

FLIPPED IRSPBL 2021: MOVING TOWARDS A VIRTUAL PBL COMMUNITY

PROGRAMME • WEBINAR SESSIONS • FALL 2020/ SPRING 2021

OCTOBER 28, 2020

<p>13:00 – 13:55 (CET)</p>	<p>Session 1: <i>Sustainability, Complexity and Interdisciplinarity – Generating innovative and interdisciplinary knowledge and practice: PBL and future complex challenges</i></p>	<p>Moderator: Kristina Edström (KTH, Sweden)</p>	<p>Presentations: <i>Virginie Servant-Miklos, Jette Egelund Holgaard and Anette Kolmos</i> A “PBL effect”? A longitudinal qualitative study of sustainability awareness and interest in PBL engineering students <i>Lelanie Smith and Nadia Trent</i> Student and staff experience of an interdisciplinary, multi-national co-curricular aerospace design project <i>Anette Kolmos, Lykke Brogaard Bertel, Jette Egelund Holgaard and Henrik Worm Routhé</i> Project Types and Complex Problem-Solving Competencies: Towards a Conceptual Framework</p>
	<p>Session 2: <i>PBL, cognition and Social interactions – Processes and Tools to Develop Collaborative Competences</i></p>	<p>Moderator: Aida Guerra (Aalborg University, Denmark)</p>	<p>Presentations: <i>Jonte Bernhard, Jacob Davidsen and Thomas Ryberg</i> By hand and by computer – a video-ethnographic study of engineering students’ representational practices in a design project <i>Ron Ulseth and Bart Johnson</i> Design-Based Research: Students building workplace skills in a new educational model <i>Preethi Baligar, Gopalkrishna Joshi and Ashok Shettar</i> Assessment of Collaborative-Problem Solving Competency in Engineering Education: a Systematic Literature Review</p>

14:00 – 14:55 (CET)	Session 3: <i>Development and awareness of Future Competences and Learning Spaces</i>	Moderator: Jette E. Holgaard (Aalborg University, Denmark)	Presentations: <i>Juebei Chen, Anette Kolmos and Xiangyun Du</i> The Effectiveness of Teamwork on Students’ Engineering Professional Identity Development in the AAU PBL Model: From the Perspectives of International Engineering Students <i>Oscar Ivan Higuera-Martinez and Liliana Fernández-Samacá</i> Fostering Creativity in Engineering through PBL <i>Tom Radisch, Johannes Schüler, Karsten Menzel and Ulrich Möller</i> Cross disciplinary Project Based learning in the context of Building Information Modelling
NOVEMBER 25, 2020			
13:00 – 13:55 (CET)	Session 1: <i>Sustainability, Complexity and Interdisciplinarity – Generating innovative and interdisciplinary knowledge and practice: PBL and Sustainability</i>	Moderator: Thomas Ryberg (Aalborg University, Denmark)	Presentations: <i>Carlos Efrén Mora, Shannon Chance, Inês Direito, María Dolores Morera, Lastenia Hernández-Zamora and Bill Williams</i> INGENIA, a novel program Impacting Sustainable Development Goals locally through students’ actions <i>Jette Egelund Holgaard, Carla K. Smink, Aida Guerra and Virginie Servant-Miklos</i> Educating Engineering Educators for Sustainability – a case of online resources for staff development
	Session 2: <i>Democracy, Social progress and PBL: Overall experiences and reflections</i>	Moderator: Ronald Ulseth (Iron Range Eng., USA)	Presentations: <i>Khalid Kamal Naji, Hessa AL-Thani, Abdulla Khalid A M Al-Ali, Usama Ali Ali Ebead and Xiangyun Du</i> Characteristics, benefits, challenges and socio-cultural factors of implementing PBL in Qatar <i>Kristina Nyström, Sara Nyberg and Gunaratna Kuttuva Rajarao</i> Experience and reflections – implementing European teaching methods in 5 African Universities

