

ID: 101 / BO4.1: 1

Short Presentation (15')

Topics: Track 4: Seamless, Inclusive, Green Mobility and Tools for Flexible Learning

Keywords: Student-interactive seminars, digital tools, international cooperation, preparing for mobility

Student virtual interaction in combination with physical mobility: three models

Stellan Sundh

Uppsala University, Sweden

Intercultural and international learning is central today at universities for the understanding of the multicultural society. Digital tools and social media are useful in this context when learning at different universities in Europe is organised to encourage the mutual understanding of current cultural differences. Not all students can choose exchange programs with physical mobility for various reasons. Virtual activities are then possible to combine with optional physical mobility in various ways to stimulate for a follow-up of the encounters carried out on-line. Three examples of exchange in teacher education courses show the potential of this model.

Bibliography

Sundh, Stellan and Marketa Denksteinova (2017) "The Role of a Teacher in Videoconferencing" in Videoconferencing in Language Education ed. by Libor Stepanek and Katerina Sedlackova, Masaryk University, Brno, Czech Republic

Mutabazi, Eric and Stellan Sundh (2017) Comparaison d'expériences scolaires comme moyen pédagogique: cas d'un dispositif pédagogique favorisant l'échange sur la spécificité culturelle entre étudiants français et suédois autour du métier de professeurs des écoles Education Comparée 17, pp.33-57

Sundh, Stellan and Marketa Denksteinova (2015) "Video conferencing in Teaching Cross-cultural Competences" in CASALC Review, 2015/16, volume 5, number 1. (pp. 75-85) ISSN 1804-9435

ID: 102 / BO5.3: 1

Short Presentation (15')

Topics: Track 3: Generic Competencies and Global Engagement

Keywords: distributed course, project course, student-centered learning, international collaboration

A sustainable internationally distributed project course in software development

Mats Daniels¹, Anders Berglund¹, Arnold Pears²

¹Uppsala Computing Education Research Grup, Uppsala University, Sweden; ²Department of Learning in Engineering Sciences, KTH, Sweden

This course focus on collaborative learning of computer systems in international teams of approx. 6 students. The course is designed so that the students do not only learning computer science per se (by developing a computer software to control a robot), but also relevant professional competencies, such as collaboration. The course, that has run for 20 years, with only minor changes. Different aspects of the learning in the course have been evaluated and researched, particular to offer the students' perspective on their own learning and development. The results are encouraging.

Bibliography

Selected, relevant publications.

1. Berglund, A., Daniels, and Pears, A. (2019), Inspiring students in their learning: A theoretically based discussion building on three courses ASEE/IEEE Frontiers in Education Conference, Covington, USA.
2. Beecham, S., Clear, T., Barr, J., Daniels, M., Oudshoorn, M., and Noll, J. (2017), Preparing Tomorrow's Software Engineers for Work in a Global Environment, IEEE Software, January/February, pp 9-12.
3. Nylén, A., Daniels, M., and Isomöttönen, V. (2017) Open-Ended Projects Opened Up – Aspects of Openness, ASEE/IEEE Frontiers in Education, Indianapolis, USA.
4. Pears, A., Daniels, M., and Cajander, Å. (2014) Integrating Global Systems Development Skills into the Engineering Curriculum, ASEE International Forum, Indianapolis, USA.
5. Cajander, Å., Daniels, M., and McDermott, R. (2012) "On Valuing Peers – Theories of Learning and Intercultural Competence", Computer Science Education, vol 22, pp 319-342.
6. Bernáld, H., Cajander, Å., Daniels, M., and Laxer, C. (2011) "Reasoning About the Value of Cultural Awareness in International Collaboration", Journal of Applied Computing and Information Technology, vol 15, no 1.
7. Daniels, M. (2010) "The Contribution of Open Ended Group Projects to International Student Collaborations", ACM Inroads, vol 1, no 3, pp 79-84.
8. Pears, A. and Daniels, M. (2010) Developing Global Teamwork Skills: The Runestone Project, IEEE EDUCON, Madrid, Spain.
9. Cajander, Å., Clear, T., Daniels, M., Edlund, J., Hamrin, P., Laxer, C., and Persson, M. (2009) Students analyzing their collaboration in an International Open Ended Group Project, ASEE/IEEE Frontiers in Education conference, San Antonio, USA, pp M1D 1-6.
10. Daniels, M., Berglund, A., and Pears, A. (2003) Runestone, The Story, Grundutbildningsrådets utvecklingskonferens, Gävle, Sweden, pp 170-177.
11. Pears, A., Daniels, M., Berglund, A., and Erickson, C. (2001) Student Evaluation in an International Collaborative Project Course, SAINT, San Diego, USA.
12. Daniels, M. and Fincher, S. (1999) Evaluating a joint international project in disjunct courses, SEFI workshop, Delft, Holland.
13. Daniels, M., Petre, M., Almstrum, V., Asplund, L., Björkman, C., Erickson, C., Klein, B., and Last, M. (1998) RUNESTONE, an International Student Collaboration Project. ASEE/IEEE Frontiers in Education conference, Tempe, USA.

ID: 103 / BO4.1: 2

Short Presentation (15')

Topics: Track 4: Seamless, Inclusive, Green Mobility and Tools for Flexible Learning

Keywords: online learning, project-based learning, flipped classroom, scalable, low-budget

Online learning that is worth it in a post-pandemic world (efficient, flexible, social, cheap)

Stefaan Cottenier

Ghent University, Belgium

In the year 5 BC (Before Corona) I started developing an online course format that evolved to combine the best of many worlds: it is engaging, has a high learning effect, is fully flexible in terms of planning for the students, is scalable (10, 100, 1000,... students), it's shareable between universities, and it doesn't require a large budget. Students learn from the teacher and from each other, and collaborate on a challenging project across universities, countries and time zones. I look forward to inspiring you to set up something similar for your course. Sneak preview at <https://youtu.be/LqoXYCDu-kw>.

ID: 104 / BO10.2: 1

Short Presentation (15')

Topics: Track 2: Challenge-based Education

Keywords: pedagogical communication, internationalisation, peer learning, teamwork, engagement

Pedagogical communication in the international environment

Lucia Hlavatá

Comenius University in Bratislava, Slovak Republic

The newly introduced BA course "Pedagogical communication" at Comenius University in Bratislava, Slovakia, follows the principles of internationalisation addressing both the needs of international students and so-called internationalisation at home. By using several active learning methods as teamwork, peer learning and various types of formative assessment it aims to achieve the outcomes focused on improvement of pedagogical skills needed in international environment, improvement of student's soft skills and increasing of student's motivation and engagement during the lesson. Moreover, it aims to prepare students for their future opportunities, as teaching in international or mixed classrooms at home or abroad.

Bibliography

Biggs, John (undated) "Aligning teaching for constructing learning," The Higher Education Academy, available from:

<https://www.advance-he.ac.uk/knowledge-hub/aligning-teaching-constructing-learning>.

Hayden Mary (2008), Thomson Jeff: International schools: growth and influence. Paris: UNESCO: International Institute for Educational Planning.

PLESCHOVA, G., SIMON A. (2018). Early career academics' reflections on learning to teach in Central Europe. London: SEDA.

ID: 106 / BO11.4: 1

Short Presentation (15')

Topics: Track 1: Educational Quality Approach

Keywords: engaged learning, early career researcher, community engagement

Engaged Learning seminars for early career researchers

Courtney Marsh, Noel Klima

Universiteit Gent, Belgium

We aim to push forward the agenda of the University as a part of an ecosystem of knowledge production addressing public problem-solving. With this framework in mind, addressing the concept (through seminars) of Engaged Learning at an early stage (such as the PhD level) has been thought most prudent in pushing forward this agenda. The results from our trial seminars will include reflections on the student's expectations prior to the seminars and their evaluations thereafter. What we have found is that there is a desire to have more awareness of and connections with local communities in their research.

Bibliography

Marsh, C., Anderson, L., & Klima, N. (Eds.). (2021). Engaged learning in Europe. Antwerp: Maklu.

Chmelka, A., Anderson, L., Ferraresi, E., Griffith, M., Klima, N., Marsh, D. C., ... Sutela, E. (2020). Communities and Students Together (CaST): a state-of-the-art review of Engaged Learning in Belgium, Finland, Germany, Italy, Spain and the United Kingdom.

ID: 107 / BO11.3: 2

Short Presentation (15')

Topics: Track 2: Challenge-based Education, Track 3: Generic Competencies and Global Engagement

Keywords: international and intercultural competencies, inter-university learning initiatives

Developing HE students' international and intercultural competencies through international peer-interactions in a Qualitative Research course

Peter Stevens, Ernst Buyl

Ghent University, Belgium

This presentation describes and evaluates a learning initiative aimed at developing international and intercultural competencies (IIC's) with students taught separately at Ghent University, University of Western Cape (South Africa) and University of Missouri (USA), students from these different universities carried out a similar qualitative research project in their respective national contexts (i.e. research on homeschooling during the Covid-19 pandemic). At the end of the research process, students were asked to interact online and write an individual reflection assignment about what they have learned from these interactions. This presentation aims to inspire Enlight colleagues to develop similar, collaborative inter-university learning initiatives.

