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INVITED SPEAKERS

INSTITUTO SUPERIOR DE ENGENHARIA DO PORTO

Rua Dr. António Bernardino de Almeida, 431
4249-015 Porto, Portugal

MAY 5TH 2021, 3:00PM (GMT+1)

Paul Magnuson

Title: Student Self-Regulation in Action

Building on work in the agile mindset (www.edgility.school; www.peakchallenges.ch; www.arcforschools.org), the Leysin American School runs classes across grades 8-12 to first and foremost help students practice self-regulation, ground content areas like the arts, STEM, and entrepreneurship.

The goals of these courses are contained in an acronym based on the French for baking (CUIRE): Collaboration, Uplift, Imagination, Respect, and Effort. The courses are student-directed, with input and support from teachers in the role of coach, cheerleader, safety manager, team member, tutor, or any other appropriate role beside all-knower, leader, and final arbiter of achievement (the courses are in fact ungraded).

We'll introduce the courses with some student voices, discuss how we got where we are and our connection with the agile mindset, and why we believe letting go of curricular and instructional preconceptions are so important.

Interesting for participants is the location of these courses in a traditional school and curriculum - the place where most of our work focused on changing current assumptions needs to take place, since traditional describes the overwhelming number of our schools across the world.

Short bio

Paul Magnuson leads a research center using teacher action action research as professional development.The research center welcomes international visiting scholars annually and travels to other schools and organizations to work on innovative teaching and learning. Paul is a member of the Scrum Alliance team that developed the Agile Certified Educator, a new certification of Scrum Alliance. He is also a founding member of the Agile Research Consortium for Schools, a one-stop website for all things agile in ed. The school's research center is www.las.ch/laser and Paul's small personal consulting (and books for children) can be found at www.magnusonedstudio.ch. Paul is also an instructor for Moreland University.

MAY 19TH 2021, 3:00PM (GMT+1)

Janika Leoste

Title: How to make TEL Innovations sustainable

Rapid technological advances lead educational systems and their stakeholders to initiate various technology-centered innovations with the aim of enhancing teaching and learning practices with technology, i.e. of introducing Technology Enhanced Learning. Research indicates that many of these TEL innovations fail to become sustainable (i.e. they do not change neither teachers' teaching practices nor students' learning practices). An unsustained innovation, however, often means that valuable invested human and material resources become wasted.

My presentation aims to share pieces of information about designing and implementing TEL innovations with a greater potential to sustainability. The focus of this discussion is on identifying the factors that influence TEL innovation sustainability, and on apprehending their relevance in different TEL innovation process stages.

Short bio

Janika Leoste is a PhD candidate at the School of Educational Sciences of Tallinn University (Estonia). Her research includes the sustainability of technology enhanced educational innovations and didactics on STEAM teaching in all stages of education, including using robot integrated learning in early childhood and primary education.

JUNE 2ND 2021, 3:00PM (GMT+1)

Angel Krause

Title: Caring for Students in the Online Setting: Examining Practices which Encourage Students to be their Real Selves

More than ever during times of crisis students need to be able to project their real selves during their learning experience, being emotionally and socially present. The concept of social presence within the Community of Inquiry framework is described as "the ability of participants in a CoI to project themselves socially and emotionally, as 'real' people (i.e., their full personality), through the medium of communication being used" (Garrison et al., 2000, p. 94). Richardson and Swan (2003) suggested that high perceptions of social presence correlated to perceived learning and satisfaction with the instructor. Social presence at its core is participants of the community of inquirers being human, being emotionally real (Garrison et al., 2000).

The presentation will review three themes that emerged from a multiple case study of how three Hispanic women described their experiences of being their real selves while completing fully online courses. They included a) the ways professors honored students' assets, b) access to other students/cohort and the instructor through

pedagogical choices, and c) consistency in course design and facilitation. The role of synchronous sessions, having real access to the instructor v. pseudo access, and the predictability of course design and facilitation all contributed to the participants' ability to be their real selves. Perceptions of instructors exhibiting care will be discussed, along with perceptions of lack of care. Suggested future practices for instructors and universities based on key findings will be presented. Additionally, an inquiry activity will guide attendees to evaluate their current care practices from a student's perspective.

