



The **19th International Conference on e-Learning and Digital Learning (ELDL 2025)** (part of the IADIS 19th Multi Conference on Computer Science and Information Systems 2025) was held in Lisbon, Portugal, **23-25 July, 2024**.

This conference was organized by the International Association for Development of the Information Society (IADIS).

The e-Learning and Digital Learning (ELDL) 2025 conference aims to address the main issues of concern within e-Learning. This conference covers both technical as well as the non-technical aspects of e-Learning. The conference accepted submissions in the following seven main areas: Organisational Strategy and Management Issues; Technological Issues; e-Learning Curriculum Development Issues; Instructional Design Issues; e-Learning Delivery Issues; e-Learning Research Methods and Approaches; e-Skills and Information Literacy for Learning.

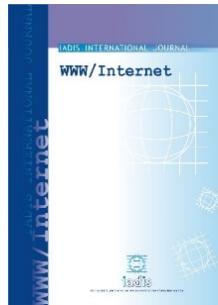
This edition was published jointly with the: 13th International Conference on Sustainability, Technology and Education (STE 2025) and received 165 submissions from more than 23 countries. Each submission has been anonymously reviewed by an average of four independent reviewers, to ensure that accepted submissions were of a high standard. Consequently, only 26 full papers were approved, which meant an acceptance rate of 16%. A few more papers were accepted as short and reflection papers, as well as posters.

Extended versions of the best papers were selected to be published in:

- ❖ the Interactive Technology and Smart Education (ITSE) journal (ISSN: 1741-5659)



- ❖ the IADIS International Journal on WWW/Internet (IJWI). ISSN: 1645-7641



Besides the presentation of full, short and reflection papers, posters and a doctoral paper, these conferences also included one keynote presentation from Professor Dr. Piet Kommers, UNESCO Professor of Educational Technology (The Netherlands).



Keynote Presentation:

A.I. FOR STUDENTS' METACOGNITIVE SKILLS AND CREATIVE THINKING

By Professor Dr. Piet Kommers, UNESCO Professor of Educational Technology (The Netherlands)



The e-Learning Conference 2025 was published in hard copy (ISBN: 978-989-8704-68-9) by IADIS Press.

Volume Editors: Miguel Baptista Nunes, Pedro Isaías, Tomayess Issa and Theodora Issa

Computer Science and Information Systems Series Editors: Piet Kommers and Pedro Isaías

Program Committee Members:

Conference Program Co-Chairs

Miguel Baptista Nunes, Xi'an Jiaotong-Liverpool University, China

Pedro Isaías, Universidade Aberta (Portuguese Open University), Portugal

MCCSIS 2025 General Conference Co-Chairs

Piet Kommers, UNESCO Professor of Educational Technology, The Netherlands

Pedro Isaías, Universidade Aberta (Portuguese Open University), Portugal

Committee Members:

Adamantios Koumpis, University Hospital Cologne, Germany

Airina Volungeviciene, Vytautas Magnus University, Lithuania

Alejandro Sánchez, Universidad de Alicante, Spain

Ali Fawaz Shareef, The Maldives National University, Maldives

Aminath Zifna, The Maldives National University, Maldives

Ana Barata, ISEP-GILT, Portugal

Andreas Böllin, Klagenfurt University, Austria

Andreas Papasalouros, University of the Aegean, Greece

Ángelica De Antonio, Universidad Politécnica de Madrid, Spain

Anthony Abrome, University of Bologna, Italy

Antoanelia Naaji, Vasile Goldiș West University of Arad, Romania

Antonio Navarro, Universidad Complutense de Madrid, Spain

Antonio Panaggio, Italian Ministry of Education, Italy

Apostolos Gkamas, University of Ioannina, Greece

Araz Yusubov, ADA University, Azerbaijan

Bertil P. Marques, Instituto Superior De Engenharia Do Porto (ISEP), Portugal

Bruno F. Gonçalves, Instituto Politécnico de Bragança, Portugal

Carolina Lorenzo, University of Alicante, Spain

Charalampos Karagiannidis, University of Thessaly, Greece

Christos Bouras, University of Patras, Greece

Copelia Mateo Guillén, Universidad de Alicante, Spain

Danielle Allessio, University of Massachusetts, College Education, USA

Dara Tafazoli, University of Newcastle, Australia

Demetrios Sampson, University of Piraeus, Greece

Dessislava Vassileva, Sofia University "st. Kliment Ohridski", Bulgaria

Dimitra Pappa, National Center for Scientific Research - Demokrit, Greece

Egle Butkeviciene, Kaunas University of Technology, Lithuania

Eliza Stefanova, Sofia University, Bulgaria

Elliot Soloway, University of Michigan, USA

Esma Aimeur, University of Montréal, Canada

Esteban Vázquez Cano, Spanish National University of Distance Education, Spain

Eugenia Kovatcheva, University of Library Studies and Information Tech, Bulgaria

Eva Jereb, University of Maribor, Slovenia

Francesca Pozzi, Instituto Tecnologie Didattiche – CNR, Italy

Geoffrey Lautenbach, University of Johannesburg, South Africa

George Tsirhrintzis, University of Piraeus, Greece

Giovanni Bonaiuti, University of Cagliari, Italy

I Putu Indra Kusuma, Universitas Pendidikan Ganesha, Indonesia

Ibrahim Ahmed, University of Bahrain, Bahrain

Igor Bernik, University of Maribor, Slovenia

Jan-Torsten Milde, Hochschule Fulda, Germany

Jesús Sánchez Allende, CUNEF Universidad, Spain

Joan Ballantine, University of Ulster, United Kingdom

Jose Bidarra, Universidade Aberta, Portugal

Juan M. Santos-Gago, atlanTTic - University of Vigo, Spain

Khalid El Khadiri, Chouaib Doukkali University, Morocco

Larbi Esmahi, Athabasca University, Canada

Luh Indrayani, Universitas Pendidikan Ganesha, Indonesia

Luis Álvarez-González, Universidad Austral de Chile, Chile

Made Hery Santosa, Universitas Pendidikan Ganesha, Indonesia

Maiga Chang, Athabasca University, Canada

Malinka Ivanova, Technical University of Sofia, Bulgaria

Manuel Caeiro-Rodríguez, University of Vigo, Spain

Marina Rui, University of Genoa, Italy

Martin Wessner, Hochschule Darmstadt, Germany

Martín Llamas-Nistal, atlanTTic Research Center - University of Vigo, Spain

Martina Benvenuti, University of Bologna, Italy

Michail Kalogiannakis, University of Thessaly, Greece

Nicola Capuano, University of Salerno, Italy

Patrick Blumschein, Teacher University of Freiburg, Germany

Paula Escudeiro, ISEP/GILT, Portugal

Paula Miranda, School of Technology, Setubal Polytechnic University, Portugal

Piedade Carvalho, ISEP/GILT, Portugal

Rafael Morales Gamboa, Universidad de Guadalajara, Mexico

Ritesh Chugh, CQUniversity, Australia

Rosabel Martínez Roig, University of Alicante, Spain

Roza Ibrahim, The Maldives National University, Maldives

Rubén Edel Navarro, Universidad Veracruzana, Mexico

Sangeetha Kutty, Cquiversity, Australia

Shelia Anjarani, Universitas Muhammadiyah Purwokerto, Indonesia

Tamilla Mammadova, ADA University, Azerbaijan

Tarek Assassi, University of Mohamed Kheider, Algeria

Telmo Zarraonandia, Universidad Carlos III de Madrid, Spain

Thomas Zarouchas, Computer Technology Institute and Press "diophantu", Greece

Vahid Norouzi Larsari, Charles University, Czech Republic

Valentina Dagiene, Vilnius University, Lithuania

Vassilis Triantafyllou, University of Peloponnese, Greece

Verónica Onrubia, Universidad de Alicante, Spain

Veronika Makarova, University of Saskatchewan, Canada

Yannis Psaromiligkos, Technological Education Institute of Piraeus, Greece