Program

New Frontiers in Creativity, Learning and Technology Research

10:00 – 10:10 Introduction

Vlad Glaveanu, Webster University Geneva, Switzerland

It has been three years since the Webster Center for Creativity and Innovation (WCCI), Webster University Geneva, and the Centre for the Science of Learning and Technology (SLATE), University of Bergen, held the first international symposium on ‘Creativity, learning and technology’. The event celebrates two outcomes from this initial symposium: a special issue 'Creativity, Learning and Technology' published by Creativity Research Journal (volume 32, issue 1, 2020) and, based on it, a book from Routledge, ‘Creative Learning in Digital and Virtual Environments: Opportunities and Challenges of Technology-Enabled Learning and Creativity’ (2021). The present online symposium brings together an eminent group of international experts to discuss current developments in the field of creativity, learning and technology research, and to reflect on the use of these phenomena and resource to address the pressing challenges of today.

10:10 – 10:25 (followed by 5 min Q&A)

Leading for innovation - How crises can be innovation catalyzers

Ingunn Johanne Ness, University of Bergen, Norway

New technology and changes in society are common drivers for innovation. Still, it normally takes many years to implement large changes in any organization. This has to do with different barriers to innovation such as employees’ attitude and resistance to change if they do not see a clear need for it; “if it’s not broken, why fix it”. Also, there can be various technological barriers in the sense that the organization might lack well functional technology and knowledge of how to use digital tools. These are common barriers for innovation in both public and private sectors. The oil crises and COVID-19 led to a situation in both industry and academia are faced with uncertainty and a need to lead the organization through the changes and think in new and innovative way. Already existing practices had to change and be replaced by new ones. These crises can in many ways be
seen as innovation catalysts for both industry and academic institutions. This presentation reports from a qualitative study on how leaders in two different contexts – private sector with a case from industry, and public sector with a case from academia – have experienced the crises in the oil industry and COVID-19. The results show that these two contexts have several similarities in how they experienced the change. The presentation will further point to the next challenge: how to support innovation in the organization also after the crises are over and the need to innovate does not seem urgent. Finally, the presentation will conclude with showing how an innovative culture can be supported by innovation leadership as a process.

10:30 – 10:45 (followed by 5 min Q&A)

**Playing the creativity game:** Educating humans and robots
Todd Lubart, University of Paris, France

The use of learning algorithms to foster the development of creative thinking will be examined. Optimization of the semantic distance of new productions from the previous ones is the first objective. The second objective is maximizing meaning, utility, or value. The necessity of mental models and future oriented thinking is highlighted. The interest of human-robot dyads for creativity is then explored.

10:50 – 11:05 (followed by 5 min Q&A)

**Creativity in education:** Learning computational thinking through game modding
Chronis Kynigos
University of Athens, Greece

'Game modding' is the practice of adopting a binary role of player and designer of a game. I will talk about a special kind of digital game designed explicitly to invite a critical engagement with game rules, content and look and feel enabling users to make changes to those games in many levels. This activity can become a context for inspiring creativity in low-stakes activities in the field of education in individuals and most importantly in collaborating teams who engage collectively in game modding. I will show an example of a freely accessible game authoring system allowing for the production and change of socio-scientific 'choices with consequences' games.
11:10 – 11:25 (followed by 5 min Q&A)

**What drives what: On the dynamics of creativity-achievement links**
Maciek Karwowski, University of Wroclaw, Poland

This talk builds on a longitudinal study that utilized the CLISAT: Creative Learning in School Achievement Test. Based on two waves of a large study on Polish elementary and middle school students, I will show how and to what extent creativity is needed for achievement and how school-based learning might inform creative learning.

11:30 – 11:45 (followed by 5 min Q&A)

**Creativity and learning on social media: Lessons from COVID-19**
Vlad Glaveanu, Webster University Geneva, Switzerland
Constance de Saint Laurent, University of Bologna, Italy

In this presentation we will discuss a large research project focused on exploring how people create meaning about the pandemic and what they learn from others about the current situation on social media. Building on social representations theory and narrative psychology, we describe a quantitative and qualitative study of coronavirus memes from a dedicated reddit community and draw conclusions about the what, how and why of creative learning in online spaces.

11:50 – 12:05 (followed by 5 min Q&A)

**Creativity and learning in 2020: Celebrating 150 years of Maria Montessori**
Giovanni Corazza, University of Bologna, Italy

On August 31, 1870, Maria Montessori was born in Chiaravalle, a small Italian town near Ancona. The story of her life is a fascinating adventure of a genius starting from a severely underprivileged condition, as were all women in Italy in the XIX century, facing harsh difficulties and discrimination, and finally raising to international fame thanks to her courage, determination, passion, and ideas. Maria Montessori revolutionized education in the Industrial Society, introducing freedom as a form of self-determined responsibility, and
anticipating modern concepts such as flow, embodied cognition, embedded cognition, and cosmic education. Through this talk we will be able to appreciate how clear it was in her mind that creativity and learning are tightly bound constructs.

12:10 – 12:30 **Final discussion with the contributors and participants**

Moderator: Claude Chaudet, Webster University Geneva, Switzerland