Garrison, R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, *2–3*, 87–105.

Richardson, J. C., & Swan, K. (2003). Examining social presence in online courses in relation to students' perceived learning and satisfaction. *JALN*, *7*(1), 68–88.

Short bio

Born and raised in California's diverse Central Valley, Dr. Angel Krause began her educational journey teaching high school health and social sciences. Moving from teaching in the brick and mortar classroom to a fully online setting in 2006 required her to be an early adopter of tools that are now common (i.e. synchronous tools). In 2010 she was hired at her alma mater, Fresno Pacific University, to direct the Clear Credential program working with beginning teachers and to serve as the Assistant Director in their fully online Masters in Curriculum. Now serving as the Teacher Education Intern Director, she facilitates blended and fully online coursework in curriculum, classroom management, and health education. With 15 years of experience in online education and her direct work with teachers in P-20 settings, she has experienced a unique convergence of theory and practice encouraging continued learning and growth as an educator. She holds secondary credentials/licensures in social sciences and health, an M.A. in Education: Curriculum & Teaching with a focus in Technology, and an Ed.D. in Educational Leadership: Instructional Design and Development.

PREVIOUS SEMINARS

APRIL 21ST 2021, 3:00PM (GMT+1)

Tony Houghton

Title: Utilising Industry Hothousing Practices for STEAM Collaborative Problem Solving in Schools and STEAMTEACH

Collaborative problem solving (CPS) is deemed by many, including EU, to be essential to society, industry and the future employment and well-being of students. It has been widely used in both industry and in schools over at least the last twenty years and there are many potential synergies between the two. The Hothousing variant of CPS in its adult format is an intensive, time-constrained workshop based process designed to build mutual trust between customers and industry experts in order to develop creative solutions together. Can students cope and benefit from this intensive approach?
If so, its use (or a suitable variant of) in schools raises two important questions: Firstly, what degree of structure and support is required to unleash student creativity and maximise learning - as in industry or does the student need more structured methods including explicitly being taught group problem solving skills? Secondly, is CPS an enrichment activity taking up additional teacher time or is it potentially cross-curricular and thus of wider benefit to teachers and students than might be thought?
Three case studies are described including the recent EU KIKS project and its recently commenced STEAMTEACH follow up in which expert teacher trainer interview responses are compared with, support and extend the above.

Short bio

Tony Houghton is Visiting Professor Linz School of Education, Johannes Kepler University (JKU) working on STEAM projects. He is a member of the University of Cambridge, Magdalene College with a degree in Psychology and a doctorate in Communications Engineering from University College, London, a year of which was undertaken with Massachusetts Institute of Technology Media Lab (MIT). He has worked with BT, Microsoft, CISCO, Pepsico, DHL, Essex County Council, Aerospatiale, CRICA, ERGOS, EDF, Eurescom, IET, STEMNET, Nationwide, Chunghwa Telecom and Sony in Singapore.
His STEAM focus is creative, collaborative problem solving and perception shift originally inspired by industry best practice and since applied to educational projects including EU KIKS and STEAMTEACH. His work benefits greatly from collaboration with JKU students.

APRIL 7TH 2021, 3:00PM (GMT+1)

Yves Kreis

Title: Transition from traditional to hybrid to online courses for pre-service elementary school teachers at the University of Luxembourg Sub Title: STEAM integrated approach in the project MathEduc @ BScE

During the past year, technology has started enabling new forms of teaching and learning in higher education in Luxemburg. Thus, to be able to work more closely with elementary school pre-service teachers, we shifted our mathematics education course during the past years to flipped classroom approaches and worked with synchronous and asynchronous teaching on- and off-campus modes. Furthermore, due to the restrictions of the COVID-19 pandemic, we decided to shift our teaching to entirely online flipped classroom approaches together with outdoor mathematical trails with STEAM integrated assessments. This final shift to a fully online flipped classroom, with self-paced, student-centred teachings and learnings, showed strong positive effects on pre-service elementary school teachers in mathematics teaching. In this presentation, we will outline results of this transition period and describe results from different studies.

