## A taster of the LEGO(R) Serious Play(R) method (LSP) for higher education

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### Abstract

This short paper is an introduction to the LEGO® Serious Play® method, the underpinning theories, the process and practical applications. The authors, using two distinct case studies, demonstrate how LSP can be used in higher education for different purposes, to achieve active, pan-participatory and stimulating learning experiences.

### Keywords

Lego Serious Play, active learning, learning through making, connectionism

### The birth of the LEGO® Serious Play® (LSP) method

LSP was developed by the LEGO company out of a dissatisfaction with the outcome of strategic meetings. There was an urgency to find new ways that would activate innovative thinking and creative problem solving especially when the company was facing problems such as strong competition from digital toy makers threatening its existence in the mid 90s (Frick et al., 2013). A shift was needed that would secure the company’s survival and thrive in the world market. LEGO was seeking a way to empower individuals and teams and use their ideas to make the company stronger and thrive in a rapidly changing market. Kjeld Kirk Kristiensen, the CEO of LEGO at the time, recognised that strategic meetings needed to be transformed into exciting idea generating events that empowered participants. LEGO looked towards its own bricks as a tool to empower its people to come up with innovative solutions.

The LSP method has developed and evolved over a number of years. There have been over 20 iterations so far (Rasmussen, 2006). The original team of Kjeld Kirk Kristiensen, together with Johan Roos and Bart Victor from the IMD Business School in Lausanne, had shared values and recognised the urgency and necessity of an alternative approach for strategic decision making. They started development of the LSP method and were keen to make it available beyond the LEGO organisation and market it as a product.

LSP was officially launched in 2002. Per Kristiansen who worked in Executive Discovery, a division tasked with carrying out research into LSP, became the Director of LEGO Serious Play and, together with Robert Rasmussen, was one of the two master trainers. The team was seeking to develop a method that would provide reliable and robust results in a variety of settings (Rasmussen, 2006) and started training LSP facilitators. In 2009, the company decided to adopt a community-based model (Rasmussen, 2012) with which to spread LSP more rapidly across the globe, transforming practices at a much larger scale. In 2010, the LEGO company made LSP available as open-source. Training in the method is today provided by master trainers Robert Rasmussen, Per Kristiansen and certified facilitators who have completed training with them. Knowing how to use LEGO bricks is not a sufficient requirement to facilitate LSP workshops effectively and training in the LSP method is highly recommended (The LEGO Group, 2010; James, 2013). Specialist LSP kits are sold by LEGO to be used for the varied applications. However, experienced facilitators often put their own kits together which work equally well as they understand that it is not about the bricks, but what they enable. Smaller number of bricks should be seen as an opportunity to be more resourceful, according to the motto "less is more", instead of a barrier for richer expression.

The first use of LSP was largely in the business world, for strategic planning, team building and identity workshops. LSP has transformed business meetings and decision-making in the companies who embraced it (Novo Nordisk, Harco Technology, ABSA and VodaCom [http://seriousplay.com/17981/THE%20CUSTOMERS'%20VOICE]). More recently, LSP is increasingly being used in Education (Gauntlett, 2007; Frick et al. 2013; James, 2013).

### Background into the LSP method

Brown (2010, 101) states that “play is like fertilizer for brain growth. It’s crazy not to use it.” While this is widely recognised especially for children, play is still often dismissed as a valuable learning and development strategy for adults. LSP is a playful method that has the power to help participants feel more relaxed, though there can be resistance where participants might uncomfortable and exposed. Positivity towards LSP can be achieved via the creation of a safe environment that will enable participants to loosen up, immerse themselves in the process, take risks and engage in less common and more playful activities.

When the potential benefits and personal and collective gains of the process are made clear to adults (who tend to be goal orientated, Brown 2010), they start to take greater risks and experiment with new approaches which may have been alien to them initially. Some might experience what Csikszentmihalyi (1996) calls ‘in flow’, an ideal state of intrinsic motivation, which can transform LSP sessions into immersive, enjoyable and highly effective learning and development experiences.

A characteristic of LSP is learning through play and the personal and collective expression through visualisation of LEGO models via thinking with our own hands. These models represent external images in 3D of our internal reality, thoughts and ideas (James, 2013). LSP starts from the individual who creates and owns the model and what it represents. The models are then shared with others. This is a vital part of LSP. Gauntlett (2011, 4) states that making a model helps individuals to focus and identify creative connections beyond the obvious and notes that “thinking and making are aspects of the same process”. Papert developed the “learning through making” or “constructionism” theory which claims that knowledge is constructed through mental or real models (Papert & Harel, 1991). Frick et al. (2013, 8) note that constructionism is “about making formal and abstract ideas more concrete and tangible, therefore easier to understand.”

