Chapter 20
Physical Metaphorical Modelling with LEGO as a Technology for Collaborative Personalised Learning

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ABSTRACT
LEGO Serious Play is a business development process where users build metaphorical models from LEGO bricks in order to explore and share their perceptions of various aspects of their working lives. They model important symbolic elements of their personality, emotions, working practices, organization, and the relationships between these elements in order to share stories that aid the construction of organizational knowledge. This chapter reports on trials using LEGO Serious Play with HE students from a range of subject areas who used metaphorical modelling to articulate their learning autobiographies, current situations, orientations to learning, and aspirations. The models helped students make informed choices and helped staff to understand their needs and personalise the learning provision appropriately.

INTRODUCTION
It is in playing and only in playing that the individual child or adult is able to be creative and to use the whole personality, and it is only in being creative that the individual discovers the self. (Winnicott, 1971, pp 54)

In its simplest form, personalised learning is about tailoring education to the individual’s needs, interests and aptitude, giving the learner a degree of ownership of the learning process. This deceptively simple statement sets out two very clear but complex challenges, how do we discover what the needs, interests and aptitudes of an individual are and how do we facilitate the learner’s attempts to own the learning process? To rephrase this from a speculative learner’s perspective, “How do I know what my relevant needs, interests and aptitudes are
and what exactly is this learning process that I’m supposed to own?”

This chapter describes the evaluation of a process that attempts to deal with both of these challenges by having students physically model their needs, interests, aptitudes and learning processes in order to model the learner journey itself. Students then use these models in metaphorical storymaking and storytelling in order to articulate their learning autobiographies, current educational context, orientation to learning, and aspirations to other students and to staff. Models are revisited and reconfigured throughout the learners engagement with Higher Education (HE) and are used to help them make choices related to course and module options, placements, projects, training, and other personal and professional development planning. We refer to this process where groups of students help each other to understand their learning processes and make decisions based on this understanding as collaborative personalised learning. The strengths and weaknesses of this process will be the primary focus of this chapter.

BACKGROUND

Initiated in 2004 by Hex Induction (an independent consultancy with experience in training, change management, and research) The Playful was a research project that looked at the use of pedagogical games in HE. Funding for the project came from areas with an interest in: play and learning (the University of Huddersfield Teaching and Learning Research Fund); digital game design (the Centre of Excellence in Digital Design at the University of Huddersfield and The Centre for Excellence in Media Practice at Bournemouth Media School); and performativity and learning (the University of Huddersfield Drama Department).

The initial aim of The Playful was to find workable, playful, teaching and learning methods, with a broad potential application across HE, that would appeal to learners for whom visual thinking and aesthetics are important and which would not put shy learners in difficult situations.

Before describing the trials with students the next section will look at the LEGO Serious Play process: why it was developed, how it works, its basis in learning theory, and how it is used in business contexts.

THE LEGO SERIOUS PLAY PROCESS

Kjeld Kirk Kristiensen, the owner of LEGO, and Bart Victor and Johan Roos, professors at the Swiss business school IMD, developed LEGO Serious Play in 1996 in order to find a way to generate more engagement, imagination, and playfulness in staff meetings (Roos & Victor, 1998). It is now an established business development tool used by companies such as Google, eBay, Roche, NASA, AstraZeneca, the International Red Cross and DaimlerChrysler as an alternative to traditional planning meetings. Participants use LEGO bricks to build models of themselves, their teams, the organization, and business strategies (Roos & Victor, 1999). The process discourages the making of literal models, which would be no more useful than traditional tools such as flipcharts and diagrams, by focusing on metaphorical and symbolic representations.

This is best explained with an example. Figure 1 shows a model made by a final year student representative to describe a negative attitude exhibited by senior managers at their University. The model shows two managers looking away as the University “cash cow” feeds on the bones of students who haven’t been supported properly.

Simple metaphors are combined in a model to represent pretty much anything that is important to the individual, team or organization. Often, it is the individual, team or organization that is built but specific issues or problems can also be modelled.
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