Bibliography

Prof. dr. Peter Stevens teaches qualitative research and conducts research on racism and discrimination in education and is based at the Department of Sociology, Faculty of Political and Social Sciences, Ghent University. Dr. Ernst Buyl works on educational innovation and evaluation projects at the Faculty of Political and Social Sciences, Ghent University.

Stevens, Peter A. J. and Dworkin, Gary (Eds). 2019. The Palgrave Handbook of Race and Ethnic Inequalities in Education, Basingstoke: Palgrave.

ID: 108 / BO7.1: 1

Interactive Workshop (45')

Topics: Track 2: Challenge-based Education

Keywords: problem-based learning, case studies, active learning, communication, collaboration

Inspiration into learning: Creating educational case studies inspired by everyday life

Janet Angela Hart

Massachusetts College of Pharmacy & Health Sciences, United States of America

We are surrounded by inspiration that can inform our teaching. Everything from historical events to modern everyday life can help us translate conceptual knowledge into engaging classroom activities. Instructional case studies are a versatile problem-based tool that can transform our inspirations into active student engagement and positive learning outcomes across a wide variety of disciplines. They help students develop important skills related to communication, reading comprehension, and critical thinking (e.g. synthesis, analysis, application) using real world examples. In this session, participants will explore in small groups how to use and create this type of innovative activity.

Bibliography

DeMasi, J. and De Souza-Hart, J.A. (2019). CAR T Immunotherapy: Engineering the Immune System to Fight Cancer. National Center for Case Study Teaching in Science. Retrieved from:

http://sciencecases.lib.buffalo.edu/cs/collection/detail.asp?case_id=1031&id=1031

De Souza-Hart, J.A. and DeMasi, J. (2019). The Sound of DNA: Musical Gene Expression. National Center for Case Study Teaching in Science. Retrieved from: http://sciencecases.lib.buffalo.edu/cs/collection/detail.asp?case_id=1012&id=1012

De Souza-Hart, J.A. (2017). The Path of a Pathogen: The Past, Present, & Future of Zika. National Center for Case Study Teaching in Science. Retrieved from: http://sciencecases.lib.buffalo.edu/cs/collection/detail.asp?case_id=972&id=972

De Souza-Hart, J.A. (2015). Drug Wars: An Epic Tale of Asthma and Bacterial Pneumonia. National Center for Case Study Teaching in Science. Retrieved from: http://sciencecases.lib.buffalo.edu/cs/collection/detail.asp?case_id=764&id=764

De Souza-Hart, J.A. and Ho, D. (2014). The Gen-Ethics Bowl: An In-Class Activity Combining Genetics & Bioethics. J. of Microbiology and Biology Education, 15(2), 238-9.

De Souza-Hart, J.A. (2013). A Family in Need: In Class Case Study on Cancer Genetics. National Center for Case Study Teaching in Science. Retrieved from: http://sciencecases.lib.buffalo.edu/cs/collection/detail.asp?case_id=677&id=677

Note: I publish under J.A. De Souza-Hart (my maiden and married names hyphenated).

Supporting material: An annotated bibliography with dozens of research articles that demonstrate the pedagogical effectiveness of case studies can be found here: https://sciencecases.lib.buffalo.edu/pdfs/Bibliography_Case_Study_Teaching_Science.pdf

ID: 109 / BO4.3: 1

Short Presentation (15')

Topics: Track 3: Generic Competencies and Global Engagement

Keywords: multilingualism, communicative competence, peer-learning, learning logs

Enhancing students' multilingual communicative competence through peer learning-based course

Jana Výškrabková

Comenius University in Bratislava, Slovak Republic

The contribution is focused on presenting the design and the concept of the new course "Multilingual Communication" at the Faculty of Arts, Comenius University in Bratislava. The course is based on peer learning, reflexive learning and formative assessment. Teaching the course, I will implement learning logs as a tool for reflections, self-evaluation, and assessment. I suppose the concept of the course will positively impact students' communicative competence in multilingual and multicultural internationalised environments. Part of my contribution is the presentation of partial outputs of learning logs, in which students reflect their perceptions of the course and their learning and progress.

Bibliography

VÝŠKRABKOVÁ, Jana. Rozvíjanie produktívnych jazykových zručností v e-learningových kurzoch slovenčiny ako cudzieho jazyka. In *Varia 28 : zborník príspevkov z XXVIII. Kolokvia mladých jazykovedcov*. Nitra : Univerzita Konštantína Filozofa v Nitre, 2020. s. 244-250. ISBN 978-80-558-1632-6.

MOŠAŤOVÁ, Michaela – VÝŠKRABKOVÁ, Jana. Designing tasks for developing complex language skills and cognitive competence in the distance learning of Slovak as a foreign language. In *CALL and complexity : short papers from EUROCALL 2019*. Voillans : Research-publishing, 2019. s. 310-313. ISBN 978-2-490057-54-2.

ID: 110 / BO10.4: 1

Short Presentation (15')

Topics: Track 2: Challenge-based Education

Keywords: internationalisation, teaching history, peer learning, presentation skills

Teaching and learning Central European history for international students in Bratislava

Stanislava Kuzmová

Comenius University in Bratislava, Slovak Republic

This contribution will address the specifics of learning and teaching of history of Central Europe for international students. The students who typically come as part of their Erasmus exchange programme enrol for courses in their discipline but many are also interested to learn about the history and the country they come to. The contribution will discuss the possibilities of redesigning a course by attaining specifically to the needs of this group of students.

ID: 112 / BO11.2: 1

Interactive Workshop (45')

Topics: Track 1: Educational Quality Approach, Track 2: Challenge-based Education, Track 3: Generic Competencies and Global Engagement

Keywords: Games, Stories, Learning by teaching, Computer Architecture

Learning by teaching, games, and story design

Edurne Larraza-Mendiluze, Olatz Arbelaitz Gallego, Olatz Arregi Uriarte, José Francisco Lukas Mujika, José Ignacio Martín Aramburu

UPV/EHU, Spain

Students in the subject called Introduction to Computer Architecture, first year of Artificial Intelligence, will be learning the introductory concepts of the subject using games designed to introduce these concepts in primary and secondary education. After using the games, in order to internalize the knowledge, they will have to design stories to introduce the games, and what is expected to learn from them.

The perception that students and teacher get about the learning outcomes will be analyzed.

Bibliography

Frank-Bolton, P., & Simha, R. (2018, February). Docendo discimus: Students learn by teaching peers through video. In Proceedings of the 49th ACM technical symposium on computer science education (pp. 473-478). Available from: <https://dl.acm.org/doi/10.1145/3159450.3159466>

Thomas, N., Carroll, F., Kop, R., & Stocking, S. (2012). iBook learning experience: the challenge of teaching computer architecture to first year university students. P Worldcomp, 16-19. Disponible en: <http://worldcomp-proceedings.com/proc/p2012/EEE2439.pdf>

Willingham, D. T. (2004). Ask the cognitive scientist the privileged status of story. American Educator, 28, 43-45. Available from: <https://www.aft.org/periodical/american-educator/summer-2004/ask-cognitive-scientist>

ID: 113 / BO9.4: 1

Short Presentation (15')

Topics: Track 1: Educational Quality Approach, Track 2: Challenge-based Education, Track 3: Generic Competencies and Global Engagement

Keywords: Higher Education, Sustainability, Macroeconomics, Building Team-Works, Problem Based Learning (PBL)

Ehgin-macroeconomics using agenda 2030 to build team-works and teach macroeconomics to first year university students

Patricia Peinado, Ricardo Bustillo, Begoña Eguia, Catalina Gálvez, Carmen Gómez, Ana González

University of the Basque Country UPV/EHU, Spain

Students are key social actors who must acquire cognitive, socioemotional and behavioural skills to face the challenge of building up a sustainable society. Our two teaching innovations give evidence that may be helpful for other teachers and institutions. The first innovation, to build team works with similar and common concerns using Agenda2030. The second, to teach on "Gender Equality". In order to measure the level of acquisition of skills, we have design and drawn students' answers passing two "ad hoc" surveys. Results show the benefits of implementing these two innovations as students significantly reveal an improvement of the associated skills.

Bibliography

Peinado P, Bustillo R, Gálvez C (2019) Webinar: A new global tool to promote deep learning in the classroom. *Journal of Management and Business Education* 2(3): 279-292

Peinado, P. (2017) Introduction to Economics II: Principles of Macroeconomics. Student's Book. Ed. Rectorate for Quality and Teaching Innovation. University of the Basque Country. ISBN: 2254-9153

Peinado, P. (2017) Introduction to Economics II: Principles of Macroeconomics. Lecture's Book. Ed. Rectorate for Quality and Teaching Innovation. University of the Basque Country. ISBN: 2254-9153

ID: 114 / BO9.3: 1

Short Presentation (15')

Topics: Track 1: Educational Quality Approach, Track 2: Challenge-based Education, Track 3: Generic Competencies and Global Engagement

Keywords: Sustainability; Professional Competencies; Citizenship Education; Higher Education; Active Learning; Serious Games; Critical Thinking;

A Serious game for the promotion of transversal competences and sustainable decision-making

Noemi Peña Miguel, Ainhoa Saitua Iribar, Javier Corral Lage, Sonia Garcia Delgado, Izaskun Ipiñazar Petralanda
UNIVERSITY OF THE BASQUE COUNTRY, Spain

Graduates of the different degrees at our universities should be able to incorporate the management of actions to promote the SDGs in their professional performance. For this aim, in higher education we should, on the one hand, increase students' knowledge of the SDGs and on the other hand, promote the development of competences for sustainability in students.

