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Introduction

This paper considers prospects created in education by the Lego Serious Play (LSP) method. In addition to this, opportunities of developing and applying an internal team's potential using the LSP method are elaborated. Psychological, educational and practical implications of the hand-made game design are presented. The rationale behind the mind's and hands' connectedness is given. In the methodological part, Lego Serious Method is presented; aims and objectives of this method are given and deliberately discussed. Stages of the LSP method, rules and instructions are evaluated from the viewpoint of users. A user-driven design of the LSP method is evaluated and its possible adaptations depending on the concrete user group are presented. In the results' part, testing of the method and its main consequences are discussed. In the conclusion part, results of the study are considered with the implications in education, innovation management and psychology.

If an objective is about solving a practical problem, a solution can be found via opportunities provided by a game (a play). Lego Serious Play is a method developed by Johan Roos and Bart Victor. This method's purpose is to develop various business sections (Roos & Victor, 1999; Statler et al., 2009). Lego bricks serve as the main tool of the method. With the help of Lego bricks, specific solutions are built in order to solve current challenges. Game-related activities enable imaginary opportunities created by hands.

An Idea of Play in the Learning Process

The meaning of the play in the development of human imaginary was jointly studied by Brown and Vaughan (2010). Play creates a place for optimism in people and reduces stress. In addition to that, play helps us to recognize

new opportunities better. Play is thus considered in our culture as a matter that does not produce anything. In this respect, play becomes synonymic to some degenerate thing (Brown & Vaughan, 2010). Such an attitude probably stems from the Lutheran faith and its work moral as well as from the fact that labour is a man's duty. Therefore play is mainly seen as a waste of time. Therefore it is viewed as a dissolute thing (Brown, 2010). There is probably a concept of the Lutheran work moral in the backgrounds of this concept and a dutiful attitude towards any work done by man. As a result, a game is considered a waste of time. In turn, it can be meaningful in the work-related context. Games are not however intended excessively. Instead of that, there is an intent to use a game only as a catalyst that enables benefits derived from it (Chua, 2003). In general, working by hands activates the human brain and enables a better problem solving compared to the simple discussion of problems.

According to Brown (2010), games have typical basic characteristics. Firstly, a game has no self-evident goals. Instead, it is practiced for the sake of practice, since it feels good. Secondly, a game is voluntary by its nature: no one can oblige us to play. Thirdly, human beings have a natural interest towards a game, and hence participants do not need to be especially motivated to play a game. Fourthly, freedom of time relates to a game. Typically, a starting point of a game is not detailed. There is no exact information about a game's duration or end. Fifthly, participation in a game diminishes individuals' awareness about themselves. In addition to that, participants often change their roles between each other, which could lead to blurring of time and place boundaries. Sixthly, there is a great improvisation potential in a game. Those opportunities are bought forward that can exist in organisations from the innovative competences' perspective. Finally, seventhly, a game includes participants' desire to continue playing. The completion of the below-mentioned conditions creates a flow-type experience among participants. Such an experience tends to be prolonged further and further.

A game that is checked by experience proceeds through six stages. The first stage is the rise of interest when participants start guessing about a game's future events. In relation to an increased personal interest, the next stage is a surprising move, which then leads to the sense of gratification. After that, a new knowledge construction is being built. Besides, participants' earlier experience base is used as the material for such a construction (Brown, 2010). As the effect of the newly born inspiration, participants' experience strengthens even further (West & Meyer, 1997). Therefore a game achieves the planned final result: a sense of contentment and balance.

Each participant of a game has his or her own role. According to Brown (2010), there are the following marked roles in a game: a joker, a maker (kinaesthetic), an explorer, a competitor, a supervisor, a collector, a creator/an artist, and a storyteller. A person playing a joker role is typically responsible for uniting separate units. It can be traceable for instance in the form of practical pranks. A maker thinks while moving, and a game is built through such moves. An explorer, in turn, searches for opportunities to move physically or emotionally to the new areas. A competitor wants to be single in the game. For such kinds of personalities, creation of game rules is required. A supervisor wants to plan entireties and control every detail. A holder of such a role can become a tyrannical actor in a game that would also strive to control the actions of other players. A collector gets delight from a game by collecting different artefacts. A creator (an artist) takes fun by creating new things in a game. At last, a storyteller makes game-related narratives that are based on the events taken part.

