM schools, interdisciplinary programs in institutions of higher education etc. There remains a need, both conceptually and empirically, to understand the hows and whys of these STEM programs.

Topics for this special issue may include, but are not limited to:

- Thematic content analysis, review and meta-analyses related to issues within STEM education, for example the impact of teacher education initiatives and impact on student learning.
- Frameworks for integrated STEM and STEAM education
- Empirical studies that investigate the effects STEM education on academic achievement, affective factors etc.
- STEM teacher education programs
- STEM education during the pandemic
- International perspectives and trends in STEM
- STEM curriculum development and implementation
- STEM schools
- STEM education in remote learning and digital experiences

Manuscript Submission Instructions

Manuscripts addressing the special issue's focus should be submitted through the [Editorial Park manuscript submission system](#). Please see the Author Guidelines and Submission Preparation Checklist carefully before preparing your manuscript.

NOTE: When submitting your manuscript, please include a note in the field 'Comments for the Editor' indicating that the paper addresses "STEM Education" special issue.

Deadlines for authors

- Final submission deadline: 15 October 2021
- First review decision on manuscripts: 15 December 2021
- Second review decision on manuscripts: 30 January 2022
- Final version submission: 28 February 2022
- Expected Publication: April 2022