The Serious Game "The Island" shows evidence of its effectiveness in increasing students' knowledge of the SDGs and promoting the development of competences for sustainability in students.

Bibliography

-Improving Knowledge about the Sustainable Development Goals through a Collaborative Learning Methodology and Serious Game

Nombre revista: SUSTAINABILITY
Sustainability 2020, 12(15), 6169; <https://doi.org/10.3390/su12156169>
ISSN: 2071-1050
JIF 3.252 – 60/125 Q2 – JCI 160/125 Q3. Environmental Sciences

- Promoting abilities and skills using serious games
ISBN: 978-84-616-8412-0 Pag: 1890-1897

-IMPROVING ABILITIES AND SKILLS USING A BUSINESS GAME OF SCIENTIFIC-TECHNOLOGICAL BASE

Nombre revista: INTERNATIONAL RESEARCH JOURNAL OF FINANCE AND ECONOMICS
ISSN: 1450-2887 Volumen: 134 Mayo 2015 Páginas, inicial: 13 final: 22
Fecha: 2015

-EDUCATIONAL GAMES FOR LEARNING.

ISSN: 2332-3205
Nombre revista: UNIVERSAL JOURNAL OF EDUCATIONAL RESEARCH
ISSN: 2332-3205 (Print) ISSN: 2332-3213 (Online)
DOI 10.13189/ujer.2014.020305
2014
International Technology, Education and Development
Editorial (si libro): L. Gómez Chova, A. López Martínez, I. Candel

-Assessment of the Development of Professional Skills in University Students: Sustainability and Serious Games

Nombre revista: SUSTAINABILITY
Sustainability 2020, 12, 1014; doi:10.3390/su12031014
ISSN: 2071-1050
<https://www.mdpi.com/2071-1050/12/3/1014>
JIF 3.252 – 60/125 Q2 – JCI 160/125 Q3.

ID: 115 / BO10.1: 1

Short Presentation (15')

Topics: Track 2: Challenge-based Education, Track 4: Seamless, Inclusive, Green Mobility and Tools for Flexible Learning, Track 5: Structural Dialogue with Local Stakeholders

Keywords: Challenge-based learning, inclusivity, creativity

Re-making the creative arts canon, re-imagining the creative arts curriculum: a challenge-based approach to inclusion and partnership

Patrick Lonergan, Clara Murphy

NUI Galway

This presentation outlines how more than 100 NUI Galway students and teachers came together with local and national creative arts partners to address one of our major shared challenges: the neglect and omission of key figures from the canon (as performed by arts organisations) and the curriculum (as taught in universities). In credit-bearing modules, students and teachers staged a festival of new work online, presenting new performances, creating teaching resources, hosting seminars, and more. As well as offering peer-learning and ensemble-based experiences, the project generated new material (such as scripts and scores) for our partners to perform in the future.

Bibliography

Patrick Lonergan, *Irish Drama and Theatre Since 1950*. London: Bloomsbury, 2019.

Patrick Lonergan (2020) 'It is suicide to be abroad. But what it is to be at home: Beckett as national performance'. *Scene*, 8 (1-2):73-90. <https://www.ingentaconnect.com/content/intellect/scene/2020/00000008/f0020001/art00006>

Patrick Lonergan (2020) 'Now for Our Irish Wars Jez Butterworths *The Ferryman* and the Irish Dramatic Canon'. *Contemporary Theatre Review*, 30 (4):456-473. <https://www.tandfonline.com/doi/abs/10.1080/10486801.2020.1821197>

Patrick Lonergan (2020) 'A Twisted, Looping Form: Staging Ella Hickson's *_Oil_*'. *Performance Research*, 25 (2):38-44. <https://www.tandfonline.com/doi/full/10.1080/13528165.2020.1752575>

ID: 117 / BO2.2: 1

Interactive Workshop (45')

Topics: Track 2: Challenge-based Education

Keywords: Communication, Questions, Real-world, Challenges, Connection

Are you a questionologist?

Natalie M Walsh, Neil Ferguson

NUI Galway, Ireland

When we are confronted with almost any situation, beautiful questions guide us to make better decisions and to create more productive courses of action. Through questions we learn from and with one another. Questioning is one of the most powerful skills we can teach and learn. Using questionology we can decide, create, connect and lead, quickly and with impact. Beautiful questions cannot be answered by google. Blending the art of beautiful questions with real world challenges our students work to develop innovative solutions that positively impact upon our society and the world of work.

ID: 118 / BO6.4: 1

Interactive Workshop (45')

Topics: Track 2: Challenge-based Education

Keywords: Communication, Questions, Real-world, Persuasion, Connection

The power of talk

Natalie M Walsh, Neil Ferguson

NUI Galway, Ireland

What does great communication look like? What are the critical moments that occur in the audience's journey with you? How can you inspire, influence and impact behaviours and outcomes when environments are uncertain?. This interactive workshop that brings together real world challenges with enterprise experts, founders and investors will take a deep dive into the art of communication persuasion. It will focus on how through your communication style you can generate trust, credibility and personal and professional impact. The workshop will explore techniques for tailoring your communication to influence and persuade.

ID: 119 / BO9.1: 1

Short Presentation (15')

Topics: Track 2: Challenge-based Education

Keywords: Challenge based learning, multidisciplinary learning in engineering, active student participation, autonomous students, empowerment and engagement

Grand designs: From challenges to possibilities

Kathryn Cormican

National University of Ireland, Galway, Ireland

Imagine trying to rewire a deeply ingrained mindset. This session shares insights on an educator's journey that attempts to enable learners to shift away from a focus on technology towards a more user-centred approach. Technology Innovation + Entrepreneurship was specifically designed in collaboration with industry leaders to better understand real-world problems and to generate commercially viable solutions that meet users' needs. It equips learners with a structured collaborative process, supported by methods and tools. Many lessons have been learned over the last 15 years and this session will share the good, the bad and the ugly...!

Bibliography

- De Paula, D., Cormican, K. and Dobrigkeit, F. (2021) From acquaintances to partners in innovation: An analysis of twenty years of design thinking's contribution to new product development. *IEEE Transactions on Engineering Management* doi: 10.1109/TEM.2021.3084884.
- O'Connor, D. and Cormican, K. (2021) Leading from the middle: Practices of team leaders on the front line of lean implementation. *International Journal of Lean Six Sigma* DOI: <https://doi.org/10.1108/IJLSS-11-2020-0194>
- Yang, L. and Cormican, K. (2021) The Crossovers and Connectivity between Systems Engineering and the Sustainable Development Goals: A Scoping Study *Sustainability* 2021, 13, 3176. <https://doi.org/10.3390/su13063176>
- Wu, Q. and Cormican, K. (2021) Shared leadership and team effectiveness: An investigation of whether and when in engineering design teams *Frontiers in Psychology*, 11, doi:10.3389/fpsyg.2020.569198
- Wu, Q., Cormican, K., Sampaio, S. (2021) Shared Leadership: Towards a Theoretical Moderation Framework in Information Systems Project Teams, *International Journal of Information Technology Project Management (IJITPM)*, 12, 3,
- Yang, L., Cormican, K., and Yu, M. (2021) Ontology Learning for Systems Engineering Body of Knowledge," in *IEEE Transactions on Industrial Informatics*, 17, 2, pp. 1039-1047, doi: 10.1109/TII.2020.2990953. doi.org/10.1109/TII.2020.2990953
- Keane, S., Cormican, K. and Sheahan, J. (2021) Exploring the dimensionality of entrepreneurial self-efficacy in entrepreneurs and managers: a cognitive process perspective. *Journal of Global Entrepreneurship Research* Open Access May 2021 <https://doi.org/10.1007/s40497-021-00281-2>
- Yang, L., Cormican, K. and Yu, M. (2019) Ontology-based systems engineering: A State-of-the-art review *Computers in Industry* 111, 148-171. doi.org/10.1016/j.compind.2019.05.003
- Scannell, P. and Cormican, K. (2019) Spinning out of control? How academic spinoff formation overlooks medical device regulations *Journal of Technology Management & Innovation*, 14(3), 82-92. doi:10.4067/S0718-27242019000300082
- Corry, S. and Cormican, K. (2019) Towards innovation in multinational corporation subsidiaries: Development of an instrument to select and evaluate value driven strategies, *Journal of Technology Management & Innovation*, 14, 1, 25-33. doi.org/10.4067/S0718-27242019000100025
- Gill, A., Cormican, K. and Clohessy T. (2019) Walking the Innovation Tightrope: Maintaining Balance with an Ambidextrous Organization. *International Journal of Technology Management*, 79, 3-4, 220 - 246 doi: 10.1504/IJTM.2019.099611
- Wu, Q. Cormican, K. and Chen, G. (2018) A Meta-Analysis of Shared Leadership: Antecedents, Consequences and Moderators *Journal of Leadership and Organizational Studies*, 27, 1, 49-64. doi.org/10.1177/1548051818820862
- Keane, S., Cormican, K. and Sheahan, J. (2018) Comparing how entrepreneurs and managers represent the elements of the business model canvas. *Journal of Business Venturing Insights*, 9, 65-74. doi: 10.1016/j.jbvi.2018.02.004
- Considine, E and Cormican, K. (2017) The rise of the prosumer: An analysis of self-service technology adoption in a corporate context. *International Journal of Information Systems and Project Management*, 5 (2), 25-39.
- O'Dwyer, C. and Cormican (2017) Regulation – Do or Die: An analysis of factors critical to New Product Development in a Regulatory Context. *Journal of Technology Management and Innovation*, 12(1) 26-38.