Short bio

Yves Kreis is Senior Lecturer in the research area Teaching & Learning of the Department of Education and Social Work of the Faculty of Humanities, Education and Social Sciences of the University of Luxembourg. He has a PhD in Educational Sciences (Dr. paed.) of the University of Education Ludwigsburg (Germany).
University of Fribourg (Switzerland) where he worked as an undergraduate assistant for 3 years. Prior to joining the University, he worked for several years as teacher in various Luxembourgish Primary Schools, and as Mathematics teacher in serving in several Luxembourgish Secondary Schools.

MARCH 17TH 2021, 3:00PM (GMT)

Chris Brownell

Title: Can University Admission Policy Regarding Mathematics Change the World?

There is both the need for and the seeds of a revolution in Secondary Mathematics Curriculum. The pandemic has revealed how rapid advances in technology, decline of interest, increase in the complexity of the problems the next generation faces, and dramatic inequities of access are combining to call into question the narrowed focus on preparation for calculus of secondary maths programs. Combine these with the unchecked proliferation of mal-dis-information and outright lies that are the fodder of extremist factions of every ilk and we soon see that we need to assist children in the navigation of a world more intensely driven by data than ever before. In this talk I will argue that the Academy can aid the world in preparing the next generations to evolve into the future, at least in part, by broadening what it considers as the basics of mathematics and end the hegemony of calculus.

Short bio

Christopher Brownell Ph.D. Associate Professor of Mathematics and Mathematics Education working mainly with pre-service mathematics teachers. After earning his doctorate in his 50s he is now a Director of the Mathematics & STEAM Education Master's degree programs at Fresno Pacific University in California. Multi/Transdisciplinary studies in STEAM and the growing role of Data Science in education are his current research focuses. He is co-author of the popular book: Math Recess Playful Learning in an Age of Disruption.

MARCH 3RD 2021, 3:00PM (GMT)

Morten Brekke

Title: High fail rate inspired math project – How MatRIC support really helps during "lockdown"

This talk is divided in two parts:

Part 1 will describe a project initiated by MatRIC (Centre for Research, Innovation and Coordination of Mathematics Teaching www.matric.no). In 2017 we started a project in corporation with the School of Business and Law at our University. A forty percent fail rate in mathematics for future economists inspired MatRIC to get to the core of the problem: insufficient prior knowledge. I will describe how we now are down to 11 percent fail rate and improved grades. It is a mix of blended learning, pre-test (diagnostic), pre-courses, workshops, assessment-tool and improved student support.

Part 2 will describe how we trough experience are able to support our students during the corona lockdown. Lecturers and tutors in mathematics are just keystrokes away. Teaching and MatRIC's drop-in for mathematics support is undertaken on digital platforms.

Short bio

Professor Brekke is Vice Rector for Education for the period 1 August 2019 - 31 July 2023 at University of Agder.

As vice rector for education, Brekke heads the Academic Affairs Committee. He also leads the work developing a strategy in the priority area Learning and Education for the Future, with special emphasis on developing a future oriented educational leadership.

Brekke has been working at UiA since 1993. Throughout his career, he has focused on quality and development in teaching. He has a central role in MatRIC, an international centre for mathematics didactics, which has been appointed a Centre for Excellence in Education.

He wants to make room for development and testing of different teaching methods which will improve the quality of learning outcomes - and also disseminate the knowledge created.

Brekke has long been a role model in the pedagogical uses of video and other digital technologies in mathematics teaching, and he has published several articles on the topic. In 2018, he was awarded Excellent Teaching Practitioner as the first recipient at UiA.

Brekke has a goal of improving students' achievements; he therefore emphasises quality culture and systematicity to improve quality in the field of education. He is particularly concerned with building a good and inclusive learning environment.

In keeping with the university's ambitions for the skills reform "Learning throughout life", Brekke strives to highlight and strengthen alumni relations and continuing education at UiA.

