Special Issue

Measuring Children's Computational Thinking Skills

Message from the Guest Editors

Computational Thinking (CT) skills equip young learners with the cognitive foundations necessary to succeed in today's technology-driven society. The acquisition of CT skills is therefore one of the essential goals of contemporary Computer Science (CS) education. There are many CS curricula, educational software programs and other modalities designed to teach the principles of CT to children. Less attention has been paid to the assessment of CT skills in children, resulting in a relative paucity of validated instruments for measuring the impact of this aspect of CS education on preschool and elementary students. Without such instruments, educators may be hard-pressed to accurately gauge their student's progress in acquiring CT skills or measure the effectiveness of their CS lessons. The primary objective is to present an overview of current progress in developing, validating, and implementing measures of Computational Thinking for children and educators. This includes quantitative and qualitative measures of CT, instruments employing coding or "unplugged" challenges as well as standardized, telemetric and adaptive assessment formats.

Guest Editors

Dr. Emily Relkin

Education Development Center, Waltham, MA, USA

Dr. María Zapata Cáceres

Computer Science and Statistics Department, Universidad Rey Juan Carlos, Móstoles, 28933 Madrid, Spain

Deadline for manuscript submissions

closed (31 October 2024)



Education Sciences

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 5.5



mdpi.com/si/189602

Education Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
education@mdpi.com

mdpi.com/journal/education





Education Sciences

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 5.5



About the Journal

Message from the Editor-in-Chief

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.

Editor-in-Chief

Prof. Dr. Daniel Muijs

School of Social Sciences, Education and Social Work, Queen's University Belfast, Belfast BT7 1NN, UK

Author Benefits

High Visibility:

indexed within Scopus, ESCI (Web of Science), Educational Research Abstracts, PsycInfo, and other databases.

Journal Rank:

JCR - Q1 (Education and Educational Research) / CiteScore - Q1 (Physical Therapy, Sports Therapy and Rehabilitation)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 29.2 days after submission; acceptance to publication is undertaken in 3.9 days (median values for papers published in this journal in the first half of 2025).