The models enable us to reflect through the use of personal metaphors. In a way, we use known terms in new contexts through LEGO models. These help us knit together and share our metaphors with others by telling a story. The metaphors play a vital role in constructing meaning in a more creative way (Schön, 1983). They also enable us to gain a deeper insight into our own thinking and as such they are a valuable tool for reflection. According to Geary (2011, 211) “metaphorical language can describe the indescribable.” We find it easier to express complex ideas and emotions for example using metaphors as 3D representations beyond words, but also challenge our own beliefs and make new discoveries. The metaphors, as the models we create, belong to the maker. Both, the models and the metaphors they represent, transfer internal meaning to an external object which might make it easier to talk about messy situations and thought provoking ideas. Teasing out meaning from the model using non-threatening questioning techniques by the facilitators and the group itself is part of the reflective process that helps the individual to make sense of their model and further the group’s understanding of a specific situation, topic or experience.

Storytelling is a natural instinct, form Tralee to Timbuktu, with Shanachies and Griots. It natural for people to share experiences via stories, making them more memorable. This happens in an LSP workshop too, individuals quickly move from describing their models in a mechanistic way and turn to storytelling as this is the way we communicate and engage the attention of our audience. Moon (2010) notes that stories are powerful for the storyteller and the listeners and are important vehicles for reflection, sharing of messages, creating opportunities for conversation and learning as well as enabling us to connect emotionally with the stories and their creators.

### The LSP process

The LSP method is premised on the idea that the solution is in the system, it encourages everybody to participate actively and become part of that solution. Everybody has a voice and shares their thoughts, reflections, ideas and feelings, to move the collective forward and become the solution to a specific problem or intervention through building LEGO® models. The models and their metaphorical meanings are owned by their creators and the creativity in expression has nothing to do with the representation of an idea from an artistic standpoint. There is no right or wrong way of doing it. Each participant is unique and expresses themselves in unique ways.

LSP is a highly active and pan-participatory activity. Using the LSP methods means opening-up, being honest with self and others, having a voice. To hear and be heard, to actively participate and contribute, to discuss openly, honestly and respectfully, to work together towards an agreed goal but also to reflect critically, think, re-think and un-think. LSP leads to personal and collective learning, development and growth. As LSP requires openness and honesty, it can also be seen as a highly sensitive process that might expose participants, their values, thoughts and ideas as well as their feelings. Therefore, In order to make LSP work effectively, it is vital that participants feel that they are in a safe environment where sharing is enabled through mutual respect and acceptance of differences and individuality. The facilitator plays a key role in this. Working practices and goals need to be negotiated and agreed with the participants at the start of each LSP workshop.

The LSP facilitator plays a vital role in the use of LSP, the process itself and the outcomes. They lay the foundations for the effective application of the LSP process, including the creation of a supportive and safe environment that ensures pan-participation. The facilitator is tasked with carefully monitoring what happens during a workshop, to sense challenges or tensions and respond quickly and smoothly to maximise engagement and output. Facilitators do not participate in the building process; they assume a position outside the participants. Effective facilitators bring the best out of the participants and empower them to share their thoughts and ideas and become part of the solution, part of learning and learning itself.

The workshop process is based on a series of challenges set as questions, a visual response to these and the sharing of stories. Limited time, usually between 1 and 5 minutes is made available for model building as a response to individual questions,. More complex applications might require additional time. A full workshop can last from one hour to a full day

As all good stories the LSP process has a beginning, a middle and an end.

The beginning: As mentioned above, working practices need to be agreed and the process and desired outcomes explained at the start so that everybody is clear. Then building begins. A progressive approach works best. A warm-up or skills development section, helps individuals develop their LEGO building skills and move them slowly from building instruction-led literal models to adding metaphorical features to them. At the same time, they start the process of sharing and opening-up in a non-threatening way while also starting the reflective process. The making of their models increases participants’ ownership of that which they represent. Many find it hard to dismantle their creations as they start seeing these as an extension of self.

The middle: The main LSP process is the following:

1. Posing the question: the facilitator asks a question which is addressed to the whole group. This acts as a trigger and helps participants to focus in on a thought, an idea or a situation. The question needs to be clear and open-ended so that participants understand what they are asked to do.

2. Building the model: Each participant makes a model individually as a response to the facilitator’s question. Building starts while everything is still messy in their minds. The models will emerge and become a visualisation of thoughts that have a specific metaphorical meaning for the makers. The model and their meanings belong to the makers.

3. Sharing the model: This is a very important part of the LSP process. The model acts as a hook to reflect and share our story with others and connect with the stories shared by others. It is important to give enough time to listen to all stories and to allow them to be heard.