14:00 – 14:55 (CET)	Session 3: <i>Variety and Understanding of Problems and Projects: Variations in PBL</i>	Moderator: Xiangyun Du (Qatar University, Qatar)	Presentations: <i>Bettina Dahl and Annette Grunwald</i> Variation in PBL in different university STEM study programmes: How elastic is PBL? <i>Kaushik Mallibhat and Gopalkrishna Joshi</i> A Systematic Review on Frameworks of Project-Based Learning <i>Karsten Menzel, Johannes Schüler and Nicolas Mitsch</i> A PBL-environment for Smart Buildings
	Session 4: <i>Blended PBL Environments: Online PBL education</i>	Moderator: Lykke Bertel (Aalborg University, Denmark)	Presentations: <i>Godfred Annum, Daniel Adjei-Boateng and Regina Edziyie</i> The Impact of E-learning in the Running of Laboratory-Based Programmes in Higher Educational Institution. A Case Study of the Department of Fisheries and Watershed Management, KNUST, Kumasi, Ghana <i>Aida Guerra, Franck Schoefs and Mathilde Chevreuil</i> Preparing engineering students for collaborative project-work: piloting an online course on PBL and project management <i>Thomas Bjørner and Marius Cristian Mic</i> Tech students' perceptions of social media's usefulness during PBL group work
JANUARY 27, 2021			
13:00 – 13:55 (CET)	Session 1: <i>Democracy, Social progress and PBL: Implementation of PBL</i>	Moderator: Lelanie Smith (University of Pretoria, South Africa)	Presentations: <i>Banjamin Asubam Weyori, Francis Attiogbe and Samuel Gyamfi</i> PBL Framework for African Higher Education: A Case Study in UENR <i>Richard Lamptey, Richard Tawiah, William Oduro and Gabriel Okyere</i> Problem Based Learning at Kwame Nkrumah University of Science and Technology: Reporting on Policies, Practices and Needs

			<p><i>Americo Azevedo</i> From the business model to business processes design and technological support: a project-based learning approach</p>
	<p>Session 2: <i>Variety and Understanding of Problems and Projects: PBL and project group work</i></p>	<p>Moderator: Pia Bøgelund (Aalborg University, Denmark)</p>	<p>Presentations: <i>Fernando Rodríguez-Mesa and Claus Monrad Spliid</i> Information management impacts when students configure the project-work <i>Vincenzo Liso</i> Issues and practical solutions in project group writing in the PBL education</p>
14:00 – 14:55 (CET)	<p>Session 3: <i>PBL, Industry and Entrepreneurship</i></p>	<p>Moderator: Bente Nørgaard (Aalborg University, Aalborg)</p>	<p>Presentations: <i>Ute Berbuir and Magdalena John</i> Not in my backyard – Dealing with challenges of public participation in industrial and infrastructure projects in an engineering education course <i>Maddi Garmendia, Gorka Alberro and Aida Guerra</i> PBL to foster integration of company projects in engineering curricula – a case example <i>Martin Jaeger, Gang Yu and Desmond Adair</i> Industry Perspective on Project Based Learning – Comparing Chinese Managers Overseas with Chinese Engineering Managers at Home</p>
	<p>Session 4: <i>Innovation in the Role of the Teacher in PBL: PBL and educators</i></p>	<p>Moderator: Bettina Dahl (Aalborg University, Denmark)</p>	<p>Presentations: <i>Philip Duker</i> Backwards Design, Standards-based Grading, and Scaffolding in the PBL Classroom <i>Helene Clausen and Vibeke Andersson</i> Linking Action Research and PBL. Case. A Mexican case of co-creation <i>Virginie Servant-Miklos and Irene van Oorschot</i> Collaboration, Reflection and Imagination: rethinking Assessment in PBL education for sustainability</p>

