PAEE/ALE'2021 Programme

Day 1	7 July, Wednesday (*local + online*)

09.00 09.30	**Opening** (*local + online*)

09.30 11.00	**Hands-on Session:** HO.1 (*local*) **Jens Myrup Pedersen** *Problem Based Learning in the Digital Age*	**Hands-on Session:** HO.2 (*online*) **Miguel Romá** *Collaborative Annotations in times of Physical Distancing*

11.00 11.30	Coffee Break

11.30 13.00	**Keynote Speaker** (*local + online*) **Manuel João Costa** *Teacher Professional Development in Higher Education – Engaging Students*

13.00 14.30	Lunch

14.30 16.00	**Keynote Speaker / Workshop** (*online*) **Eric Mazur** *Getting Every Student Ready for Every Class*

16.00 16.30	Coffee Break

16.30 18.00	**Paper Session:** PS.1 (*local*) **Session Chair:** Valquíria Villas-Boas -- 77 - *Science Communication in Bioengineering and Biotechnology: active and collaborative learning project* (Patrícia Neves, Tatiana Vilaça) -- 76 - *Exploring blended learning tools to transform a laboratory course unit in engineering: challenges, setbacks and rewards* (Tatiana Vilaça) -- 60 - *A problem-based learning experience in engineering education* (Valquíria Villas-Boas) -- 68 - *How to engage engineering students to Physics: A case report of an Introductory Physics course taught in the first year of an Engineering programme* (Cacilda Moura) -- 38 - *An innovative approach to computer mathematics teaching in a large engineering class* (Isabel Espírito Santo) --	**Paper Session:** PS.2 (*online*) **Session Chair:** Rui Sousa -- 55 - *Production of a Virtual event on Quality Management and Collaborative International Projects using Scrum as a Project Management Methodology* (Thiago Lima) -- 18 - *Setbacks of the Development of a Concept Inventory for Scrum: Contributions from the Item Response Theory* (Rui Lima and Walter Nagai) -- 70 - *Characterization of the operators training process at an industrial company* (Rui Sousa) -- 71 - *Industrial Training Qualitative Evaluation with Fuzzy Logic and an Experience Classification Method* (Rui Sousa) -- 58 - *The perception of students from a higher education institution regarding the importance of education in OSH subjects during COVID Pandemic* (Nelson Costa) --	**Paper Session:** PS.3 (*online*) **Session Chair:** José Rodrigues -- 4 - *Management of digital transformation of educational technology: key elements* (Natalia Vatolkina) -- 5 - *E-learning development strategy of the university: comparative study* (Natalia Vatolkina) -- 15 - *Virtualizing project-based learning: an abrupt adaptation of active learning due to the covid-19 pandemic with promising outcomes* (Cristiano Reis) -- 25 - *Exploring a BPMS system for learning production management with simulation of manufacturing scenarios* (José Rodrigues) -- 48 - *Game-Based Learning in a production engineering course in Brazil* (José Rodrigues) --	**Paper Session:** PS.4 (*online*) **Session Chair:** Natascha Janssen -- 1 - *Teacher collaboration in PBL: setting the example for the students* (Anabela Alves) -- 74 - *Teaching innovation: comparison between project-based and traditional learning approaches* (Sanderson Barbalho) -- 23 - *Cases for teaching and learning assessment planning: a study in the perception of teachers and students from two Brazilian universities* (Maria Brito) -- 8 - *The Show Must Go On: Active Online Collaboration during COVID-19 – Mathematics Students Solving Real-World Problems* (Marietjie Havenga, Tertia Jordaan) -- 35 - *Mapping the circular economy context within the curricula in the field of Industrial Engineering - comparative study of selected programs in two Polish universities* (Tomasz Nitkiewicz) --

18.00 19.00	**PAEE/ALE Challenge** (***fun online interactive activity***)

Day 2	8 July, Thursday (*local + online*)

09.30 11.00	**Students Paper Session:** ST.1 (*local + online*) **Session Chairs:** Sandra Fernandes Jens Myrup Petersen ------------------------------------ 47 (*local*) - *Preferred Roles of Industrial Engineering and Management Students - An exploratory European analysis* (Viktoria Heyen, Maria Serodio) ------------------------------------ 78 (*local*) - *Learning science during summer vacations and its effects on Attitude and Anxiety towards Research* (Violeta Carvalho) ------------------------------------ 12 (*online*) - *Development and application of a teaching-learning model among EduScrum and active learning methodologies* (Erik Lopes) ------------------------------------ 13 (*online*) - *Desencrenca: a PBL experience on Project Management education* (Erik Lopes) ------------------------------------ 46 (*online*) - *CDIO and Biomimicry: a case of study of analysis of the enhanced structural masonry interlock with the nacre interlacing solution* (Roberto Silva) ------------------------------------	**Students Paper Session:** ST.2 (*online*) **Session Chairs:** Diana Mesquita Marietjie Havenga ------------------------------------ 42 - *Using PBL to design a gamified application prototype: the case of waste picker's children financial education* (Júlia Brito) ------------------------------------ 64 - *Preparation Workshops for Mathematics Olympiads* (Júlia Thomazoni) ------------------------------------ 41 - *Development of an Integration Methodology for project management in an adapted online environment on a PBL discipline* (Júlia Brito) ------------------------------------ 31 - *Influence of Improvisation Education to Teamwork Abilities Based on Competency* (Shogo Takezaki) ------------------------------------ 19 - *Sustainability-focused international PBL project: Rethinking digital education for individuals of low socioeconomic status* (Daniel Britze, Jacob Jensen) ------------------------------------	**Students Paper Session:** ST.3 (*online*) **Session Chairs:** Anabela Alves Natascha van Hattum-Janssen ------------------------------------ 9 - *Perception of Professors and Undergraduate Students of Engineering at the University of Brasilia (UnB) on Emergency Remote Learning Period in the context of the Covid-19 Pandemic* (Lahra Schemmer) ------------------------------------ 43 - *Project Based Learning during the COVID-19 Pandemic: Experiment Reports of Initiatives in Computer Engineering* (Victor Hayashi) ------------------------------------ 59 - *Online adaptation strategies for active learning methodologies in STEM education* (Larissa Santos) ------------------------------------ 33 - *A new remote laboratory of a pumping system designed using a low-cost hardware model* (José Carretero) ------------------------------------	

