Special Issue

An Ecological Approach to Understanding and Promoting Learning of STEM Teachers

Message from the Guest Editors

More recently, attention has shifted to core practices, integrating knowledge and behaviors, such as leading discussions or guiding model development, as central to understanding and enhancing teacher learning. While recognizing the importance of this shift toward broader units of analysis, we argue that it insufficiently considers the ecological context to which these core practices belong. This Special Issue advocates for an ecological approach to comprehending and fostering STEM teachers' learning. Ecological psychology asserts that the possibilities and constraints within teachers' operational ecologies influence their thoughts and actions. This ecology can be examined at three levels: the micro level of the classroom, the meso level of the school and the macro level of society. To effectively support teachers in innovating their practice, a comprehensive understanding of their ecology is crucial. Contributions to this Special Issue, both theoretical and empirical, expand on the ecological approach to comprehend and enhance the learning of STEM teachers.

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From its first issue in 2011, Education Sciences (ISSN 2227-7102) has grown as a scholarly international open access journal. Its aim remains to publish extended full-length research papers that have the scope to substantively address current issues in education. As a member of the Committee on Publication Ethics (COPE), our goal has been to disseminate high quality research. Our publisher, MDPI, takes the responsibility to enforce a rigorous double-blind peer-review together with strict ethical policies and standards to ensure to add high quality scientific works to the field of scholarly publication.

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