

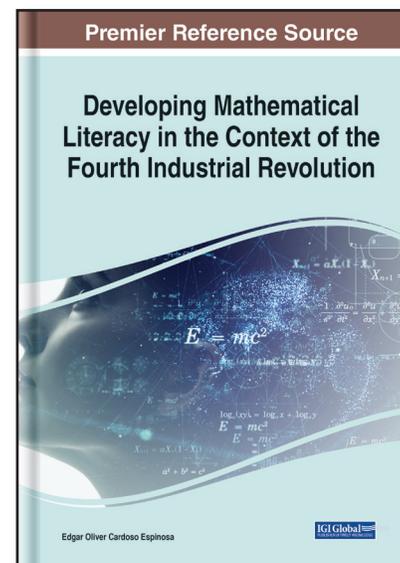
Developing Mathematical Literacy in the Context of the Fourth Industrial Revolution

Part of the Advances in Educational Technologies and Instructional Design Book Series

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Description:

In the context of the Fourth Industrial Revolution, a world of continuous alterations is glimpsed where science and technology are at the base of economic competitiveness and where innovation plays a strategic role in global competition, so that they are forced to cover a series of requirements to compete successfully in an increasingly globalized economy, including high investments in both education and research. Along these lines, the formation of mathematical learning is important because it is oriented towards the development of a set of skills with the aim of resolving situations of daily and professional lives. It focuses on the acquisition of employing the different ways of representing information in the form of models, constructions, and graphs to determine the best decision making. In this sense, it includes the mastery of the handling of numbers, measures, and structures to carry out the interpretation of operations and representations of a quantitative nature on personal and professional situations. For a society to favor innovation, the use of mathematical information is an essential condition that allows the development of creativity and analysis of information. Mathematics education plays a vital role in this development.



Developing Mathematical Literacy in the Context of the Fourth Industrial Revolution studies the formation of mathematical abilities in the context of the Fourth Industrial Revolution regarding its development of both teaching and learning strategies, as well as the use of ICT and its use in the development of this discipline in students. It is important that teachers of any educational level reorient their teaching strategies and their role as educators. Therefore, the chapters discuss up-to-date and relevant information on teaching and didactic tasks in the subject of mathematics. This book highlights mathematical pedagogies, ICT in mathematics learning, teacher training, and classroom strategies for mathematics. It is intended for teachers, pedagogical advisors, business trainers, higher education staff, administrators, teacher educators, practitioners, stakeholders, researchers, academicians, and students interested in mathematical literacy in the fourth industrial revolution.

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