



CALL FOR PAPERS

SPECIAL ISSUE ON

New Digital Vistas for PBL in Engineering Education

Guest Editors

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This special issue calls for contributions to a timely discussion on how digital technology is impacting Problem Based Learning (PBL) and adjacent pedagogies in engineering education and where it shall lead. Digitalization is disrupting traditional models of engineering education; will it be a threat to or an opportunity for PBL approaches?

Digitalization is more than just the application of digital technology, or using digital tools to support existing practices. New understandings of technology – and the affordances that digital technology offers – provide new opportunities to enable student learning.

Digitalization offers new frontiers for the organization of engineering education, and will require new (possibly post-digital) pedagogical models and practices to be fully realized for the future.

The special issue specifically aims to address:

- the impact of digital technology on the engineering curriculum, considering the skills and knowledge required by graduate engineers to work in a digital future
- digital or hybrid ways of delivering and supporting engineering PBL curricula
- the change management required to prepare faculty, institutions and students for a digitally supported PBL curriculum
- The paradox of digitalization allowing for greater personalization of learning even though knowledge is socially constructed
- How artificial intelligence and machine learning will affect teaching, assessment, problem solving, and studying in a PBL context

The special issue welcomes a range of research perspectives, from epistemic considerations through to scalable / transferable classroom innovations.

Criteria for contributions

Potential contributions can address any topic that informs future directions of digital PBL practices. Both theoretical / conceptual work and empirical investigations will be considered.

There will be a two stage submission process for this special issue. Stage one will be the submission of (two page / 1000 word) extended abstracts, which will be reviewed by the special edition editors. After review, selected submissions will be invited to submit full papers for consideration in stage two. Only full papers will be published in the special issue.

Submissions (extended abstracts and full manuscripts) should include:

- clearly formulated research problems, well-defined research questions and aims of the study
- relevant theoretical and literature background
- justification of research design and description of research methods for data collection and analysis
- elaboration on the new aspects added to the existing PBL literature

Full paper manuscripts should be written in English and limited to 12 one-sided, one-column, single-spaced pages. Manuscripts should include keywords, complete affiliation addresses and short biographies of the authors. Citing and listing of references should be in the IJEE style. Figures and illustrations should be suitable for non-color printing. No copyrighted material should be included. The IJEE Guide for authors is available at: https://www.ijee.ie/2023_Guide_for_Authors.pdf. General information and guidelines are available at the IJEE web site: <https://www.ijee.ie/>

Submissions are to be submitted through EasyChair:
<https://easychair.org/my/conference?conf=ijeedigitalpbl2024>

Submissions should be blinded for peer review.

Important Deadlines

Submission of extended abstracts (maximum two pages around 1000 words)	September 04, 2023
Notification of reviewers' feedback	October 10, 2023
Submission of full manuscript	December 20, 2023
Notification of reviewers' feedback	February 16, 2024
Submission of final manuscript	April 01, 2024
Anticipated publication	July / August 2024

Contact guest-editor: Prof Euan Lindsay (edl@plan.aau.dk) will be responsible for communication with authors.