

Curating examples of the use of analogies (& storytelling) in STEAM

Motivation

The focus on information processing and hypothesis formulation, consideration of alternative strategies and hypothesis testing (Dewey, 1910; Ausubel & Robinson, 1971) have become the key foundations of systems thinking for 21st century learning in STEAM. To Simon (1969), 'the natural sciences are concerned with how things are...design on the other hand is concerned with how things ought to be.'

Problem-based Learning, Learning-by-Design (Kolodner, Camp, Crismond, Fasse, Gray, Holbrook, Puntambekar, & Ryan, 2003; Hmelo-Silver, 2004), creativity studies (Goel & Crow, 2005, Resnick, 2007; Peppler & Kafai, 2007), computational thinking (Wing, 2006) and design/ architectural patterns are also key theoretical foundations.

Objectives

Continuing from the 1st workshop on *Promoting cognitive access, processes and knowledge building towards deeper learning and creativity* (Lee, Drew, Wang, Chen, 2017), and the second workshop on *playfulness* (Tenhunen, Drew, Wang, Lee, & Lau, 2018), this workshop invites the latest research and findings on the use of analogies (and storytelling) in encouraging interdisciplinary interactive cognition-knowledge building, towards deeper learning and creativity, either individual or collaborative (Wang, Kirschner & Bridges, 2016; Chen & Looi, 2014; Lee & Wong, 2014, Lee & Wong, 2018).

Expected Outcomes

A half day mini conference, this workshop caters to pre-school, primary and secondary education as well as higher institutions of learning. We are interested in:

- the theory, methods and assessment used to formulate perspectives, experiments through model building for structured and/or ill-structured learning environments,
- the theory, methods and assessment used to encourage design and co-design-synthesis for structured and/or ill-structured learning environments.



Submission

Paper format: Follow the [ICCE paper format](#) and guidelines.

- The main conference submission is via Easy Chair. However, for this workshop, the submission is via e-mail. To submit a paper for review, please e-mail to interd2020icce@gmail.com.
- Ensure that you have adhered to the page limits for full paper (8-10 pages), short paper (5-6 pages) and poster (2-3 pages).
- All papers will be reviewed by at least TWO reviewers.

Important dates

- Submission deadline for workshop papers: August 30, 2020
- Acceptance notification of workshop papers: September 18, 2020
- Final camera-ready version due for workshop papers: September 27, 2020



For further information, please refer to <https://csleester.wixsite.com/interd2020>