Brekke was formerly a college lecturer, university lecturer and assistant professor and received his Cand. Scient. in theoretical astrophysics from the University of Oslo.

FEBRUARY 24TH 2021, 3:00PM (GMT)

Noah Dana-Picard **Sara Hershkovitz**

Title: Golden Ratio: developments towards abstraction from a STEAM perspective

The Golden Section is a mathematical concept that is one of the most famous examples

of connections between mathematics and the arts, mostly visual arts. A less known issue is the connections with non-visual arts and with other scientific domains.

We offer a graded approach from concrete appearances of the Golden Section towards more abstract occurrences, from geometry to space studies and establishing calendars.

This STEAM approach relies on a technology-rich environment. It enables educators to incite their students to explore, discover, conjecture and reveal new insights into sometimes traditional topics. Both educators and students may have benefit of the specific cultural background of the students.

Short bio

Thierry (Noah) Dana-Picard is a Professor of Mathematics at the Jerusalem College of Technology, an academic institution training high-tech engineers and managers. He has two PhDs, from France in Algebraic Geometry, and from Israel in Non-Commutative Algebra. Noah is an active researcher in Mathematics and STEAM Education, domains in which he publishes regularly. His has special interest in Mathematics in a technology-rich environment and its influence in education, and in Mathematics and Culture. He is a member of the editorial board of several journals, chaired international conferences and special sessions, and is always happy with international collaborations.

Sara Hershkovitz retired from The Center for Educational Technology (CET) in Israel, after 4 decades. For 27 years (till 2017) she was head of the Mathematics Department and led the development of dozens of CET's Math textbooks for primary and secondary schools, as well as the interactive digital content and digital textbooks, and the development of the online course in Math for high school, which is a part of CET's Virtual High School (VHS). During 2017 to 2020, Prof. Hershkovitz was the head of the assessment and Evaluation Department, which was responsible for national and international exams in Israel and the research led by CET. She published books and research papers in the field of Problem Solving, Mathematics Education and SGTEAM Education. She is now the Head of the Mathematics Department at Levinsky Academic College in Tel Aviv.

FEBRUARY 17TH 2021, 3:00PM (GMT)

Martin Andre

Title: Integrating education for sustainable development into statistics classes

In my talk, I will discuss our work on introducing statistics concepts in schools and how statistics teaching can be connected to sustainable development with real data for students in schools. In particular, we will discuss that statistics is becoming crucial in our current data-driven society to explore numerous phenomena that are too complex to comprehend without exploring and visualising data. Citizens need to understand statistics about issues concerning essential parts of their lives such as the spread of a pandemic or climate change in order to responsibly participate in a prosperous development of our civilization. With our research projects we try to find out more about young students' intuitive approaches to statistics when visually analysing data. We found that certain kinds of data visualisations are especially capable to provoke reasoning of statistical concepts such as ideas of centre, spread and covariation. Based on these intuitive visual approaches to statistics, another aspect of our design-based research projects is concerned with statistical modelling processes. We developed a learning trajectory where middle school students were engaged in analysing real-world data to explore sustainable development of various countries and to build a model for this phenomenon. Results show that students' statistical investigative learning processes should feature active participation in constructing knowledge of formal statistical concepts; and students should adopt and fit their intuitive knowledge to formal concepts using methods of visual data analyses. Thus, I will outline some diverse opportunities to foster students' intuitive understanding of statistics and sustainable development issues simultaneously.

Short bio

Dr Martin Andre is a senior lecturer and researcher in mathematics education at the University College of Teacher Education Tyrol, Austria. He has experience of teaching mathematics education to pre-service teachers and in-service teachers within primary, secondary, and post-graduate programs. His interests focus on the relationship between technology and mathematical thinking in statistics education, integration of digital technologies in the teaching of mathematics, and Education for Sustainable Development (ESD). He is working on research projects related to integration of ESD into statistics education and technology integration into mathematics education.

FEBRUARY 3RD 2021, 3:00PM (GMT)

Ebru Taylan

Title: How can we adapt agile mindset into science laboratory classes and research projects of students?