FEBRUARY 24, 2021

13:00 – 13:55 (CET)	<p>Session 1: <i>Innovation in the Role of the Teacher in PBL: Ways of doing PBL</i></p>	<p>Moderator: Bart Johnson (Itasca Community College, USA)</p>	<p>Presentations: <i>Imad Abou-Hayt, Bettina Dahl and Camilla Østerberg Rump</i> A Problem-Based Approach to Teaching a Course in Engineering Mechanics <i>Mona Lisa Dahms, Maryam Ismail, Anthony Zozimus Sangeda and Al Saah</i> The Jigsaw Classroom – a Student-Centered Learning approach applied in Training of Trainers in African Universities</p>
	<p>Session 2: <i>Teachers role in PBL: Encouragement and support for teachers using PBL</i></p>	<p>Moderator: Claus M. Spiild (Aalborg University, Denmark)</p>	<p>Presentations: <i>Mary C. English</i> Tools for Scaffolding Educators' Project Design Process <i>Annette Grunwald, Henrik Worm Routhé, Mette Hesselholt Henne Hansen, Martin Krabbe Sillassen, Charlotte Krog Skott, Morten Rask Petersen, Jørgen Haagen Petersen, Lone Djernis Olsen and Steffen Elmoose</i> Using a PBL perspective in continuing education of science and mathematics lower secondary teachers</p>
14:00 – 14:55 (CET)	<p>Session 3: <i>How to support international and interdisciplinary PBL in a digital format?</i></p>	<p>Moderator: Jens Myrup Pedersen (Aalborg University, Denmark)</p>	<p>Brief description: In connection with end of the Erasmus+ project EPIC. A project where students work on joint projects across nationalities and disciplines - usually in collaboration with companies.</p>
	<p>Session 4: <i>Curriculum Design: Implementing a PBL approach</i></p>	<p>Moderator: Ulisses Araújo (University of San Paulo, Brazil)</p>	<p>Presentations: <i>Juan Carlos Cruz, Carolina Muñoz-Camargo, Francisco Buitrago-Flórez and Carola Hernández</i> Integrating two core Biomedical Engineering courses through a project-based learning approach: A framework for teaching student-centered comprehensive engineering design <i>Bente Nørgaard, Henrik Bregnhøj and Ernest Kira</i> Implementation of ABC Learning Design for curriculum development in an African context</p>

			<i>Kjell Staffas, Steffi Knorn, Aida Guerra, Damiano Varagnolo and André Teixeira</i> Using different taxonomies to formulate learning outcomes to innovative engineering curriculum towards PBL: perspectives from engineering educators
MARCH 31, 2021			
13:00 – 13:55 (CET)	Session 1: <i>Teachers role in PBL: The role of the teacher</i>	Moderator: Anette Kolmos (Aalborg University, Denmark)	Presentations: <i>Mette Møller Jeppesen, Henrik Worm Routhe, Rikke Slot Kristensen and Jutta Prip</i> The role of the teacher in a PBL teaching process <i>Liliana Fernández-Samacá, Lorena Maria Alarcón Aranguren, Claudia Isabel Rojas and Alejandra María González Correal</i> Encouraging faculty towards the curriculum transformation of engineering programs <i>Karsten Menzel and Michal Otreba</i> Assessment methods in split-level (PBL) ² for Building Information Modelling
	Session 2: <i>PBL Implementation – Advantages and Disadvantages</i>	Moderator: Preethi Baligar (KLE Technological University, India)	Presentations: <i>Giang Tran Thi Minh</i> Empowering English-Majored Students at DUY TAN University through Project Based Learning to Upgrade their Graduation Theses <i>Jonathan Montoya, Forest Peterson and Sade Bonilla</i> Opportunity Gap and Women in the Energy Infrastructure Workforce <i>Bettina Knappe, Gesine Cornelissen, Dagmar Rokita, Christoph Maas and Gerwald Lichtenberg</i> An interdisciplinary Biotechnology Project – Experiences with a change to PBL
14:00 – 14:55 (CET)	Session 3: <i>Curriculum Design: PBL curriculum and competencies</i>	Moderator: Jonte Bernhard (Linköping University, Sweden)	Presentations: <i>Jette Egelund Holgaard, Anette Kolmos and Maiken Winther</i> Designing Progressive Intended Learning Outcomes for PBL: A Workshop Format for Curriculum Redesign

			<p><i>Martin Wölker, Janina Müller and Ulla Tschötschel</i> Promotion of competencies through case studies in logistics studies</p> <p><i>Anders Melbye Boelt, Nanna Svarre Kristensen and Nicolaj Riise Clausen</i> Classification and framing in PBL: a case study</p>
	<p>Session 4: <i>PBL Implementation – Experiences and Workflows: Implantation of PBL</i></p>	<p>Moderator: Erik de Graaff (Aalborg University, Denmark)</p>	<p>Presentations:</p> <p><i>Carola Hernández and Carola Gómez</i> Developing Teamwork skills in a multidisciplinary project-oriented course</p> <p><i>Preethi Baligar, Sanjeev Kavale, Kaushik Mallibhat and Gopalkrishna Joshi</i> Crafting design problems for Project-based learning in first-year undergraduate engineering education</p> <p><i>Lisette Wijnia and Gera Noordzij</i> Development of Motivation in a Problem-Based Psychology Bachelor’s Program</p>