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WHY DON'T YOU PLAY, SERIOUSLY?

Play is powerful. Playfulness gives us the space to explore and learn

hildren learn how to interact with the world and how to express themselves through playing. As we grow older, we can sometimes forget how to learn through play. LEGO Serious Play (LSP) is a powerful method to facilitate reflective thinking and learning for people of all ages through purposeful play.

Play and learn

People learn in many different ways. Cognitive learning theory considers learning as a process, in which individuals process information and develop certain actions as a result (Mayer, 2002). Such cognitive activities involve the reorganisation of mental processes that develop human intelligence and can take place in various forms, including games. A game is a form of play with goals and structures (Maroney, 2001) and is just as useful in Higher Education as it is for younger learners (James, 2019). Play or playfulness is one of most important elements in gamification, as it allows individuals the freedom to explore and fail within boundaries (Nicholson, 2015). In a game-based learning environment, cognitive learning supports students to obtain specific types of knowledge (Wang et al., 2015). When individuals can play and have the freedom to explore questions and answers from various perspectives, they have wider access to possibilities that can often lead to creative solutions to logic problems (Gray, 2015).

In a conventional and linear learning session, individuals might feel that they should follow rules and auidelines to meet certain requirements and expectations and they might feel that there is only one 'correct' answer. Even indicative answers can sometimes limit an individual's creativity, since they still might want to be 'right'. Avoiding this type of right/wrong situation can help maximise learning opportunities. One way of achieving this is to emphasise the playfulness of learning. The playful mind state allows individuals to explore different avenues with fewer constraints. Such playfulness can be encouraged by having choices – where different personalities are able to choose what they want to play with and how they want to play it. A ludic learning space (Kolb & Kolb, 2010), in which individuals can feel free and safe to play

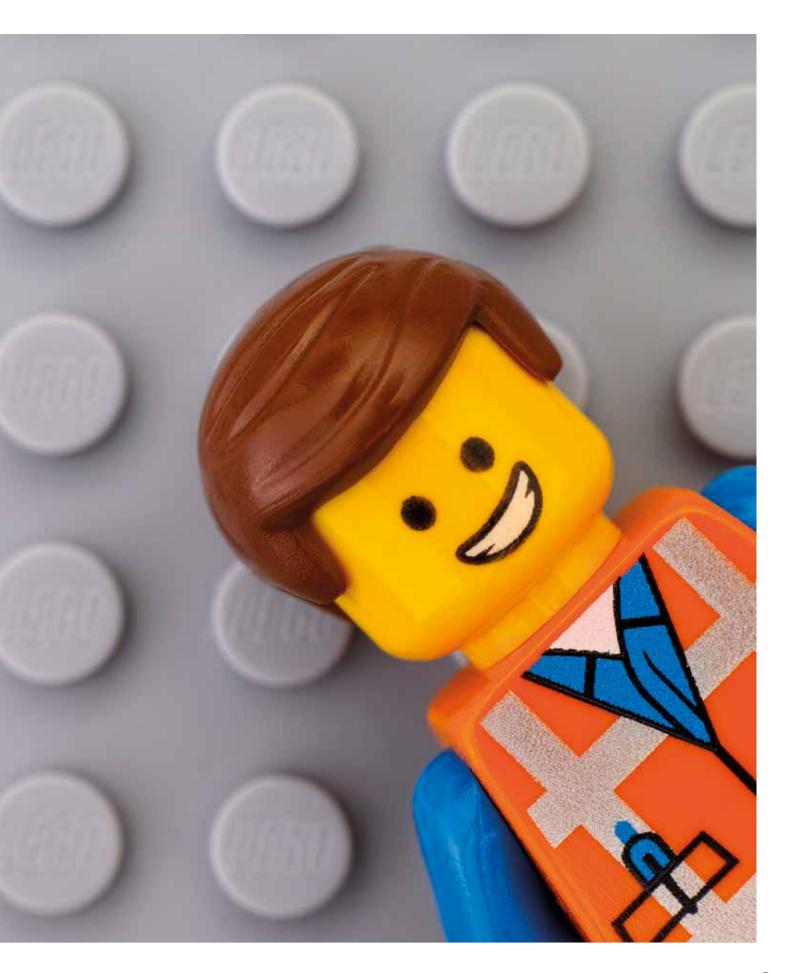
with their potentials and commit themselves to learn and develop, provides the environment for this playful learning.

Play with a learning purpose: LEGO Serious Play

LEGO Serious Play (LSP) is a method that aims to connect minds and hands to create a deeper understanding of the world and its surroundings via the use of LEGO bricks as metaphors (Kristiansen & Rasmussen, 2014). Metaphors can demonstrate the human cognitive process and provide a new way of expressing experiences and realities. LEGO Serious Play has been used intensively to tackle complex problems by many organisations worldwide, including Google and NASA. LEGO bricks can be seen as mediating artefacts/tools in activity theory (Engeström et al., 1999) to support dialogues and achieve goals (James, 2015). Instead of using words or diagrams to express themselves, students are encouraged to use metaphors with LEGO bricks to explore, construct and express. Individuals identify and build challenges and opportunities as they think, instead of planning everything out before building. The spontaneous approach allows each participant to continuously develop, reflect and enhance their views. The generic LSP workshops consist of several steps:

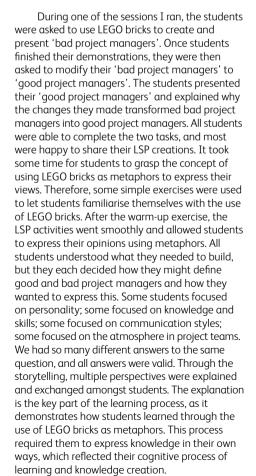
- **1.** Introduction and warm-up activities to help students feel comfortable with expressing themselves metaphorically
- **2.** Instructor poses the question(s) for discussion with students as a building challenge
- 3. Students build a model within a set time limit
- **4.** Students share their stories with others and find connections amongst the models
- **5.** Students reflect their explorations and constructions

The generic steps should be tailored to suit the purpose of the learning sessions. One of the most important considerations is how the questions (the building challenges) are structured. The building challenges should be crafted carefully. Instead of asking a big complex question, we can break down the questions into smaller modular or sequential questions such that questions allow individuals to form a shared understanding of what is to be explored yet provide the freedom to explore in their own ways.









Social learning through LEGO Serious Play

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LEGO Serious Play also facilitates communication and group problem-solving processes through exploring a subject by building 3D artefacts. The collaborative nature of LSP supports social learning theory, which views learning as a cognitive process that takes place through observation or interaction in a social environment. The structures, constraints, boundaries and identities of communities of practice can shape an individual's learning process (Wenger, 1998). Through the lens of social learning theory, people do not learn and develop knowledge in isolation. The interaction with others and the observation of fellow students or participants in the learning process also provides the context for students to construct knowledge. This storytelling and reflection part of LSP in particular enables social learning. The LSP workshop facilitators ask more questions based on stories with an aim to get students to reflect and share their thoughts more and more.



A pile of LEGO bricks is less scary than a microphone, pens and big blank flip charts. With colourful bricks, nothing looks bad! As a result, many students are more willing to try and share their thoughts. Play is powerful and engaging. With appropriate planning, play can enhance an individual's learning journey significantly

Engagement and participation with LEGO Serious Play

The majority of students engaged with the good/bad project manager session said that they did not expect to see LEGO bricks in the classroom, but they were pleasantly surprised by the task. LEGO Serious Play challenges individuals to express their views in a way that they are not familiar always with. Once past the initial shyness, they start exploring with LEGO bricks to create new and interesting metaphors. They often initiate the discussion between themselves without being asked. During the building process, it is common that students comment on their peers' work. The engagement amongst the group, in addition to their engagement with instructors, is valuable as it creates a learning community where social learning can take place. For students, visual presentation often helps them as well as others understand a subject better. Furthermore, the LEGO creations are visually pleasing, and many students enjoy taking photos and sharing them on social media. With the popularity of social media, LSP provides another opportunity to engage with students by offering something they might want to share with their followers.

Lowering the barriers for participation is yet another advantage of LSP. Some students might not be very confident in giving a short speech or saying something in front of others, because it can be scary to have to organise our thoughts and talk about it on the spot. Therefore, it is important that we find other ways that could be more interactive and engaging, such as group discussion or drawing ideas. But many students still might not want to draw because they fear they aren't artistic or creative enough. With LEGO bricks, it is harder to go wrong. We don't have to worry about whether we can draw a perfect tree or a person that is recognisable. We just put bricks together. If we don't like it, it can be easily taken apart and rebuilt. A pile of LEGO bricks is likely to be less scary than a microphone, pens and big blank flip charts. With the colourful bricks, nothing looks bad! As a result, many students are more willing to try and share their thoughts.

Play is powerful and engaging. With appropriate planning, play can enhance an individual's learning journey significantly. LEGO Serious Play brings playfulness through creativity and choice, yet it maintains seriousness by having clear goals. So, why don't you play, seriously?



References

Engeström, Y., Miettinen, R. & Punamäki-Gitai, R.-L. (2nd: 1990) Perspectives on activity theory. Cambridge University Press

Gray, P. (2015) Free to learn: Why unleashing the instinct to play will make our children happier, more self-reliant, and better students for life. Ingram Publisher Services US, New York, United States

James, A. (2019) Making a case for the playful university. In The power of play in Higher Education. Palgrave Macmillan: Cham

James, A. (2015) Innovative Pedagogies Series: Innovating in the Creative Arts with LEGO. York, UK

Kolb, A.Y. & Kolb, D.A. (2010) Learning to play, playing to learn: A case study of a ludic learning space. Journa Organizational Change Management, 23 (1): 26-50

Kristiansen, P. & Rasmussen, R. (2014) Building a better business using the Lego Serious Play method. John Wiley & Sons, Hoboken: New Jersey USA

Maroney, K. (2001) My entire waking life, The Games Journal http://www.thegamesjournal.com/articles/ MyEntireWakingLife.shtm

Mayer, R. E. (2002) Multimedia learning. Psychology of Learning and Motivation, 41: 85–139

Nicholson, S. (2015) A RECIPE for meaningful gamification. Gamification in Education and Business, Springer International Publishing, 1–20

Wang, C.-S., Li, Y.-C. & Tzeng, Y.-R. (2015) How to replicate the cognitive process in computer game-based learning units game-based learning units. *Information Technology* & People, 28 (2): 327-343

Wenger, E. (1998) Communities of practice: Learning as a social system. Systems Thinker, 9 (5): 2–3

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