Both in high schools and higher education, laboratory applications are crucial to learn science better. While doing a project or an experiment in the lab, students are trying to learn and apply an information in a limited time and mostly working with teams. Due to this complexity, it comes harder to have a high efficiency. In this session, you will join my journey of experiences and find out some examples how we could apply problem based learning system or eduscrum in small or larger group of students.

Short bio

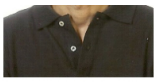
Ebru Taylan is the founder of Young Scientist Academy company which aims to contribute to the development of the scientific, practical, learning and questioning competencies of young people by bringing the sciences under the roof of Biotechnology easily and economically.

She completed her undergraduate degree in Biochemistry / Biotechnology department at Ege University in 2005. By working at Dokuz Eylul University (DEU) Research Laboratory for ten years, she completed her master and doctorate education in the Institute of Health Sciences, Dokuz Eylül University. During the course of her education, she worked as a research assistant in the Department of Biochemistry at the Faculty of Medicine. She took part in the laboratory applications of the students of the Faculty of Medicine during the experimental and reporting processes of numerous TÜB?TAK 1001, 1003 research projects including her doctoral thesis. She completed her research at the German Diabetes Center (DDZ) by receiving TÜB?TAK 2214a foreign research scholarship with a project she has undertaken in the last year of her doctorate.

In 2018, she worked as Associated Prof. at Izmir University of Economics, Department of Genetics and Bioengineering.

For the last three years, her company has been carrying out studies with the aim of enabling young people to develop science and technology at an earlier age to enable them to discover their potential and to become the preferred solution partner in educational institutions.

JANUARY 27TH 2021, 3:00PM (GMT)



Nuno Escudeiro

Title: Mainstreaming Blended Mobility: tearing down barriers to international education

Blended mobility has an intrinsic aptitude to overcome most barriers to international mobility that our students might face. Such teaching methodologies significantly promote equity in internationalization of education.

This session raises awareness to blended mobility and provides the required inputs to set up and run blended mobility courses. We will follow a thrilling path through the Blended Education World aiming to foster the take-up of Blended Mobility as an effective way to promote international exposure during studies.

By the end of the session you will have all the information, the tools and the contacts you might need to setup and run your own blended mobility course from scratch.

Short bio

Nuno Escudeiro is a professor at the School of Engineering of the Polytechnic Institute of Porto, from the Informatics Department. He has been developing R&I work in two different areas, Engineering Education and Machine Learning.

Currently, Nuno Escudeiro assumes the following positions in the field of European Higher Education:

- Coordinator of the European University ATHENA
- Vice-President of the European Association of Erasmus Coordinators (EAEC)
- Vice-President of the European Association of Career Guidance (EACG)
- Blended-AIM blended mobility course coordinator
- Praxis network coordinator - European Center for Project / Internship Excellence
- Coordinator of the European Coordination Office Portuguese at EAEC
- Member of the advisory board of INNOTECS - International Network of Technical Schools
- Member of the advisory board of the Sector Skills Alliance EO4GEO

He completed his doctorate in Informatics Engineering at the Faculty of Engineering at the University of Porto, a master's degree in Data Analysis and Decision Support Systems at the Faculty of Economics at the University of Porto and a degree in Electrical and Computer Engineering at Instituto Superior Técnico, University of Lisbon.

JANUARY 20TH 2021, 3:00PM (GMT)

Willy Wijnands

Title: Transforming Education with eduScrum

Short bio

As a passionate teacher, I want to give ownership and responsibility for their own learning process to the students and everyone I train. But most importantly, I give them trust and offer them the freedom and the space they need to work together in teams, while being there to facilitate and coach them. They become more independent from the teachers, and they have more fun. In addition to that, I want students to determine their own 'why' for their learning.

So they become empowered and responsible for what they do, because they are more engaged, committed. They are also more productive, create better results and discover who they are and what their abilities are through the development of their personality. Through this process they become more prepared for the future by becoming Agile lifelong learners with well-developed twenty-first-century skills. It is such a wonderful to see them developing themselves!

I want transform education with eduScrum. By training teachers, face to face and online, all over the world together with good passionate trainers, I support them to implement Agile in education.