ID: 120 / BO9.3: 2

Short Presentation (15')

Topics: Track 2: Challenge-based Education

Keywords: social media, literary criticism, culture, interpretation, literature

Teaching how to talk and write about new literature with the help of social media

Mária Stanková

Faculty of Arts, Comenius University in Bratislava, Slovak Republic

The aim of the contribution is to present a design of a newly introduced course for a group of international undergraduate students: "Literary Criticism in the Era of Social Media". In this course, students will learn through being engaged in a set of assignments, which ask them to appreciate the value and impact of social media, internet and pop-culture as an important part of our globalized culture. The main point of the contribution is to show how teachers can use social media both as an object of study and a teaching tool.

Bibliography

GOGUS, Aytac. Peer Learning and Assessment. In: Encyclopaedia of the Sciences of Learning. Available on the internet:

https://link.springer.com/referenceworkentry/10.1007%2F978-1-4419-1428-6_146.

HOIDN, Sabine. The Pedagogical Concept of Student-Centred Learning in the Context of European Higher Education Reforms.

In: European Scientific Journal, 2016, Vol. 12, No. 28, pp. 439 – 458. ISSN 1857 – 7881.

ECONOMY, Peter. Is Social Media Destroying Society? This Former Facebook VP Says Yes (but There's a Solution). In:

Inc.com. Available on the internet: <https://www.inc.com/peter-economy/is-social-media-destroying-society-this-former-facebook-vp-says-yes-but-theres-a-solution.html>.

KEEND, Andrew. Is Internet Killing Our Culture? In: Abcnews.go.com. Available on the internet:

<https://abcnews.go.com/WN/WebCast/story?id=3432007>.

ID: 121 / BO5.1: 1

Short Presentation (15')

Topics: Track 2: Challenge-based Education

Keywords: intelligent tutoring systems, computer science education, learning analytics, educational data mining

Dodona: learn to code with an online co-teacher that supports active learning

Peter Dawyndt, Charlotte Van Petegem, Rien Maertens, Niko Strijbol, Bart Mesuere

Ghent University, Belgium

Dodona (dodona.ugent.be) is an intelligent tutoring system for computer programming, data science and statistics that bridges the gap between assessment and learning by providing real-time data and feedback to help students learn better, teachers teach better and education systems become more effective. We demonstrate how active learning approaches can be supported by educational technology and can be promoted with challenge-based education, and highlight some of the opportunities (automated feedback, learning analytics, educational data mining) and challenges (scalable feedback, online examinations, plagiarism) we are faced with in practice.

Bibliography

Van Petegem C, Deconinck L, Mourisse D, Maertens R, Strijbol N, Dhoedt B, De Wever B, Dawyndt P, Mesuere B (2021). Pass/fail prediction in programming courses. *Computers and Education* (submitted).

Maertens R, Van Petegem C, Strijbol N, Baeyens T, Jacobs A, Dawyndt P, Mesuere B (2021). Dolos: language-agnostic plagiarism detection in source code. *Journal of Computer Assisted Learning* (submitted).

ID: 123 / BO5.2: 1

Short Presentation (15')

Topics: Track 5: Structural Dialogue with Local Stakeholders

Keywords: inclusivity, primary schools, ancient Greek, multidimensional poverty

The application of ancient Greek in primary schools to tackle multidimensional child poverty

Evelien Bracke

Ugent, Belgium

Students doing training at UGent to become teachers of ancient Greek take part in the module 'Initiation to Subject-specific didactics'. They teach ancient Greek in two local primary schools with high numbers of children who live in socio-economic deprivation. Students develop the teaching resources with my guidance and receive inclusivity training.

The project has now run for three years and it has a positive impact on pupils' self esteem. Students and teachers are active participants in shaping the content of the module.

In this short presentation I will introduce the project, its practical organization, and impact so far.

Bibliography

1. 2021. 'Iedereen Latijn' van theorie naar praktijk: een diversiteitstoolkit. *Didactica Classica Gandensia* 54, 49-74. ('Latin for all' from theory to practice: a diversity toolkit)

2. 2020. De impact van Oudgriekse studie op kansarme leerlingen: participatieverruiming in het lagere scholenproject Oude Grieken – Jonge Helden. *Lampas* 53, 90-103. (the impact of Ancient Greek study on children living in multidimensional poverty: widening participation in the primary schools project Ancient Greeks - Young Heroes)

3. and Bradshaw, C. 2020. The impact of learning Latin on school pupils: a review of existing data. *Language Learning Journal* 48.2, 226-36.

ID: 124 / BO5.3: 2

Short Presentation (15')

Topics: Track 2: Challenge-based Education

Keywords: cross-cultural learning, international business, problem-solving, needs identification challenge

Creating a cross cultural experience virtually

Majella Giblin

NUI Galway, Ireland

As part of a postgraduate module called International Management in Practice, I used the lockdown as an opportunity to create a deeper cross-cultural student learning experience. Through an organisation called the Austral Group, I connected with an entrepreneur based in Brazil who had founded a Fintech company and was interested in internationalising the company from Brazil to the EU and US. The students engaged in a two-week challenge helping the entrepreneur strategise. Through slack channels and real-time engagement with the entrepreneur, the students experienced first-hand about problem-solving, need identification and communicating across a culture that was not their own.

Bibliography

Majella Giblin is a Senior Lecturer in the Management Discipline at the J.E. Cairnes School of Business & Economics, NUI Galway. She was awarded a Ph.D. in the area of industrial clusters and innovation systems from NUI Galway and she also holds a Bachelor of Commerce degree (NUIG), Master of Economic Science degree (NUIG) as well as a Postgraduate Diploma in Higher Education Studies (Trinity College Dublin). Her primary research interest is the evolution of regional entrepreneurial ecosystems with a particular interest in technology-driven ecosystems.

Recent publications:

1. Ryan, P., Buciuni, G., Giblin, M. and Andersen, U. (2020) 'Subsidiary Upgrading and Global Value Chain Governance in the Multinational Enterprise', *Global Strategy Journal*, 10(3): 496-519.
2. Ryan, P., Giblin, M. and Buciuni, G. and Kogler, D.F. (2020) 'The Role of MNEs in the Genesis and Growth of a Resilient Entrepreneurial Ecosystem', *Entrepreneurship and Regional Development*, DOI: 10.1080/08985626.2020.1734260
3. Ryan, P., Giblin, M., Andersson, U. and Clancy, J. (2018) Subsidiary knowledge creation in co-evolving contexts, *International Business Review*, 27, 915-932.

ID: 125 / BO8.3: 1

Interactive Workshop (45')

Topics: Track 1: Educational Quality Approach

Keywords: Quality Assurance, self - reflection, monitor, instrument

An online interactive monitoring system as an instrument for data- driven self -reflection on education policy and quality assurance processes at faculty and study programme level

Ilse De Bourdeaudhuij, Hilde Van Puyenbroeck, Janis Vanacker, Sien Uytterschout, Joke Claeys, Roxanne Figueroa Arriagada, Nele Mahieu

Ghent University, Belgium

Ghent University considers adaptability, co-leadership and self-governance as crucial aspects of study program management. Ghent University developed an *online interactive monitor system* that supports self-evaluation and stakeholder engagement. In these monitors, faculties/programmes can document, argument and reflect on their mission/vision, processes, actions, quality indicators and results. The monitor structure follows the PDCA-cycle: for each topic the vision and policy, the implementations, the monitoring, and the actions for change are explicitly reported. In this workshop, the participants get an in-depth view on how the monitors are built, how they technically work, how they stimulate self-reflection and monitor quality.

Bibliography

<https://biblio.ugent.be/person/801000794144>

ID: 126 / BO4.2: 1

Short Presentation (15')

Topics: Track 2: Challenge-based Education

Keywords: problem-based learning; challenge-based learning; simulations; role-games; active student participation; hybrid and online learning

Simulation as a form of problem-based learning: challenges and opportunities of running decision-making simulation games in offline and online formats

Stefano Braghiroli, Anna Beitane

University of Tartu, Estonia

This presentation focuses on simulations and role-games as a perfect laboratory to look at the interaction between problem-based and challenged-based learning.

In COVID times, role-games and simulations have witnessed a process of re-definition. This presentation compares processes and actors' reactions to different modes of conducting simulations, including offline, hybrid, and online formats.

Through a process of diachronic comparison, a student-led simulation of the Council of the EU, conducted as part of a graduate course, is assessed, and the changes determined by the different learning modes are evaluated.

Data are collected by means of study logs and through interviews with students.