4. Reflecting: the process of reflection kicks in as soon as building begins, continues through the building process and when the stories are shared. The facilitator and participants might ask open-ended questions to seek clarification linked to specific models or features and aid deeper reflection.

The process is repeated through a series of scaffold activities introduced through further questions which the facilitator has prepared until the desired outcomes have been met.The facilitator must always be flexible and responsive.

The end: The facilitator summarises what has been captured during the LSP workshop and invites participants to reflect individually and capture these on the model itself but also in a notebook or learning journal.

### LSP method in higher education

The model where the teacher was the holder of knowledge to be dispensed to learners needs to be revised. Instead we need to look toward models of learning which facilitate the sharing of views and conceptions. Learning is not a process which occurs in isolation. The constructivist view is that learning is achieved through experiences and the integration of new knowledge with existing knowledge. The co-constructivist view extends this to allow that learning is achieved through the sharing of meanings and understandings, within learning communities. In this domain LSP has a great deal to contribute. LSP workshops often begin with the building of individual models which give a representation of the builder’s conception. The use of LEGO® bricks shifts the language of expression of the learner. New language leads to new thinking and as such the learner is less likely to reproduce learned or expected responses. Instead their responses are more visceral. The LSP method allows these individual models to be combined or integrated into a new shared model which represents the shared understanding of the group. It is through this process that deep conceptions and misconceptions can be brought to the table and through exposition, conflict and resolution, familiar concepts to storytellers, new knowledge and understanding is co-constructed within that community.

In current LSP the questions are prepared and posed by the facilitator (The LEGO Group, 2010; Frick et al., 2013) and form part of their workshop preparation and construction. While this is of value and enables the facilitator to carefully orchestrate the session to maximise engagement and output, it still models a facilitator-directed and -driven approach to learning and development.

There are opportunities to explore the use of questions that are generated from the group itself based on a pre-agreed theme and allow a more responsive workshop with looser structures more owned by the participants themselves. This change would potentially increase motivation and empower learners further but does require a skilful facilitator, able to translate their questions into valuable LSP activities.

### Applications

Within this paper two (2) applications are presented as mini case studies which have been used in different institutions that will provide some food for thought for educators who would like to make a start with LSP.

#### Identity

An LSP workshop was carried out within the School of Education at Durham University. In this exercise, a group of 12 postgraduate students, training to be primary school teachers, followed a series of exercises and explorations, culminating in the question of how they saw themselves as teachers. These were students early in their teacher training programme and as yet, had little experience in that role within a class, although many had carried out voluntary roles within schools.

Participants each spoke for between one and two minutes about how they saw themselves and their role within the classroom. Interestingly, many talked about their nurturing role, models typically having ‘large welcoming arms’. Contrasting with this and often comprising part of the same model, were themes of ‘authority’, represented by tall or broad figures, but also by figures which were capable of looking in many directions simultaneously ‘Making sure I’m in control and all-seeing’ Another common theme was that of flexibility, represented by models with many aspects or many heads, capturing the idea that a teacher would need to fulfil many roles in the classroom as well as be able to cope with a great variety of pupils.

Interestingly for this stage of teacher education, few of the trainee teachers mentioned teaching or learning within their narratives, perhaps reflecting that concerns about classroom management and acceptance dominated their thinking.

All participants felt that the workshop had been a worthwhile task, a key benefit being that it allowed them to focus on their few core beliefs, which best represented themselves.

#### Reflection

LSP was used with students, who are members of teaching staff, studying towards the Postgraduate Certificate in Academic Practice at the University of Salford in the context of their summative assessment for the Learning and Teaching in Higher Education module which is a Professional Discussion with the module tutor and an external panel member. Students were invited to create individual LEGO models through which they shared their learning from the module.

Students were given 30 minutes in advance of the Professional Discussion to create their models. At the start of the assessment, students talked about their model with the panel members and were asked a few questions to clarify specific aspects when needed. It was noted that the models provided a useful hook for reflection and a focus for the student. It also made them feel more relaxed about the assessment process and broke the ice at the beginning of the discussion and helped the student to open up. As a result, the conversation was richer, more reflective and enabled the panel to gain a deeper insight into student’s learning. Models were all photographed and added to students’ digital portfolios. This provided an opportunity for reflection and self-assessment. (Nerantzi & Despard, under review)

Overall, the LSP approach was received positively by students and panel members. There were some reservations expressed by a very small minority of students who felt less able to fully engage with the process because of its novelty. The assessment outcomes, reflective accounts and discussions with students and panel members confirm the value and positive impact of this LSP intervention.

### Conclusions

The LSP method is a valuable tool in the toolkit of any educator and students. It can aid self- and collective reflection and increase active participation, engagement and individual and collective learning through making, discovery and sharing within a learning community.

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