Lego Serious Play for Economics Lessons

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Experiential Learning Theory (ELT) is a holistic methodology in higher education that focuses on how individuals learn (Kolb, Baker, & Jensen, 2002). In recent years, educators are beginning to recognise experiential leaning as the methodology that will revitalise curricula in higher education (Kolb, 2014).

As the unit convenor of the Bachelor of Commerce (BCom) Capstone Unit – *Agility and Excellence in Business*, I teach a new unit that brings students across 12 distinct disciplines in the BCom together to form cross-disciplinary teams of 5-7 – so that each student develops an empathy for other disciplines that they will have to work with upon graduation, as well as understand where a student's own discipline-expertise fits in the context of the entire team.

The teams work towards addressing one of the UN Sustainable Development Goals. They bring their skills and experience from their prior studies together to achieve this goal – collaboratively, sustainably, ethically, and profitably. Students produce a report that comprehensively outlines their capstone project, and how the team has strategically incorporated the 5 lenses of the team members.

Teamwork is embedded in the unit's curriculum with 5 weeks devoted to teamwork: an introduction to teams, the theory of teams, communication, collaborative problem solving, and conflict management. We work through activities which are ultimately a scaffolding for their capstone project.

This is where *Lego Serios Play* comes in. *Lego Serious Play* is a teaching pedagogy used in schools, higher education, as well as industry. *Lego Serious Play* is not to be confused with *Lego Mindstorms* which is another excellent methodology for teaching in STEM – and hence the Lego kits and lesson plans are quite different. *Lego Serious Play* (LSP) is geared towards business education as it is designed for team building, teamwork, management, and organisational activities.

For 17 years I have incorporated a "budget-version" of Lego Serious Play in my economics classes – whereby I use blank pieces of paper to teach team-based activities when it comes to a factory production line or the co-ordination of the banking system.

Satzler & Shieu (2002) discuss the use of LSP in a large operational management class. Specifically, the authors utilised LSP to teach:

- Product design / development
- Statistical quality control
- Workforce management
- Aggregate production planning
- Material requirements planning

- Process / layout design

All of which fits neatly within the context of the B Com Capstone.

Casper (2017) discusses the teaching of forming, storming, norming, performing, adjourning using LSP in a higher education context – content in the BCom Capstone curriculum. Kristiansen & Rasmussen (2014) in a widely cited study, discus how LSP helps in building better businesses, which echoes the name of the BCom Capstone – *Agility and Excellence in Business*. In Peabody & Noyes (2017), the authors discuss the use of LSP for teamwork, as well as reflective practice, and they state that the kinesthetic methodology is a promising higher education pedagogy – where reflective tasks are embedded in the BCom Capstone. Nerantzi & Despard (2014) and James (2013) also discuss the benefits of incorporating LSP in higher education.

In the Capstone unit, one lesson using LSP is to teach Tuckman's Stages of Teamwork. Each team is provided an identical Lego set and instructions – with the aim of completing the construction in the fastest time possible. The teams are initially allocated ten minutes for purely planning out their team strategy – the stages of forming and storming. Once these ten minutes pass, teams begin construction – the stages of norming and performing. When all teams are complete and their various times are realised, team reflect on their performance and are given the opportunity to re-form or adjourn.

For a lesson on economics, LSP can be used to teach a lesson on production and costs from microeconomics. A simple Lego structure involving 7 pieces is showcased as the product to be created - the aim is to create the maximum possible product in 2 minutes. Begin the first round with a single student on a production line and note the total product created in 2 minutes. Every round, add another student to the production line and plot the total product in both a graph and a table. Eventually, you will notice diminishing marginal returns beginning to set in.

LSP provides a tangible point of reference to students to experience the concepts that are being discussed in the classroom, via a hands-on activity that emulates what would occur in the workplace – equipping and empowering learners with employability skills.