

ECEL 2023

22nd European Conference on e-Learning

26 – 27 October 2023, Pretoria, South Africa

Mini Track on The Design of Learning Content and the Development of Learning Activities for STEM Education

Mini Track Chair: Dr Adrian A. Adascalitei, "Gh. Asachi" Technical University, Iasi, Romania



Learning Design is the framework that supports learning experiences. It refers to deliberate choices about what, when, where and how to teach. Decisions need to be made about the content, structure, timing, pedagogical strategies, sequence of learning activities, and the type and frequency of assessment in the course, as well as the nature of technology used to support learning. Design of learning contents for STEM education is a topic of interest because adapt the learners' necessities in e-learning environment. Learners have different learning styles, cognitive traits, learning goals and varying progress of their learning over period of time, which affects the learner's performance while providing the same bundle of course to all learners.

This mini-track is looking at two important elements when creating an e-learning course. Learning content design creates adaptive e-learning environments to offer appropriate learning content to all individuals. Learning content design is based on learners' characteristics, the learning content (learning object) and the configuration of e-learning environment are important in Learning Design. Whereas, Instructional Design provides a strategic opportunity to improve the quality of education and to facilitate policy dialogue, knowledge sharing, and capacity building.

Suggested subjects focusing on Content Design are (but not limited to):

- learning object design and process for learning content design,
- learner context parameters, and
- models/components of e-learning;
- Development of learning activities in the LCMS:
- Interactivity (with Others) Focus.
- Critical Thinking.
- Production.
- Problem Solving.
- Reflection.

Suggested topics focusing on Instructional Design include (but not limited) to:

- the design and implementation of technology-rich learning environments study of teaching and learning STEM
- studies that address specific challenges in improving students' achievement,
- approaches used to motivate and engage students
- lessons learned from changes in curriculum and instruction in STEM education
- design of e-learning contents for STEM education
- development of e-learning activities in the LCMS



Dr Adrian A. Adascalitei is Professor at Technical "Gh. Asachi" University and at "Al. I. Cuza" University, Iasi, Romania. His specialist area is Blended STEM Teaching and Learning. He is a certified student teachers' trainer, reviewer in international journals and conference proceedings and member of scientific associations. He has authored and co-authored various papers in International and European conferences and journals. His research focuses on blended learning, use of virtual laboratories in STEM Education.

Submission details

In the first instance a 300 word abstract is required, to be received by the 5th April 2023. Submissions must be made using the online submission form at: <http://www.academic-conferences.org/conferences/ecel/ecel-abstract-submission/>

If you have any questions about this track please email the mini track chair: adrian.adascalitei@gmail.com

See more about ECEL at <http://www.academic-conferences.org/conferences/ecel/>