Bibliography

- Ertmer, P. A., & Newby, T. J. (2013). Behaviorism, Cognitivism, Constructivism: Comparing Critical Features From an Instructional Design Perspective. *Performance Improvement Quarterly*, 26(2), 43–71. <https://doi.org/10.1002/piq.21143>
- Hung, W., Jonassen, D. H., & Liu, R. (2008). Problem-based learning. In: M. Spector, D. Merrill, J. van Merriënboer, & M. Driscoll (Eds.) *Handbook of research on educational communications and technology*, (pp. 485-506, 3 rd ed.). New York: Erlbaum.
- Savery, J. R. (2006). Overview of Problem-based Learning: Definitions and Distinctions. *Interdisciplinary Journal of Problem-based Learning*, 1 (1). Available at: <https://doi.org/10.7771/1541-5015.1002>

ID: 127 / BO11.3: 1

Short Presentation (15')

Topics: Track 3: Generic Competencies and Global Engagement

Keywords: legal education, student-centered learning, teaching reform, legal history, comparative law

History of private law: Internationalizing the course and using active learning methods to support student learning

Igor Hron, Adam Koszeghy, Terézia Švedová

Comenius University in Bratislava, Faculty of Law, Slovak Republic

The present paper introduces the redesigning of the History of Private Law Course taught in the first semester of the English Master Degree programme held at the Faculty of Law, Comenius University in Bratislava. In our contribution, we introduce the design reforms to be implemented in the Winter semester 2021/22. The redesigned course is rooted in several concepts (e.g. Bloom's taxonomy, constructive alignment, formative assessment). Building upon these concepts, the course will place the students at the centre of attention, commencing with the activities that can remedy the lack of interest in the course and its content.

ID: 129 / BO10.2: 2

Short Presentation (15')

Topics: Track 2: Challenge-based Education, Track 3: Generic Competencies and Global Engagement

Keywords: challenge-based learning, french for specific purposes, active learning, learning by teaching

Multilingual challenge based learning in a cross border context

Frederik Verbeke

University of the Basque Country (UPV/EHU), Spain

In the undergraduate course French for Specific Purposes (FSP), students of the Faculty of Arts of the University of the Basque Country have to co-design a FSP program for participants in the OCEAN i3 project, a cross-border educational innovation initiative that brings together social actors, teachers and students of the University of Bordeaux and the University of the Basque Country. Students design didactic resources that respond to the specific learning needs of the participants. As co-designers and co-teachers, students learn from and with each other (peer learning), face real challenges and become engaged with SDG.

Bibliography

Please find more information on: <https://frederikverbeke.academia.edu>

ID: 131 / BO8.1: 1

Interactive Workshop (45')

Topics: Track 2: Challenge-based Education

Keywords: Science, Business and Policy, Workbased Learning, student as partner

Work based learning, sharing responsibility

Saskia Grooters, Maarten Van den Nieuwenhof-Schilstra, Martin Muller

Rijksuniversiteit Groningen, Netherlands, The

The Groningen translation of the Bologna covenant in science education: the multidisciplinary master track Science, Business and Policy (SBP), an example of Work Based Learning (WBL). WBL has a triangular relationship of actors involved (Student, Work floor and Academia).

Important SBP-success factors are: fine-tuning a learning trajectory individually, and student responsibility. The function is diverse; selection for communication quality, guaranteeing interest in the topic, client matching and guided process in networking. Students describe their SBP-experience as a process of ownership and personal development.

In an interactive workshop, an SBP-student shares his experience and let you step in his shoes.

Bibliography

Saskia Grooters works as a coordinator of, and lecturer in the work-based learning track Science, Business and Policy (SBP) at the Faculty of Science and Engineering of the University of Groningen. Based on real-life projects, she develops educational programs and promotes experience-based learning based on collaboration with the professional field. The SBP program was selected as best-case practice of WBL in Europe (WEXHE project, European Union) in 2018. Saskia obtained master's degrees in Biomedical Sciences, Neurosciences and Psychology. Based on her experience in the corporate world and theoretical knowledge, she tries to bridge science and society on multiple levels.

ID: 132 / BO1.2: 1

Community Group Session (45')

Topics: Track 2: Challenge-based Education, Track 3: Generic Competencies and Global Engagement, Track 4: Seamless, Inclusive, Green Mobility and Tools for Flexible Learning

Keywords: Virtual Exchange, Internationalisation of the Home Curriculum, Global Competences, Employability, Sustainability

Virtual Exchange: From pedagogy to institutional practice

Sake Jager¹, Joanne Pagèze², Tanja Reiffenrath³, Gerdientje Oggel¹, Juan Albá Duran¹

¹Rijksuniversiteit Groningen; ²University of Bordeaux; ³University of Göttingen

In this presentation, key drivers of implementation of Virtual Exchange in the University of Groningen, the University of Bordeaux and the University of Göttingen introduce VE as pedagogical practice to achieve student learning outcomes critical for studying and working in the 21st century. Drawing on cases from their institutions, the presenters outline how VE is implemented as a tool for internationalisation of the curriculum, for giving more students access to international learning experiences and as an arrangement for blended mobility. Attention will be given to how VE supports multidisciplinary collaboration and challenge-based learning in the context of the ENLIGHT consortium.

Bibliography

Jager, S., Peng, H., Alba Duran, J., & Oggel, G. (2021). Virtual Exchange as Innovative Practice across Europe: Awareness and Use in Higher Education: EVOLVE Project Monitoring Study 2020. <http://hdl.handle.net/11370/80666684-9024-466a-9968-d13b335cfb6a>

EVOLVE Project Team. / Key drivers' perspectives on the institutional uptake of virtual exchange. Case Studies from 9 European HEIs. 2020. <http://hdl.handle.net/11370/86cbbfd8-64e8-44e9-aa2a-5e01993528d8>

EVOLVE Project Team (2020). The Impact of Virtual Exchange on Student Learning in Higher Education: EVOLVE Project Report. <http://hdl.handle.net/11370/d69d9923-8a9c-4b37-91c6-326ebbd14f17>

ID: 133 / BO6.2: 1

Interactive Workshop (45')

Topics: Track 2: Challenge-based Education, Track 3: Generic Competencies and Global Engagement, Track 4: Seamless, Inclusive, Green Mobility and Tools for Flexible Learning

Keywords: Virtual Exchange, Instructional Design, Internationalisation at Home, Global Competences, Employability

Learn to design a virtual exchange

Juan Albá Duran, Gerdientje Oggel, Angelos Konstantinidis

University of Groningen, Netherlands, The

In this workshop participants will learn about the co-designed model of Virtual Exchange (VE) whereby small groups of students from geographically remote classes work together online on learning tasks developed by educators.

We will first briefly discuss how VE can give additional value in comparison with regular face-to-face or online courses. Next, based on research carried out in the field, we will explore what kind of guidance the collaborating students need from their educators in order to have a meaningful VE experience. Finally, the participants will start developing a draft VE project.

Bibliography

EVOLVE Project Team (2020). The Impact of Virtual Exchange on Student Learning in Higher Education: EVOLVE Project Report.

<http://hdl.handle.net/11370/d69d9923-8a9c-4b37-91c6-326ebbd14f17>

EVOLVE Project Team (2020). Key drivers' perspectives on the institutional uptake of virtual exchange. Case Studies from 9 European HEIs.

<http://hdl.handle.net/11370/86cbbfd8-64e8-44e9-aa2a-5e01993528d8>

Albá Duran, J.; Oggel, G.; Espejel Nonell, O.; Pujolà Font, J. T. (2020). Success factors of a Telecollaboration project in the context of Second Language Teaching and Learning. *Culture Crossroads*, 15, 31-60. <http://www.culturecrossroads.lv/pdf/281/en>

Albá Duran, J.; Oggel, G. (2019). Challenges of the transatlantic cross-disciplinary ENVOIE-UFRUG Project. In Turula, A.; Kurek, M.; Lewis, T. (Eds). (2019). Telecollaboration and virtual exchange across disciplines: in service of social inclusion and global citizenship. Research-publishing.net. <https://files.eric.ed.gov/fulltext/ED596478.pdf>

ID: 134 / BO5.2: 2

Short Presentation (15')

Topics: Track 1: Educational Quality Approach, Track 2: Challenge-based Education, Track 3: Generic Competencies and Global Engagement, Track 5: Structural Dialogue with Local Stakeholders

Keywords: social justice, equity, critical thinking, antidiscrimination Law, local social stakeholders

Social Justice at the centre of learning & teaching in Law in the Legal Clinic: challenging students with real systemic discrimination cases and engaging with local social stakeholders

Alazne Irigoien

University of the Basque Country, Spain

The Legal Clinic for Social Justice of the Law Faculty has developed innovative ways to learn and teach Law, where students are at the centre. Working with local social stakeholders, (mainly NGOs, and other actors), students get involved in real cases related to social justice and systemic discrimination in the Basque (local) society. The session counts with the participation of a clinic student and it explains the transferable theoretical grounds, diverse tools and instruments that the Legal Clinic uses to foster the social function of the university, engage students in critical thinking and work with different actors.

