



## LEGO IN THE CLASSROOM

### AN ACTIVE LEARNING TECHNIQUE FOR CO-CREATING KNOWLEDGE

COMPLEXITY	Effort to Facilitate:	Low	Medium	High
	Effort to Participate:	Low	Medium	High

#### WHAT IS IT?

LEGO® Serious Play® (LSP) was developed by the LEGO Corporation in 1996 as a real-life facilitation technique and practical problem-solving mechanism. LSP is a process that combines model creation, storytelling, active listening, engagement, and story-making. It is designed to foster problem identification, and the generation and sharing of creative ideas and knowledge in situations where other, traditional methods would be less effective.



#### ACTIVITY INSTRUCTIONS

LSP is normally used in a four-step process:

1. **The Challenge.** Participants are encouraged to think about a theory, framework, or problem scenario they have just learned about. This step allows them to clarify their objectives, collect and organize their thoughts, and begin formulating a solution.
2. **Build a Model.** Students build three-dimensional models visualizing their response to the challenge. This step is completed individually, so that every student gets a chance to explore and share their own ideas.

*Note: There is no need to buy special LEGO sets for this activity. You can simply use whatever pieces you have at home and/or buy a variety of inexpensive sets for students to play with.*

3. **Create and Share Meaning.** Students present their models (and the ideas behind them) to the rest of the class. This can include a description of what the model looks like, how/why it represents the concept under discussion, and the creative decisions behind why they created what they did. To facilitate this process, divide large classes into groups of four to five.

4. **Questions and Reflection.** After students present their ideas, their classmates and the instructor ask follow-up questions about the models and try to identify relationships between the various ideas presented. At the end of the discussion, students reflect on the activity (individually or in a group). Depending on the learning outcomes for the lesson, this reflection can focus on the models themselves (i.e., what can they tell the class about the concept under discussion), the experience of using LEGO® (i.e., what was it like to learn and reflect using LEGO®), or both.



**LEARNING OUTCOMES**

**What will students gain?**

- Brainstorming
- Creative thinking
- Problem-solving
- Self-reflection
- Active listening
- Synthesis
- Collaboration
- Empathy



LSP offers a number of advantages to learners. It renders abstract and implicit theory less esoteric and more personal and concrete, and brings an innovative and associative rather than a linear flow to cognitive processes. It creates an environment that can assist with surfacing of ideas, thoughts, and knowledge that would otherwise have been inaccessible in conventional conditions. It supports visioning or brainstorming exercises, allows integration of concepts, and serves as a high-impact experiential education activity. It is ideally suited to situations where the objective is to work out a solution to a shared problem, create a shared mindset

or vision, facilitate constructive discussion, or promote team or leadership development or coaching. Finally, it generates less fear and resistance in participants than other activities such as drawing or painting.

## TIME REQUIREMENTS

Activity	Time/student	Time/class
<b>Challenge:</b>		05 min.
<b>Building Model:</b>		10-15 min.
<b>Creating/Sharing Meaning:</b>	04-05 min	x 4-5 (number of students/group) 16-25 min.
<b>Questions and Reflection:</b>		15-20 min.
<b>TOTAL:</b>		<b>36 to 65 min.</b>

## POTENTIAL CHALLENGES

- Some students may feel hesitant to participate and share their ideas because the approach is novel to them.
- Instructors may struggle to identify how many LEGO® pieces are needed for this kind of activity.
- Some students may not be able to manipulate LEGO® pieces. To ensure that everyone has a chance to reflect and meet the learning outcomes, it is important to offer an alternative activity for students who may not be able to participate in the activity.

## HELPFUL STRATEGIES

- To get students excited about the activity and take away potential fears, consider doing an icebreaker or a similar kind of low stakes activity involving the LEGOs at the beginning of class. For example, you could ask students to form small groups and build a bridge with the longest span possible.
- There is no hard and fast rule for how many LEGO® pieces are needed for this activity. Generally, a small Tupperware container of assorted pieces is enough for one group of four to five students.
- The Teaching Commons does have LEGO® sets available for borrowing. If you are interested in making use of this option, email Lisa Endersby, Educational Developer, at [lendersb@yorku.ca](mailto:lendersb@yorku.ca).
- If you would like to discuss options for alternative activities, reach out to the Teaching Commons (see contact info listed on the last page of this handout).

**ADDITIONAL RESOURCES**

Blair, S., & Rillo, M. (2016). Serious work: How to facilitate meetings & workshops using the LEGO® Serious Play® method. *Prommeet*. Retrieved August 30, 2022 from <https://www.serious.global/read/how-to-facilitate-lego-serious-play-online/>

Blair, S. (2020). Mastering the LEGO® Serious Play® method: 44 facilitation techniques. *Prommeet*. Retrieved August 30, 2022 from <https://www.serious.global/read/how-to-facilitate-lego-serious-play-online/>

Dann, S. (2018). Facilitating co-creation experience in the classroom with LEGO® Serious Play®. *Australasian Marketing Journal*, 26, 121-131. <https://doi.org/10.1016/j.ausmj.2018.05.013>

Middleton, A. (2015). Room for imagining - The Playful Mind. Exploring Play in Higher Education. Retrieved from [http://www.creativeacademic.uk/uploads/1/3/5/4/13542890/cam2\\_part\\_a.pdf#page=6](http://www.creativeacademic.uk/uploads/1/3/5/4/13542890/cam2_part_a.pdf#page=6)

**Would you like to learn more?**

Contact us at Teaching Commons for additional resources, handouts, applications, courses, workshops, examples, advice, assistance, one-on-one consulting, and everything else related to teaching and learning. We are happy and eager to assist you!



[Teaching Commons](#)

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