Mind-hands collaboration

Wilson (1999) indicates that the meaning of concepts is built in collaboration of hands, language and the brain. In order to form abstract concepts in our language, we have to find some equivalents in the real world (Chong et al., 2014). Moreover, for a concept's deeper understanding, we should make it with the real world's artefacts (Sun, 1998). From the viewpoint of our brain's work, it would be optimal if such a connection would be based by means of hands.

In order to take on new knowledge we would rather use our hands. In relation to some new objects, we roll them in our hands – thus understanding its entirety. It can be considered as a proof of our intelligence (Gray et al., 2010). The same model can also be observed in animals' behaviour: the more intelligent an animal is, the more various ways it creates for studying and benefiting from an object (Wilson, 1999).

In this meaning, a game offers an opportunity to work (i.e. to elaborate) on an object from various sides. When a game takes part with the help of Lego bricks, wide opportunities exist to accomplish different game-related roles that are described above.

In consistence with the findings of Gaunlett (2012), a process of making has a uniting influence in three different ways. Firstly, unification of materi-

als, ideas and/or its separate elements creates newness. Secondly, unification occurs in social contexts when creative processes are fulfilled as a part of the joint activity. Thirdly, unification of the first two levels enables a more intensive association to the social and physical environments.

Consequently, collaborative playing offers an excellent way of exploiting different players in different roles and making good use of their various strengths to the work community. Additionally, an organisation's innovative potential can be utilised most comprehensively.

Lego Serious Play – as a method

Lego Serious Play method is seen to be well functioning in setting an organisation's objectives, developing collaboration of the work community, innovating, developing products and services, and managing changes. The advantages of Lego Serious Play method are the following:

- Views and tacit knowledge of every participant are brought forward.
- Unification of opinions offers new opportunities.
- There is an opportunity for all group members to generate new knowledge
- Afterwards every participant has a clear concept of what has happened at the event.

By means of active participation everyone experiences dealt issues in his or her own way. Additionally, participants become ready to work on promoting the general decision.

Lego Serious Play (LSP) – workshop proceeds cyclically, so the upcomings are repeated. After the final stage, one returns again to the first stage in order to get new question(s) or challenge(s). The stages of the LSP-workshop are following: presenting a challenge, building and distributing. In presenting a challenge, the members of a group define a question that they need to answer by making a joint decision. At the stage of building, every group member builds his or her own solution to the presented challenge from Lego bricks. The building work proceeds mainly independently at this stage unless other instructions are provided (Lynne, 2001). When the construction work is mainly finished, a distribution stage starts. Everyone is able to tell in detail about his or her result (i.e. a constructed object). Consequently, multiple solutions are obtained to the same challenge (Brown & Vaughan, 2010). An extra level of participants' motivation is achieved by means of blurred opportunities to different possible final results.

It is quite an often situation during the meeting when a large group of participants share a passive role. By means of LSP-method all previously passively involved individuals get involved in the joint collaboration. What is more important, their opinions are also heard. However, in order to make such a workshop productive, participants have to obey LSP-etiquette. It includes the four core principles: everyone gets an opportunity to present his or her own viewpoint; it is permitted to ask questions about details of others' products but to not challenge them; there is no single correct answer to the existing challenge; all answers are found from the built artefacts.

LSP-method can be exploited both for making individual or collective construction. By means of the individually built models, it is easy to get several clearly different viewpoints and interpretations of solutions regarding the same challenge. As a starting point of the collective constructing work, every participant makes first his or her own constructions. Based on these individual inputs, a complete collective construction is formed by making use of negotiations between the group members. In this way different outlooks and demands are adjusted for resolving the challenge.

LSP-method will be tested at the Department of Business Management in the autumn 2014. In order to get foreknowledge about the method's applicability among the educated individuals, we will try effects of LSP-method in relation to the focus group's experience, in a real-case environment. Our final objective is to identify how the national identity influences on the familiarity and applicability of the method.

Lego Serious Play TM – experiment design

A staff meeting (September 2014) was chosen as the date for experimenting with the LSP-method. The size of the training group was about 25-30 people, all of whom are actively participating either in teaching or research, development and innovation process of the Mikkeli University of Applied Sciences, Department of Business Management (Finland). All the group members are adults, with their high level of academic education and profound industry experience in the management, marketing, and/or economic fields. Before the beginning of the experiment, the staff members were given the deliberate instructions on the background of Lego Serious Play as a method, idea of 'hands – mind' collaboration, etiquette of first the individual and then collective idea building, and the factors that predetermine a successful learning & work process under the LSP-method. Altogether, staff members

received four consequent tasks. We provided first the description of all four tasks (i.e. design of the experiment) and then proceed to the analysis of the experiment's results, and the theoretical and practical implications.