Bibliography

- Irigoien Domínguez, A. (2021): "Estereotipos de género e interseccionalidad: una referencia a la normativa y jurisprudencia de la Comunidad Autónoma del País Vasco" RVAP 119. DOI: 10.47623/ivap-rvap.119.2021.03

- Irigoien Domínguez, A. (2021): "Strengthening European democracy? The Treaty of Lisbon and the European responses to the crisis through gender lens" in Ares-Castro Conde, C. (ed.) The state of democracy in Europe in the 1st decade of the Treaty of Lisbon. Política y Sociedad. DOI: 10.5209/poso.71939

- Irigoien Domínguez, A. (2021): "Zuzenbideak genero estereotipoak kontuan hartzen: Euskal Autonomia Erkidegoko kasuari erreferentzia bat" IkerGazte, UEU, DOI: <https://dx.doi.org/10.26876/ikergazte.2021.02>

- Irigoien Domínguez, A. (2019): On the road to gender equality: gender balance in the European Economic and Social Committee. Brussels: European Economic and Social Committee doi 10.2864/019787

- Irigoien, A. (2018): European Parliament's Elections 2019: towards parity democracy in Europe. Brussels: Gender Five Plus (G5+) think tank policy paper series

ID: 135 / BO9.1: 2

Short Presentation (15')

Topics: Track 2: Challenge-based Education

Keywords: Sustainable Development Goals (SDG), challenge-based learning, cross-curricular skills, interdisciplinary approach, innovation.

Student empowerment in the design of a sustainable-oriented task

Ana Bilbao-Goyoaga, Xabier Gonzalez, Miren Barrenetxea

University of the Basque Country (UPV/EHU), Spain

This contribution presents a challenge-based learning project developed at the Faculty of Economics and Business, Elcano, of the University of the Basque Country (UPV/EHU). We have implemented a cross-curricular activity that enhances the commitment of students of the Degree in Business Management to the challenge of sustainability encompassed in Agenda 2030. Interdisciplinary and cooperative learning in the design of a webpage is paramount in this team task, where students must perform the leading role and offer a solution to the sustainable challenge presented. Two subjects of the degree are involved in the design and monitoring of this student-centred activity.

Bibliography

- Barainca, I.; Bilbao-Goyoaga, A.; Lázaro, N. y Maguregui, L. (2019). The ESAU Project in the Degree in Business Management. En Ana Bilbao-Goyoaga Arenas y Pedro Gómez Rodríguez (Eds.) *Ikasi irakasteko. Kudeaketa formakuntzari buruzko gogoetak. Aprender para enseñar. Reflexiones sobre la formación en gestión.* (pp. 151-162). Servicio Editorial de la Universidad del País Vasco. ISBN: 978-84-9082-981-3
- Bilbao-Goyoaga, A. (2018). *Enseñar inglés en las PYMES. El caso de Bizkaia.* Berlín, Alemania: Editorial Académica Española. ISBN 978-620-2-11772-2
- Aguirre, M.; Bilbao-Goyoaga A. et al. (2018) *Enpresa Ikasketen berrehun urte Bilbon. Doscientos años de los Estudios Empresariales en Bilbao.* En Ana Bilbao-Goyoaga y Rosa de Diego (Eds.) *1818 – 2018 Kontsulatuko Merkataritza Eskolatik Ekonomia eta Enpresa Fakultateko Elkano Atalera. 1818 – 2018 De la Escuela de Comercio del Consulado a la Facultad de Economía y Empresa.* Elcano. (pp. 49-100 y 109-185). Servicio Editorial de la Universidad del País Vasco. ISBN: 978-84-9082-924-0
- Bilbao-Goyoaga, A.; Maguregi L.; Lázaro N.; Barainca I. y Flores, P. (2018). Improving the Degree in Business Management: Proposal of a Major Based in the Virtual Firms Applied to University Model. *European Conference on Education 2018 - Official Conference Proceedings.* (pp. 277-292). Brighton, UK. ISSN: 2188-1162 Available at: http://papers.iafor.org/wp-content/uploads/conference-proceedings/ECE/ECE2018_proceedings.pdf

ID: 136 / BO4.2: 2

Short Presentation (15')

Topics: Track 2: Challenge-based Education

Keywords: UX Hackathon; Challenge based learning; Empathy; Authentic learning; User experience design

Empathy Jam – Designing an authentic learning experience to explore real problems in the community

Mairéad Siobhán Hogan¹, Karen Paula Young¹, Heike Vornhagen¹, Diarmaid Máirtín Ó Fátharta²

¹NUI Galway, Ireland; ²Vesta

Students from a variety of user experience design modules participated in a series of hackathons, called *Empathy Jam*. This event was designed using an authentic learning approach, where the students, using user-centred design techniques, worked in groups to design a solution to a challenge relevant to the local region. Students learned to implement relevant techniques through their participation, through collaboration with their group members and from advice and guidance given by mentors from industry and academia. Learning was assessed from student videos and learning journals. Feedback on the event was obtained via vox pops on the day, and feedback surveys.

Bibliography

Hogan, Mairéad (2020, April). From Times Square to Eyre Square: Hackathons as Authentic Learning for Information Systems Students. In 6th International Conference on Higher Education Advances (HEAd'20) (No. 30-05-2020, pp. 301-308). Editorial Universitat Politècnica de València.

Hogan, Mairéad. (2021, September). Authentic Learning for Groupwork Skills: A Comparison Between a Physical and a Virtual Experience. In ISD2021: 29th International Conference on Information Systems Development.

Hogan, Mairéad and Young, Karen. (Forthcoming). Designing Group Assignments to Develop Groupwork Skills. Journal of Information Systems Education.

ID: 137 / BO3.1: 1

Interactive Workshop (45')

Topics: Track 4: Seamless, Inclusive, Green Mobility and Tools for Flexible Learning

Keywords: Erasmus+, existing cooperation opportunities

Optimizing existing cooperation opportunities for "inclusive, seamless, green mobility and tools for flexible learning"

Frederik De Decker

Ghent University, Belgium

Some major aims of ENLIGHT are to develop the structural and technical framework for inclusive, seamless and green mobility and to provide the tools for flexible learning.

In this session we will explore what existing cooperation opportunities (especially in the Erasmus+ programme) we can use and how we can optimize these in order to enhance mobility of staff and students between the 9 partners by making it seamless and as such create more flexibility (with a particular focus on recognition). At the same time we will touch upon ways to make our mobility more inclusive and greener.

ID: 139 / BO4.3: 2

Short Presentation (15')

Topics: Track 2: Challenge-based Education

Keywords: Challenge-based learning, group work, reflection tools, feedback, feedforward

Applying Feedback & Reflection in Challenge-Based Learning: a case-study in engineering

Femke De Backere¹, Stéphanie Carlier¹, Mathias De Brouwer¹, Joris Heyse¹, Frank Gielen¹, Dirk Stroobandt², Filip De Turck¹

¹IDLab, Department of Information Technology, Ghent University - imec, Belgium; ²Computing Systems Lab, Department of Electronics and Information Systems, Ghent University, Belgium

The course Design Project in the Master Computer Science Engineering at Ghent University is based on the concept of challenge-based learning in teams of students. Two important aspects of challenge-based learning are in our opinion: (i) providing feedback to students throughout the entire teaching process and (ii) enable the students to reflect on what they have learned and how they function in a group setting. During this presentation, we want to share some insights in why these aspects are important and how exactly we apply these concepts in our course.

ID: 140 / BO7.2: 1

Interactive Workshop (45')

Topics: Track 1: Educational Quality Approach, Track 4: Seamless, Inclusive, Green Mobility and Tools for Flexible Learning
Keywords: Student peer learning, Supplemental Instruction, Peer Assisted Learning, Digital Tools, Student Engagement

Peer learning in changing times – student engagement and the use of digital technology

Eoghan Clifford¹, Orla O'Donoghue², Aoife O'Shaughnessy³, Niamh Tobin², Amber Walsh Olesen²

¹School of Engineering, NUI Galway, Ireland; ²Students Union, NUI Galway; ³NUI Galway

This collaborative workshop run by a programme coordinator, academic lead and a student from the CÉIM* peer learning programme will explore academic outcomes and share key learning from moving a large peer learning programme online during the pandemic. Student feedback will be examined, and there will be a brief overview of digital technology used to support engagement in online peer learning. Participants will discuss and share their ideas for supporting peer learning and student engagement in the future, using digital tools and other strategies. The role of peer learning in supporting remote learning will also be discussed.

Bibliography

Scriver, S., Walsh Olesen, A., Clifford, E. (2021) 'Partnering for success: a students' union-academic collaborative approach to supplemental instruction'. *Irish Educational Studies*, 1-20: <https://doi.org/10.3389/frsus.2021.631685>

Scriver, S., Walsh-Olesen, A., and Clifford, E. (2015) 'From Students to Leaders: Evaluating the impact on academic performance, satisfaction and student empowerment of a pilot PAL programme among first year students and second year leaders'. *Journal of Learning Development in Higher Education*, . <https://journal.aldinhe.ac.uk/index.php/jldhe/article/view/359>

Almeida, C., Loubet P, da Costa, TP., Clifford, E., Cooney, R., et al (2021) 'Packaging environmental impact on seafood supply chains: A review of life cycle assessment studies'. *Journal Of Industrial Ecology*, :1-18. <https://doi.org/10.1111/jiec.13189>.

Cooney, Ronan, Wan, Alex H.L., O'Donncha, Fearghal, Clifford, Eoghan (2021) 'Designing environmentally efficient aquafeeds through the use of multicriteria decision support tools'. *Current Opinion in Environmental Science & Health*, 23:100276. <https://www.sciencedirect.com/science/article/pii/S2468584421000489>

Mulligan, S., Hannon, L., Ryan, P., Nair, S., Clifford, E. (2021) 'Development of a data driven FDD approach for building water networks: Water Distribution System Performance Assessment Rules'. *Journal of Building Engineering*, 34: 14 pp. <https://doi.org/10.1016/j.jobbe.2020.101773>

REFERENCED PUBLICATIONS:

Cinnte Report (2019). Available at - <https://www.qqi.ie/Downloads/NUIG%20Cinnte%20Report.pdf>. The NUI Galway Cinnte review committee was chaired by Professor Sibrandes Poppema (Formerly President of the University of Groningen).

