

## Topical Collection

# Promotion of Computational Thinking and Informatics Education in Pre-University Studies

### Message from the Collection Editor

Digital competence is a key competence proposed by the European Union. Having basic computer skills is a necessity in today's society, which adds to other basic knowledge, such as reading, writing or performing arithmetic operations. The development of any key non-transversal competence requires independent subjects with a mandatory character, such as Mathematics, Physics, Chemistry or Natural Sciences, for example. Informatics constitutes a mixed discipline with elements of science and technology. Therefore, its learning requires an independent subject from others with which it has a relationship but whose contents are different, such as Mathematics or Technology. Moreover, this subject-based approach should be combined with other items from a pedagogical toolbox such as the computational thinking. Purpose of the special issue The purpose of this Special Issue is to help to identify good practices and/or particular concerns that may contribute the development of the computational thinking practices and curricular approaches to teach informatics in the different levels of the pre-university studies, with a special emphasis in bringing with STEM reinforcement actions.

### Collection Editor

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## Informatics

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### Message from the Editor-in-Chief

*Informatics* (ISSN 2227-9709) is an international, peer-reviewed, open access journal, which publishes original theoretical and empirical work on the science of informatics and its application in multiple fields. Our concept of Informatics includes technologies of information and communication as well as the biological, social, linguistic and cultural changes that initiate, accompany and complicate their development. *Informatics* publishes regular research articles, reviews and short notes. There is no restriction on the length of papers, and we encourage researchers to publish their theoretical and empirical results in as much detail as possible. The scientific community and the public have unlimited and free access to the content as soon as it is published. We would be pleased to welcome you as one of our authors.

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### Editor-in-Chief

Prof. Dr. Antony Bryant  
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