I give the students ownership of their own learning process, but most important trust. The students take their responsibility for what they do and I give them liberty and space. The effect is that students are engaged, more productive and their results are better; It is such a wonderful to see them developing themselves!'

JANUARY 13TH 2021, 3:00PM (GMT)

Jeff Sutherland

Title: Scrum@Scale Origins Story to an Education setting

Short bio

Jeff Sutherland, the inventor and Co-Creator of Scrum has worked with thousands of companies deploying Scrum and recently launched two global trainer programs for Scrum Inc Scrum Trainers and Certified Scrum@Scale Trainers in addition to creating two independent companies, Scrum Inc Japan and Scrum@Scale LLC.

Jeff started his career as a fighter pilot in the U.S. Air Force where he achieved Top Gun status in 1967 and flew 100 combat missions over North Vietnam.

After 11 years as a pilot, he joined the faculty of the University of Colorado Medical School where he received his Doctoral degree. As Asst. Prof.of Radiology, Biometrics, and Preventive Medicine he co-founded the Center for Vitamins and Cancer Research under the sponsorship of Nobel Laureate Linus Pauling and for eight years was the Principle Investigator of a National Cancer Center research grant that ran all IT programs and research for the Colorado Regional Cancer Center.

In 1983 he joined a banking company that operated 150 banks throughout North America where he was VP of Advanced Systems and General Manager of their ATM Business Unit. Noticing that waterfall processes at the bank were not working, he implemented the first prototype of Scrum@Scale for organizational transformation of a business unit.

He has been VP of Engineering and CTO or CEO of eleven software companies. In the first four companies he prototyped Scrum and in 1993 in the fifth company created Scrum as we now see it used in 74% of Agile software

prototyped Scrum and in 1993 in the first company created Scrum as we now see it used in 74% of Agile software companies in over 100 countries. He was a signatory of the Agile Manifesto in 2001.

In 2006, working as Senior Advisor to OpenView Venture Partners and their portfolio companies, Sutherland established his own company, Scrum, Inc. now recognized as the premiere source of Scrum Training in the world. His latest book, Scrum: The Art of Doing Twice the Work in Half the Time," describes how he used his background and experience to create the most widely used Agile practice in industry today.

JANUARY 6TH 2021, 3:00PM (GMT)

Zsolt Lavicza

Title: STEAM education approaches and technological innovations to foster creativities in STEM teaching and learning

Besides tackling challenges and disruptions caused by digital technologies in schools, there is also a growing emphasis for encouraging creative thinking in education, innovating pedagogies and develop connections among subjects. Activities focusing on creative processes, rather than concentrating on achieving only results for posed problems, are being designed and trialled by innovative groups around the world. In my talk, I will introduce ideas and examples for technological, pedagogical and policy innovations involving STEM to STE-A-M (by the inclusion of Arts in a broader sense of creation and creativities) transitions and how these approaches could be utilised to teach and connect mathematics with other subjects. These examples will include STEAM research with mathematical foci from collaborating with the Experience Workshop Movement; studies related to GeoGebra and its new developments such as Augmented Reality, 3D Printing, Machine Learning and Mobile experiments; developing students' mathematical skills through robotics and connecting digital and physical worlds; and possibilities to detect and nurture creative thinking processes from Big Data. An overview of such studies could offer new insights into developments of creativities, innovations for STEM teaching and learning, and opportunities for nurturing further collaboration in these areas.

Short bio

Professor Zsolt Lavicza (BA, BA, MS, MA, MPhil, PhD)

After receiving his degrees in mathematics and physics in Hungary, Zsolt began his postgraduate studies in applied mathematics at the University of Cincinnati. While teaching mathematics in Cincinnati he became interested in researching issues in the teaching and learning mathematics. In particular, he focused on investigating issues in relation to the use of technology in undergraduate mathematics education. Afterwards, both at the Universities of Michigan and Cambridge, he has worked on several research projects examining technology and mathematics teaching in a variety of classroom environments. In addition, Zsolt has greatly contributed to the development of the GeoGebra community and participated in developing research projects on GeoGebra and related technologies worldwide. Currently, Zsolt is a Professor in STEM Education Research Methods at Johannes Kepler University's Linz School of Education. From JKU he is working on numerous research projects worldwide related to technology integration into schools; leading the doctoral programme in STEM Education at JKU; teaching educational research methods worldwide; and coordinates research projects within the International GeoGebra Institute.

