

## Preface

This volume contains papers presented at the 4<sup>th</sup> International Conference "Informatization of Education and E-learning methodology: Digital Technologies in Education" (IEELM-DTE 2020). The conference was held at the Siberian Federal University, October 06-09, 2020. Due to COVID-19 related travelling restrictions for the majority of participants the conference had to be switched to partly online format

The IEELM-DTE was co-founded by the major scientific and educational center of Central Siberia, Siberian Federal University (Krasnoyarsk) and the Berg Institute of Cybernetics and Educational Informatics of the Federal Research Center "Computer Science and Control" of the Russian Academy of Sciences.

The widespread adoption of information technologies contributes to changes in all areas of our society. Digital transformation is the basis for the development of the modern education system. This poses urgent tasks for science to develop and implement new content, relevant methods and teaching tools. Intensive implementation of digital technologies in the educational process should be accompanied by diagnostics of the results of the educational process and the study of the impact of information technologies on the physical and psychological state of students. All of the above is impossible today without a comprehensive fundamental analysis and scientific approach to the development of a wide range of emerging problems.

The conference was attended by more than 120 scientists from ten countries located on different continents. The attention of the conference participants was focused on the discussion of the following topical issues:

- creation and justification of methods for the formation of professional, general professional and universal competencies in the subject area using information technologies;
- analysis of educational data and its application to the tasks of personalization of training, forecasting of learning outcomes and certification of students and teachers;
- problems of social security of the information and communication environment in the context of digitalization of education;
- development and research of methods for implementing distance education technologies in the context of a pandemic;
- development of a systematic approach to bridging the digital divide between the use of digital technologies in professional and everyday human activities and their application in education.

The conference received 200 submissions. Each submission was reviewed by up to four Program Committee members who evaluated the quality, originality, and relevance to the conference of all the submissions. This volume contains selected 26 regular papers. These publications, in our opinion, most fully and clearly cover the problems and prospects of digital transformation of education.

We would like to thank all the authors who responded to the call for papers and all the members of the Program Committee.

## Acknowledgments

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Mikhail Noskov  
Alexei Semenov  
Sergey Grigoriev  
October 2020

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