

Threshold concepts, systems thinking and Lego Serious Play: 3D ways of thinking

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Lego Serious Play (LSP) has been used globally, primarily as a business development tool but increasingly, and especially at The London College of Fashion, for personal, curriculum and educational development. Originally designed by the Lego group and now available as open source material, LSP offers a systematic and three dimensional process for deepening understanding of issues, building connections and relationships, uncovering insights and thinking laterally and creatively about things. Through its democratic and non-hierarchical approaches we believe it has significant potential for enabling students to grapple with threshold concepts and troublesome knowledge. With some threshold concepts requiring high levels of abstract conceptualisation, LSP helps learners to construct metaphorical models, and experience learning-through-making (Papert, 1991) beyond practical-based domains. In this way, LSP extends experiential learning and acts as a metaphorical tool for learning.

LSP has been in use with staff and students at the London College of Fashion since 2010 to explore themes such as personal and professional development, engagement in learning, motivation, team identity and functioning, as well as key areas of mission such as learning for sustainability. Awareness and use of LSP is now extending to the whole of UAL through our community of practice, Legolab, and we are piloting its use in university Academic Support sessions. In these sessions, we seek to encourage students from multiple and diverse courses to meet to explore and share variation in understandings of particular threshold concepts and troublesome knowledge in arts, design and media. Such interdisciplinary workshops on common areas of troublesome knowledge can also create valuable opportunities for students to build cross-course communities.

The workshop will have two parts to it: first, we will briefly outline the ongoing development of this approach to exploring threshold concepts with learners described above; second, we will follow this with an interactive section for participants that introduces the techniques of LSP. This part of the workshop will give participants a preliminary indication through hands-on experience with LSP of how they might 'build' a response to the following question:

What are the most favourable conditions under which a learner might meaningfully reach understanding(s) of a threshold concept, and successfully negotiate liminality?

In the process of exploring this question, participants may also encounter an interdisciplinary threshold concept identified by Sandri (2013): systems thinking. Given the problem-based nature of the question above, systemic thinking may underpin responses to the question, and would therefore create a further layer of experience for participants in the session. Choosing a problem-based task of common interest to participants should also take into account the likely multi-disciplinary interests of the potential participants, while the LSP approach allows for individual and shared reflection on participants' individual experiences. The workshop will include an opportunity to share ideas of how to take the LSP approach forward.

Estimated workshop time: 60 minutes, although a longer session of **90 minutes** would allow for a richer experience.

References

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- Papert, S. (1991) *Situating Constructionism*. Available at <http://www.papert.org/articles/SituatingConstructionism.html>
- Sandri, O.J. (2013) Threshold concepts, systems and learning for sustainability *Environmental Education Research*, 19 (6)

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