For the first and subsequent tasks all the participants were in the same position. The same start packages with the Lego bricks were distributed to every participant of the experiment. Therefore the just attitude towards each participating individual was ensured. Since we were restricted in time, only two major tasks were fulfilled.

In the first task, the participants could see three pictures with the ready constructions from the available Lego bricks. Over the three following minutes, they were asked to build one of the constructions seen in the pictures. Apart from the building part of the exercise, the participants were encouraged to think individually and then share their ideas with each other about the meaning of the built models.

In the second task, the general question was linked with the currently developed Master School programme in the Mikkeli University of Applied Sciences at the Department of Business Management. The challenges and solutions of these challenges in the implementation of the Master School were to be reflected in the Lego constructions by all participants. The third task was completed in five to ten minutes.

After the completion of these two tasks, the participants were asked for their feedback, in which they could tell about their personal impressions of the LSP-method in action, about possible ways of implementing the LSP-method in their own work, and about ways of improving the LSP-method.

In general, while fulfilling the first and the second tasks, the individuals revealed their personalities. In this respect, as one possibility to develop this LSP-experiment and get more information about psychological nature of participants, they could for instance receive the following task. Individuals are free to select nine bricks from the whole collection of the available Lego elements. In three minutes, they are expected to build something that could describe their personalities. It should be noted that changing the bricks after the initial selection are prohibited. Additionally, each selected brick is supposed to be used in the self-describing construction.

Another experiment task could be used for determining participants' levels of creativity and ability to meet challenges in their current work. To do so, participants are first put in the marketing-design chair of the imaginary enterprise with the task to identify what kind of snowmobile could appeal to the absolutely new target group. As for the second part of the same task, participants are challenged to identify the future trend in the collection 2030 based on the current know-how of the enterprise. Timing is chosen equal to five minutes for both parts of the exercise.

Results and Discussion

As a result of the experiment we received solutions for seven developmental issues that the organization was interested about. It was more interesting for the research to determine how the participants saw the method as a tool for development. Twelve out of twenty-seven participants did give feedback after the experiment. Overall reactions were positive and the method was considered as a good way to find new solutions. The participants were given three questions to be answered. Different findings are considered question by question.

How does it sound as a method?
The overall feeling after the experiment was positive. The way that the method helps to make thoughts concrete was inspiring for some of the participants. It was also thought that the interest towards the task is much more intense once the task is ´in the hands´. Some participants thought that this method might be used more frequently. The participants also had noted that with this method much more options were considered as compared to traditional meetings. Some participants reported to be a bit sceptical before the experiment but were surprised how nice the method actually was.

The lack of time was seen as a negative side of the experiment. Because of the rush, there was no sufficient time to consider the outcomes. In one team the actual developmental challenge was seen as problematic. All the team members started to build the current situation, not the way how it could be solved.

In which specific areas (How?) could you use this method in your work?
For this question there were multiple situations identified which could be used as a platform for the LSP method. Problem solving was considered as the main field where this method could be used. R&D functions might benefit greatly with this kind of approach. It was also thought that it works

especially well in a situation where participants are highly educated. The study counselling was also seen as a field where the method might help students to find solutions for their challenges.

It wasn't so clear how this method might work in a situation where the team members' backgrounds might vary. Some participants were concerned about how to build up a comfortable situation so that every participant would feel him- or herself safe while taking part in LSP.

How could you develop this method?
Quite many participants saw that based on this experience, they couldn't really see any ways how it could be developed further. Some restrictions arose about the time given. To ensure the proper dealing of results, it would need more time. This was seen as the major difficulty in this setting. Another opinion was concerning the number of bricks available. Because of the lack of time, it was thought that fewer bricks would make it easier to handle the situation.

Conclusion

The LSP was taken positively by the staff members participating in the experiment. It was thought as a great tool to be used yet more in this kind of circumstances. Besides the positive feedback there were things that needed to be further developed. Once using LSP method there must be enough time to prepare the participants for actual developmental challenges. Within this experiment, the rush was seen as the major setback in an otherwise nice setting. Therefore safe conditions could be achieved only when there is enough time available. With these additions the LSP might work in a more pragmatist way. The method must be studied more to find out how the results can be taken into actions of the organization.

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