



## Special Issue:

### **STEM education with digital technologies: Review and prospects**

Digital technologies have significantly changed individual and organizational behaviors on nearly every aspect of the society for the recent two decades. Over this period in education sector, digital technologies have been recognized from having a great potential to fundamentally transform education to becoming an integral part of modern education design and delivery. The impact of digital technologies on the social aspect of education is even beyond the initial imagination of education experts, practitioners, administrators, and policy makers. An immediate example is the online teaching adopted swiftly by numerous schools and universities around the world as a response to the outbreak and containment of the current COVID-19 pandemic globally. This unprecedented event also reminds us that it is time to reflect on the endeavour educators in the world at all levels have been made in recent years on promoting excellent practices in teaching and learning with digital technologies, creating digital-technology enabled or centric modern curricula, exploring new technologies to enhance teaching and learning in diverse environments, inspiring school students to increase STEM education participation, and empowering learners to become able and responsible digital citizens of the future.

This special issue calls for evidence-based empirical papers that share excellence and innovation in STEM education at all levels with digital technologies. Topics include, but not limited to:

- Adaptable learning management systems to support learning anytime and anywhere by anyway
- Digital techniques in teaching applied sciences in nonconventional ways
- Personalised learning support to individual learners with large learning systems, such as MOOCs
- Redesigning or refining the curriculum and learning process of applied sciences according to digital technologies
- Data analytics to improve learning outcomes and reduce attrition in science education
- The design of technology-enable assessments to enhance student learning
- Equitable teaching for students in diverse learning environments by digital technologies
- Success in preparing teachers to use digital technologies in classrooms
- The social and cultural impacts of digital technologies on science education in the future

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For papers submitted to ICMSTTL 2020, if the authors want to publish their papers in this special issue with STEME, your paper will be published without extra charge if it passed the journal's peer review. Papers may be published upon acceptance, regardless of the Special Issue publication date.

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