DECEMBER 16TH 2020, 3:00PM (GMT)

Selay Arkun Kocadere

Title: Gamification: A Way to Add Fun in Learning

Although "gamification" dominates the headlines nowadays, there is a contradiction in terms. Therefore drawing the line between game and gamification will be a smooth beginning. Following the daily life examples of gamification, the instructional implementations will be shared and the transfer of the gameplay concept into classes will be discussed. The focus will be on practical tips for designing gamification for teaching.

Short bio

Selay Arkün Kocadere is an associate professor at Hacettepe University in Ankara, Turkey. Following her bachelors' degree in Mathematics Education, she received her M.Sc. and PhD in Computer Education and Instructional Technology. Dr. Kocadere worked as an instructional designer in the private sector before moving into academics. Interested in online learning, technology-enhanced mathematics education, mentoring, and educational games, Dr. Kocadere's recent research focuses on gamification. "Educational Game Design", and "Gamification in Education" are included in taught courses, in addition to IT in Education, Human-Computer Interaction, Distance Education. She managed two national and three international projects some of which are related to educational mobile games, and gamification. In addition to her ongoing projects and master courses on gamification, she sets up workshops and gives seminars about gamifying learning.

DECEMBER 9TH 2020, 3:00PM (GMT)

Philippe Longchamps

Title: Sustainable & Integrative Active Learning Methodologies: a Case for Holistic Teaching in Future-Making Education

When the evolution of technology and engineering is taught in an integrative fashion from an early age, it may literally be sowing seeds of creativity in students' minds and provide an opportunity to teach using hands-on activities for a more sustainable learning experience. When new concepts related to Science, Technology, Engineering, Arts and Mathematics (STEAM) are integrated, adapting a transdisciplinary pedagogy together with an active learning approach, ideas that might have a considerable impact on our shared future can flourish in the students' imagination. With examples provided from the methods I use at Bilingual Montessori School of Lund in

Sweden, I will attempt to demonstrate how a variety of school subjects ought to be integrated chronologically to enhance the understanding of the creative process that led to inspiring technological evolutionary patterns. Endeavouring to demonstrate that by using a holistic approach while using 4DFrame and other materials, it is possible to stimulate analytical and creative thinking, but most importantly, to develop a deeper understanding about historical and technological concepts and their relationships to one another, while creating a stimulating transdisciplinary teaching and learning environment. Indeed, I will argue in this seminar that teachers can develop their students' interest for engineering while using a chronological historical narrative where technical innovation is at the heart of the evolution of civilization.

Keywords: 4DFrame, Active learning, Engineering, History, Technology, Pedagogy, Convergence, Creativity, Sustainability

Short bio

Philippe Longchamps is the overseas Director of the ISAS, Teacher of the Year in Sweden 2020, and Head of Department at Bilingual Montessori School of Lund

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NOVEMBER 25TH 2020, 3:00PM (GMT)

Hana Siddiquee

Title: What is Agile and can it help improve student engagement in higher education?

We will be discussing the following:

- What is Agile Education and where can we use it?
- What are your strategies to engage students in learning?
- Why are Agile strategies vital for Higher Education Institutions?

Short bio

Prof. Hana Siddiquee is the founder of Agile in Education USA and President at Bohnishikha. She's a pioneer in the usage of Agile in Education, Scrum, eduScrum, and L-EAf in higher education in the USA. She has implemented Agile methods into more than 15 graduate and undergraduate courses. She is a business faculty and a program developer with over ten years of teaching experience. She's conducting research in Agile Scrum in Higher Education, eduScrum in Higher Education, Experiential team building with Scrum, Women in Agile Leadership, and Poverty Alleviation with Innovative educational programs.