O'Neill, G. and McMahon, T. (2005). Student-Centred Learning: What does it mean for students and lecturers?. *Emerging Issues in the Practice of University Learning and Teaching*. (O'Neill, G., Moore, S., McMullin, B. (eds)), Dublin, AISHE, 27-36.

ID: 141 / BO8.2: 1

Interactive Workshop (45')

Topics: Track 2: Challenge-based Education

Keywords: Interprofessional collaboration, interdisciplinary collaboration, interprofessional education, rich pictures

Interprofessional Education and Collaboration, sharing challenges and lessons from medical practice at 4 universities

Titia Van Duin¹, Matts Olovsson², Peter Pype³, Susanne Borgmann⁴, Marco Carvalhofilho¹, Marco Anne Cornelis Versluis¹

¹University Medical Center Groningen, Netherlands, The; ²Uppsala Universitet, Sweden; ³Gent University, Belgium;

⁴Universitätsmedizin Göttingen

Health care requires collaboration between patients, nurses, doctors, and others. This interprofessional collaboration (IPC) doesn't happen by itself and is a challenge to graduates. This was the topic for a recent research collaboration between 4 ENLIGHT universities. This project investigated perspectives of young graduates on IPC and their training using a rich picture technique.

In this workshop, participants share and explore challenges they experience within their practice as teachers or student, using the rich picture technique. The workshop aims for participants to exchange ideas on teaching and learning with other disciplines. Participants also become familiar with the rich picture technique.

ID: 143 / BO1.1: 1

Interactive Workshop (45')

Topics: Track 2: Challenge-based Education

Keywords: Challenge-based education, authentic inquiry, real-world challenges, didactical carving, pragmatist educational research

Challenge-based teaching: Selecting well-chosen teaching content for education practices as an authentic inquiry into real-world challenges

Leif Östman¹, Katrien Van Poeck²

¹Uppsala University, Sweden; ²Ghent University, Belgium

This interactive workshop addresses a key teaching task in challenge-based education: how to organise teaching and learning as an authentic inquiry into real-world problems instead of a pseudo-inquiry meant to let the students 'discover' predefined solutions. This provides students with unique educative opportunities but also requires crucial didactical work from the teacher; e.g. to select suitable teaching content. Addressing challenges related to ENLIGHT's flagship areas, the participants try-out a didactic tool designed to help them to turn societal problems into teaching topics that are in reach of the students and face them with an authentic challenge to explore and tackle.

ID: 145 / BO5.1: 2

Short Presentation (15')

Topics: Track 4: Seamless, Inclusive, Green Mobility and Tools for Flexible Learning

Keywords: flexible learning, open source, individual homework, homework platform, online learning, blended learning, peer groups

Open-source tool for flexible learning: “WeBWorK” pilot at University of Groningen

Mariet Hofstee, Oksana Kavatsyuk, Wilbert Samuel Rossi

University College Groningen, University of Groningen, The Netherlands

To provide students a flexibility in their educational path efficient tools are required. WeBWorK is a free open-source online homework system for flexible learning in math and science courses, with a large assignment library, and built-in authoring tools. We report on results of a pilot using WeBWorK for individualized assignments, digital exams, additional exercises and repair assignments in courses “Mathematics” and “Calculus-1” (2018-2021). With WeBWorK students work together in self-assembled peer groups on their assignments. The individualized problems ensure that they learn how to solve, rather than copy solutions. During the Covid lockdown WeBWorK facilitated a smooth transition to online-teaching.

Bibliography

Not by the author, but references for the contribution.

[1] Mathematical Association of America 2021, accessed 26 Aug 2021, <<https://WeBWorK.maa.org/>>;

[2] A. Segalla, S. Hauk, “Using WeBWorK in an Online Course Environment” (2008) *Journal of Research in Innovative Teaching* Vol. 1(1), p. 128.

[3] V. Roth, V. Ivanchenko, N. Record “Evaluating student response to WeBWorK, a web-based homework delivery and grading system” (2008) *Computers & Education* Vol. 50(4), pp. 1462-1482.

[4] K.M. Cauley, J.H. McMillan (2010). “Formative Assessment Techniques to Support Student Motivation and Achievement”.

The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 83(1), 1-6. DOI: 10.1080/00098650903267784

[5] L. Wheatley et al. “Feeding back to feed forward: Formative assessment as a platform for effective learning” (2015) *Kentucky Journal of Higher Education Policy and Practice* Vol. 3(2) Art. 2.

[6] D. Nicol, D. Macfarlane-Dick (2006). “Formative assessment and self-regulated learning:

A model and seven principles of good feedback practice”. *Studies in Higher Education*,

2, 199-218.

ID: 146 / BO7.4: 1

Interactive Workshop (45')

Topics: Track 4: Seamless, Inclusive, Green Mobility and Tools for Flexible Learning

Keywords: Inclusive classroom, gender, STEM, educational practices, microaggressions

Inclusive educational practices for the STEM (and others) university classroom

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Compelling research evidence shows that girls are performing as good as boys in Science, Technology, Engineering, and Mathematics (STEM), however, significantly less girls than boys opt for STEM profiles and studies at high-schools and universities. We will provide a set of concrete recommendations for university instructors on how to improve their courses by raising awareness of possible gender bias and microaggressions. These recommendations are provided by students, following a review of the literature as well as implementation in various courses, including mathematics and science courses. We will share our experience based on a project where students served as co-researchers.

Bibliography

Relevant publications by the co-authors.

- [1] Enhancing students' interest in science and understandings of STEM careers: The role of career-based scenarios Drymiotou, I. , Constantinou, C. & Avraamidou, L. , 2021 , In: International Journal of Science Education. 43 , 5 , p. 717-736 20 p.
- [2] It's time to rethink science education Dillon, J. & Avraamidou, L. , 2021 , In: Education in Chemistry. April 2021
- [3] Protesting to protect "us" and/or "them"? Explaining why members of third groups are willing to engage in collective action Klavina, L. & van Zomeren, M. , Jan-2020 , In: Group Processes & Intergroup Relations. 23 , 1 , p. 140-160 21 p.

ID: 147 / BO10.1: 2

Short Presentation (15')

Topics: Track 2: Challenge-based Education

Keywords: Problem-based learning, social sciences

Implementing problem-based learning in social sciences – 5-year experience with bachelor-level Economics curricula

Eve Parts

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In the 21st century education, transferable skills become more and more important. Problem-Based Learning (PBL) as "a student-centered, inquiry-based instructional model in which learners engage with an authentic, ill-structured problem that requires further research"¹ is proved to be a useful method for developing such skills. This session focuses on implementing PBL in social sciences. More specifically, the focus will be on (1) how to find topical real-world problems which motivate students, (2) how to design the PBL process in a specific context, and (3) the importance of properly designed assessment tools. Everybody is welcome to share their own experience.

¹ Jonassen & Hung (2008)

ID: 148 / BO10.3: 1

Short Presentation (15')

Topics: Track 2: Challenge-based Education

Keywords: Peer learning - Feedback – Chemistry laboratory sessions – Active participation

Towards more effective lab sessions: online booster sessions as the way forward

Ine Van Nieuwenhove, Ingeborg Stals

Universiteit Gent, Belgium

This contribution will focus on the advantages of active participation, peer-learning, control and counter questions and feedback in a problem-based learning setting. Online preparation sessions are organized before each practical lab session to booster the students and give them a head start during the actual practical sessions by designing their own experiment. After making an online learning path, the students must identify 5 difficult concepts/definitions and 5 questions they still have on their own experimental design. This input is subject for discussion during the so-called booster sessions: via peer learning and feedback the students are activated and coached.

Bibliography

1.I. Van Nieuwenhove, T. Renders, J. Lauwaert, T. De Roo, J. De Clercq, A. Verberckmoes. Bio-based resins using lignin and glyoxal. *ACS Sustainable Chemistry & Engineering*, 2020, 8, 51, 18789-18809. Peer-reviewed, impact factor 7.632

2.I. Van Nieuwenhove, L. Tytgat, M. Ryx, P. Blondeel, F. Stillaert, H. Thienpont, H. Ottevaere, P. Dubruel, and S. Van Vlierberghe, Soft tissue fillers for adipose tissue regeneration: From hydrogel development toward clinical applications, *ACTA BIOMATERIALIA*, 2017, 63, 37-49. Peer-reviewed, impact factor 6.139

3.E. Van De Walle, I. Van Nieuwenhove, W. De Vos, H. Declercq, P. Dubruel, and S. Van Vlierberghe, Cell response of flexible PMMA-derivatives: supremacy of surface chemistry of substrate stiffness, *JOURNAL OF MATERIALS SCIENCE-MATERIALS IN MEDICINE*, 2017, 28, 183. Peer-reviewed, impact factor 2.27.