11.00 11.30	Coffee Break

11.30 13.00	**Hands-on Session:** HO.3 (*local*) **Miguel Romá**, Montse Farreras, P. Bofill, J. Armengol *Promoting creativity through collaborative assessment*	**Hands-on Session:** HO.4 (*online*) **Montse Farreras**, Pau Bofill, J. Armengol, M. Romá *Plant a seed for the future*	**Hands-on Session:** HO.5 (*online*) **Igor Montagner, Rafael Ferrão,** Andrew Kurauchi *Creating and publishing active learning handouts*

13.00 14.30	Lunch

14.30 16.00	**Paper Session:** PS.5 (*local*) **Session Chair:** Teresa Monteiro ------------------------------------ 2 - *Online assessment: more student cheating than onsite?* (Anabela Alves) ------------------------------------ 28 - *Development Process of a Rubric for Assessment of Leadership Competences in Project Management Scenarios* (Diana Mesquita, Mariane Souza, Élida Margalho) ------------------------------------ 39 - *Integrating project management and peer assessment: a case for increased teamwork* (Natascha van Hattum-Janssen) ------------------------------------ 34 - *Innovating to improve – an experience in a Computer Engineering programme* (Teresa Monteiro) ------------------------------------ 20 - *Adapting to Online Education through project-based learning in a complex remote zone (Magallanes /Chile)* (Jorge Ortega) ------------------------------------	**Paper Session:** PS.6 (*online*) **Session Chair:** Rui Lima ------------------------------------ 65 - *Mechanical Engineering Students Project Based Learning in OUAS* (Ville Isoherranen) ------------------------------------ 67 - *Oamk_Highway – New route for young people towards engineering degree in Northern Finland* (Ville Isoherranen) ------------------------------------ 6 - *Bringing PBL to Education for Sustainable Development: University to Business (U2B) approach* (Tatiana Salimova) ------------------------------------ 40 - *Project-based active learning in a robotic master's degree Subject with covid combined face-to-face and online teaching requirements* (Vicente Morell) ------------------------------------ 32 - *Project-based learning in Robotics subject of a Master's Degree* (Vicente Morell) ------------------------------------	**Paper Session:** PS.7 (*online*) **Session Chair:** Sandra Fernandes ------------------------------------ 69 - *Students' perceptions of the use of traditional methods and active learning strategies in the classroom: findings from a case study* (Filomena Lopes, Sandra Fernandes) ------------------------------------ 73 - *Active learning in project management: the life cycle of a virtual scientific colloquium and its impact on students' performance* (Sanderson Barbalho) ------------------------------------ 72 - *Engineering Education Active Learning Maturity Model: a Conceptual Framework* (Humberto Arruda) ------------------------------------ 61 - *Active methodology: the experience of the land regularization commission (CRF-UFPA) in the agents of registry qualification* (Elaine Angelim, Renato das Neves) ------------------------------------ 56 - *Student motivation in the first year of University: findings from the implementation of a PBL project for a real context* (Sandra Fernandes) ------------------------------------	**Paper Session:** PS.8 (*online*) **Session Chair:** Nélson Costa ------------------------------------ 24 - *Communication and alignment of expectations in implementing a PBL proposal* (Octavio Neto) ------------------------------------ 22 - *Development of Capstone Integrative Projects as a tool for learning Design and Process Control in Chemical Engineering* (Carlos López) ------------------------------------ 30 - *Risk Assessment of Project Based Learning Failure via Bayesian Belief Networks and Analytical Hierarchy Process – A Literature Review* (José Pereira) ------------------------------------ 17 - *Adapting studio and lab sessions to emergency remote teaching: an analysis of instructor-student interactions* (Rafael Ferrão) ------------------------------------ 49 - *The use of games in a graduation course in an engineering faculty* (José Rodrigues) ------------------------------------

16.00 16.30	Coffee Break

16.30 18.00	**Keynote Speaker** (*online*) **Maura Borrego** *Reducing Student Resistance to Active Learning*

19.00 21.00	**Conference Dinner**

Day 3	9 July, Friday (*online*)

	Industry Panel: IP.1 (*online*)
09.30 11.00	*Engineering Skills for Industry* **Moderator:** José Dinis-Carvalho — *University of Minho* **Participants:** Berta Alonso — *Sustainability Department of Inditex* Alain Afonso — *Brunswick Portugal* Alberto Bastos — *Kaizen Institute Portugal* Jorge Ferreira — *IKEA Industry Portugal*
11.00 11.30	Coffee Break
11.30 13.00	**Keynote Speaker** (*online*) **John Mitchell** *The UCL Integrated Engineering Programme*

13.00 13.30	**Closing**