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UNIVERSITY OF SURREY

INDUSTRY WEEKLY DIGEST

Play in learning and teaching

Applying Lean in Higher Education is an opportunity for lean practitioners, academics, students and professional services to learn and work together to help tackle some of our global “wicked problems”.

This approach presents a lean programme developed by a team of professional services and academics, which has embedded lean and sustainability principles through experiential learning and serious play. It provides learners with a professional qualification at lean foundations and lean practitioner level.

Metaphors, storytelling and systems thinking underpin this powerful approach; linking theory and practice through embodied systems thinking.



How effective is play in learning and teaching? In this week’s issue, **Dr Tammi Sinha** shares this ongoing project which is part of a research project linking **Surrey Business School** and the **Continuous Improvement (CI) teams at University of Southampton**, exploring innovative management education in lean, sustainability, responsible management and serious play.

Shortlisted for the Lean Diamond Awards 2023 (lean & sustainability) and for the **UCISA 2024 Sustainable Digital Award**, the approach presented was accredited by the **Lean Competency System** (2024).

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About Dr Tammi Sinha

Dr Tammi Sinha is a senior lecturer in Operations Management, an author, lean practitioner and academic at **Surrey Business School**. She previously worked as an engineer within the

manufacturing sector where she led on strategies for technological enhancement. A Senior Fellow of the Higher Education Academy, she is also a **LEGO® Serious Play®** facilitator.

LEGO? SERIOUSLY? BUILDING LEAN SKILLS, KNOWLEDGE AND ATTRIBUTES BRICK BY BRICK.

By Dr Tammi Sinha

In this approach, emphasis is on the use of **LEGO® Serious Play®** (LSP) in teaching and learning of lean and sustainability, and the impact it has on learners. This innovative approach brings lean principles, responsible management, the circular economy and carbon literacy into one space.

The work builds on existing lean knowledge and practice, by bringing elements of serious play into the mix, enabling learners to build contextual models linking lean, sustainability and their application within their workspaces. Impact of the learning is measured through an anonymous visual survey, the success rate of the lean foundations exam, progression to the lean practitioner element of the programme, and completions of the lean practitioner portfolio. The continuous improvement kata and mentoring kata are key elements in this approach. **Rother (2018)** has developed the CI kata to incorporate learning with problem solving. This is shown through a lean flow game, developed as part of this programme, to enable learners to use all their senses in learning, to experience the chaos and volatility of a current situation, and using embedded cycles of Plan-Do-Check-Act to improve the situation through experimentation.

Learners are invited to build LEGO® Serious Play® (LSP) models to explain their perspective on CI and sustainability in higher education. This storytelling and receiving helps to embed key principles in our deeper learning psyche. LSP has a strong heritage through the learning theories of constructionism and constructivism. **Piaget (1980)** illustrated how we learn from experiences, and how we interact with specific contexts. Enabling learners to experience “flow” (**Csikszentmihályi, 1990**) increases the efficacy of learning; where systems are constructed in real time using bricks to show our understanding of current/future situations.

Further Reading:

Rother, M. (2018). The Toyota KATA practice guide (Vol. 2022). New York, NY, USA: McGraw-Hill Education.



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