4.I. Van Nieuwenhove, S. Maji, M. Dash, S. Van Vlierberghe, R. Hoogenboom, and P. Dubruel, RAFT/MADIX polymerization of N-vinylcaprolactam in water-ethanol solvent mixtures, *POLYMER CHEMISTRY*, 2017, 8, 2433-2437. Peer-reviewed, impact factor 5.375

5.I. Van Nieuwenhove, A. Salamon, S. Adam, P. Dubruel, S. Van Vlierberghe, and K. Peters, Gelatin- and starch-based hydrogels. Part B: In vitro mesenchymal stem cell behavior on the hydrogels, *CARBOHYDRATE POLYMERS*, 2017, 161, 295-305. Peer-reviewed, impact factor 4.219

ID: 149 / BO10.3: 2

Short Presentation (15')

Topics: Track 2: Challenge-based Education, Track 3: Generic Competencies and Global Engagement

Keywords: student participation, course design, student engagement, peer learning, internationalisation

Participation encouraged: How I redesigned my course to make it more participatory

Lenka Vargová

Comenius University, Slovak Republic

Peer learning and student engagement play an important role in the teaching process, especially in a mixed audience of home and international students. In my presentation, I will talk about how I redesigned one of my courses to make it more participatory. The new course design aims to improve student participation via new activities that are introduced to better structure student contributions in the in-class discussions. Another aim is to make the class internationalised and to encourage peer-learning. I will describe the rationale behind these changes as well as preliminary results from a pre-post study into student learning.

ID: 150 / BO6.3: 1

Interactive Workshop (45')

Topics: Track 1: Educational Quality Approach

Keywords: scholarship of teaching and learning, learning community, academic development

Applying the idea of learning communities to support teachers with scholarship of teaching and learning

Anu Sarv, Kaire Uiboleht, Katri Kütt

University of Tartu, Estonia

In this conference workshop, we will share our experience about the support system of academic development at the University of Tartu and our experience in applying the idea of learning communities to support teachers with SoTL. We will share with participants both success and doubts from the perspective of participants of learning communities as well as academic developers. Workshop participants will be engaged in some activities we have conducted in learning communities and will reflect on how to utilise the idea of learning communities in their work context.

ID: 151 / BO2.1: 1

Interactive Workshop (45')

Topics: Track 5: Structural Dialogue with Local Stakeholders

Keywords: Norms of knowledge, identity formation, professional programs, cross-disciplinary dialogue, theory and practice.

At the boundaries of what could, would, and should be taught at university

Linn Areskoug

Uppsala University, Sweden

This workshop will circle around the field of tension between higher education institutions and local stakeholders. Issues on norms of knowledge and boundaries as a space of negotiation and identity formation will be explored in interactive exercises. Taking teacher education and authentic assignments as a point of departure, discussions will expand to touch upon other professional programs that face similar challenges when collaborating with organizations outside of the university. Engaging in a cross-disciplinary dialogue will hopefully unfold peculiarities within specific fields as well as uncover similarities that might be helpful in future dialogue with local stakeholders.

Bibliography

Areskoug, L. 2018. "Dilemmas of Sticks and Carrots. Authentic Learning, Theories, and Practices", in Pedagogiska utmaningar i en dynamisk samtid, Hössjer. A., Magnusson. M., & Reinholdsson. P. (eds.), Rapport 14, Uppsala.

ID: 152 / BO7.3: 1

Interactive Workshop (45')

Topics: Track 5: Structural Dialogue with Local Stakeholders

Keywords: Student Voice, Digital Learning, Partnership, Teaching & Learning, Lessons Learned

Lessons Learned: Student experiences of digital learning and the impact of the return to in-person teaching

Cameron Noah Keighron, Julia Forsberg, Teun Havinga, Sara Helsen

ENLIGHT Student Network

Over the past 2 years, the education sector has seen a significant change in how it operates. Studying and researching through a global pandemic has been tough on our student population. Now that we see the return to some in-person activities, the Student Network is interested in understanding the lessons our students have learned in the delivery and provision of their education.

Our idea is to have an active, discussion-based, hybrid webinar about the lessons learned around the student experiences during the pandemic and throughout the return to in-person teaching.

ID: 153 / BO11.1: 1

Interactive Workshop (45')

Topics: Track 1: Educational Quality Approach

Keywords: Educational Quality Assurance, Internal QA, Institutional QA, Good practices, Student involvement in QA

Good practices in institutional quality assurance

Ilse De Bourdeaudhuij, Joke Claeys

Ghent University, Belgium

As a first step towards an Enlight Quality Approach an overview of the partners' institutional QA systems was made. It reveals that the implementation of the European Standards and Guidelines, each in their own way, leads to adequate, fit for purpose internal QA systems. In all partners, the PDCA cycle is closed and several good practices can be identified. In this session some of the inspirational good practices will be put forward and discussed with the public. Some specific ways of involving students in QA will be highlighted.

Bibliography

<https://biblio.ugent.be/person/801000794144>

ID: 154 / BO9.2: 2

Short Presentation (15')

Topics: Track 1: Educational Quality Approach

Keywords: Programmatic Assessment, Information Systems, Group project

Information systems analysis and design project for bachelors business engineering

Frederik Gailly, Fanny Buysschaert

Ghent University, Belgium

In this short presentation we will explain how the implementation of a joint group assignment for two bachelor courses is used to cover some missing learning outcomes that were identified by means of a programmatic assessment of the Information Systems component of the Ghent University bachelor in Business Engineering. For the joint group assignment guidance and evaluation, different educational tools are used: feedback is provided by organizing online Teams meetings, code is shared using GitHub Classroom, reporting and presenting skills are evaluated using a rubric, group member participation is evaluated using a peer assessment tool.

ID: 156 / BO2.3: 1

Interactive Workshop (45')

Topics: Track 2: Challenge-based Education, Track 5: Structural Dialogue with Local Stakeholders

Keywords: regional academy, stakeholder interaction, challenge-based education, collection

Towards a platform for stakeholder collaboration in education

Jolien Coenraets, Leen Van Gijssel, Andries Verspeeten

Ghent University, Belgium

In this session we will showcase the process of Ghent University to build a platform for collaboration in education with local stakeholders (a regional academy in Enlight's terminology). Based on our university's experience, we will challenge you to discuss about different topics to think of when implementing such a platform in a university.

We envision a two-directional learning experience where you can learn from us, but we can also learn from each other to further shape our own regional academies.

ID: 160 / BO9.2: 1

Short Presentation (15')

Topics: Track 1: Educational Quality Approach

Keywords: communities of practices, sharing of good-practices, interdisciplinary teams, experiences and inquiries

The transformation of the teaching and learning practices in the University of Bordeaux (France) through the creation of communities of practices based on experiences and inquiries

Anna Barry, Christophe Roiné

Université of Bordeaux, France

The aim of the submission is to present the Open Lab "In'Pact", created in 2019, in the context of the NewDEAL program in the University of Bordeaux. Christophe Roiné (the head of the Open Lab) and Anna Barry (a post-doctoral student) work cooperatively with students, teachers, researchers from interdisciplinary fields and educational developers. The Open Lab is a structural device that aims at achieving complementary missions: a) enhance professional learning communities, b) conduct surveys involving students to measure the impact of the pedagogical transformation, c) increase expertise by monitoring scientific research on emerging issues in teaching and learning practices.

ID: 161 / BO3.3: 1

Community Group Session (45')

Topics: Track 3: Generic Competencies and Global Engagement

Keywords: multilingualism, language choice in the curriculum, language policy in a transnational space

Pathways across the Bridge: shaping the Multilingual in our Curricula

Stef Slembrouck, Liesbet Triest, Mit Leuridan, Fieke Van der Gucht

Ghent University

The purpose of this community group session is to map and assess different pathways in the implementation of a multilingual perspective on curricula in higher education. A range of initiatives will be covered, ranging from multilingual awareness and encouraging the learning of other languages, over "luistertaal" and peer interpreting, to interactionally-monitored forms of code switching and translanguaging. The implications for assessment priorities and testing protocols will be covered, too. The aim is to arrive at a set of feasible and desirable "multilingual" choices within the ENLIGHT partnership.

ID: 163 / BO1.3: 1

Interactive Workshop (45')

Topics: Track 3: Generic Competencies and Global Engagement

Keywords: Peer Mentors; Transition; Relational Pedagogy

Facilitating the transition to Higher Education: implementing an effective peer mentor programme

Simon Edwin Dalley, Liga Klavina, Roxana Elena Bucur

University of Groningen, Netherlands, The

Entering higher education (HE) is a challenging experience that can negatively impact a student's academic performance and well-being. This workshop provides a scholarly and practical entry point into establishing a peer mentor (PM) programme that can facilitate the transition to HE. We use psychological theory to demonstrate that PMs are in a uniquely influential position to help first year students overcome their challenges. We also showcase a programme that enables PMs to more effectively support their students, as well as enable their students to support each other. Finally, we describe a programme evaluation process that is grounded in relational pedagogy.

Bibliography

[1] Pennington et al., (2018). Transitioning in higher education: an exploration of psychological and contextual factors affecting student satisfaction. *Journal of Further Education*, 42.

[2] Bovill, C. (2020). *Co-creating Learning and Teaching: Towards Relational Pedagogy in Higher Education*. Plymouth: Critical Publishing

[3] Loda et al., (2019). Cognitive and social congruence in peer-assisted learning - A scoping review. *PLoS One*, 14.

[4] Crisp, G. et al., (2017). *Mentoring Undergraduate Students*. ASHE Higher Education Report Series (AEHE). San Francisco, CA: Jossey-Bass.