4.7 Exploring learning gain with LEGO ® SERIOUS PLAY ® and visual ethnography

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LEGO® SERIOUS PLAY® (LSP)/LEGO® application
Prior to the 2020 pandemic, I had enjoyed 4 years of designing in-person workshops as an LSP facilitator at Middlesex University, exploring a wide range of Higher Education related issues. These included assignment and dissertation planning, cohort dynamics, academic integrity, referencing and departmental strategising (Wheeler, 2020).

In addition, just before the pandemic arrived, I was ready to submit my doctoral research proposal which sought to explore the issue of learning gain (Kandiko Howson, 2017, 2018), employing LSP as the method. At its simplest, learning gain refers to how far a student has progressed during their educational journey. Furthermore, it is split into hard (progression, grades, employment outcomes) and soft (confidence, wellbeing, sociability) skills. My focus within this study is very much an exploration of the soft skills associated with the student experience.
For obvious reasons, after March 2020, the idea of putting participants in a room together became quickly unviable. As a result, I redesigned my proposal by incorporating LSP as a method to collect data for visual ethnography (informed greatly by the work of Sarah Pink (2008, 2021). Visual ethnography explores the interactions and subjective realities of participants via many different technologies. I still wanted to explore the experiences of students by employing LSP, but I also wished to use the principles of video ethnographic enquiry to explore representations of how individual/group dynamics on-screen impacted the holistic experience of building and sharing. Visual ethnography also stresses the importance of the researcher on the study, you're not an observer, you're a co-participant. Therefore, acknowledging my presence as an impact on the process was key.

To recruit volunteers, I took advantage of students returning to campus by attending a series of 1ˢᵗ year psychology seminars in person, presenting a short talk on what I was proposing to explore. Interested students were then interviewed informally, where more details of the study were provided. Subsequently, seven students accepted the opportunity to take part in the study.

The study itself consisted of three LSP workshops of approximately two hours duration, conducted via Zoom. All workshops were recorded and all volunteers were asked to have their cameras on throughout. For three of the participants, this was the first time they'd appeared on screen since starting at university.
Participants were posted the same LEGO® to their homes, split into three discrete bags of different numbers of bricks, so workshops could escalate from relatively simple builds to potentially more complex structures.

Each of the workshops explored different interrelated aspects of Learning Gain, touching on motivation, wellbeing, confidence and social experiences. The builds, detailed more fully below, sought to provide students with opportunities to construct examples (both positive and otherwise) related to these concepts and, equally importantly, share them in an environment that felt supportive.

Having never conducted LSP via screens before, I was interested to see if the lack of physical closeness appeared to impact on the readiness of participants to share experiences. Moreover, by conducting this research in all our living spaces, how would that manifest during the workshops?

Outcome
The three workshops, conducted between October 2021 and April 2022, produced seven hours of recordings, which I am currently analysing using principles adapted from visual ethnography. All seven participants attended all three workshops. As I write this, in 2022, those recordings are yet to be shared with the participants. Therefore, with the second stage analysis ahead of me, I will focus on what happened in the workshops themselves and the evidence for impact. Any participants mentioned directly will be identified by their initials.

The first 45 mins of all three workshops were structured similarly, starting with simple models to familiarise/remind participants of the underlying principles of LSP. Namely, ask questions of the model, stick to what you've made when describing your models (no backstory!), be respectful and don't build what you don't want to describe.
No two warm-up builds were the same, as I was concerned there should be no repetition across the workshops to keep things fresh. Examples of early-stage builds included 'build a machine or invention that would have been useful during the pandemic', 'build a piece of furniture' and 'build a model to represent something you enjoy doing when not studying'. Builds that would be fun and not anxiety inducing was paramount for each warm-up stage.

Later builds, in keeping with the soft skills which surround learning gain, included 'a model to represent your first day on campus', 'a model to represent something that makes your ability to learn harder' followed directly by 'a model to represent a potential coping strategy' and finally 'a model to represent something you know now about yourself that you didn't know when term started'. The overarching themes of these and other builds, were to offer participants an opportunity to demonstrate and share moments of resilience and progress.

In keeping with the principles of LSP and visual ethnography, I didn't want to do all the talking. Within that spirit, these quotations from the participants are in response to the question 'build a model to represent what these workshops have been like for you'.

AC: "basically the wheels represent the journey we've all been on together, the flowery things represent us all growing together, you're the one [minifigure] in the blue guiding us via the internet connection with each other and because it's also been a bit of fun I've got the aeroplane I built [which is a call-back to an earlier model] which was a fun thing I built".

CO: "So… these bits are because it's been fun, enlightening, affirmational… is that a word(?) … very life affirming… this bit represents transparency… blocks of clear… I've been really inspired by how open everyone has been and it hasn't always been easy so that's the red… but yeah that's the transparency and that's one of my themes as well… the truth shall set you free… I like being open and honest and it's very easy once you get past the hard part <laughs>. This bit, the pink blocks, and

they're quite big… because this… erm… experience has been very tender. It's been a tender experience… soft… emotionally… everyone's been really open and kind…"

CP: "Mine is more of an abstract concept, this is me and through the workshops I learn how to speak about myself and all the different aspects of myself that before I wasn't able to".

IK: "This model represents how creative everyone's minds have been, all the different colours and shapes represent creative that individuals have in the group… yeah… and it was really nice to see that everyone used their creativity to explore abstract thoughts and create something… really nice"

SL: "Mine looks very simple and basic because I had trouble deciding what to build or how to represent it…erm… It's just mainly been an eye-opening experience, that's why I've got the eye on top of the head… yeah… we've been… it's been eye-opening for I guess myself and to see everybody else's creativity or just… how everyone has just shown themselves through the LEGO ® and these <points to model> are the different workshops and what I've been able to take away from each one…"

SZ: "this is like a representation of the three different bags of LEGO® at the start and how it was all organised and neat and tidy. Then by the second and third [workshop] it's like I got to see everyone's perspective and even though it was a complete mess it was a lot of fun to see what we came up with, being given the same categories which is a lot of fun".

VG: "these three <points to minifigures> represents all of us and how we all have different minds and different ideas. We had all the same LEGO® pieces, but it was really interesting to see how we all came up with very, very different things, depending on what we've all been through".

These responses, towards the end of an emotionally revealing and very honest final workshop, were indicative of how participants had largely experienced their learning collectively. Despite the question asking what these workshops 'have been like *for you'*, overwhelmingly, the responses incorporated the whole group within the resulting build. It has led me to consider the possibility that learning gain can be a social undertaking, incorporating the notion that what we learn about each other adds context to that which we learn of ourselves.

Possible changes
If I were to conduct LSP via Zoom again, it would probably be for a different outcome. Technologically, I would ask for more background details concerning cameras and lighting if sessions were due to be recorded. If I had the opportunity again to explore learning gain with a group, the possibility of asking them to build individually, post-workshop as a reflective tool is something I would consider.

New ideas for the future
It is not yet known how much teaching is expected to be on campus from September 2022. This makes it difficult to plan sessions in the near future. However, what has been discussed with lecturers is the possibility of an in-person LSP session exploring

the concept of academic integrity. This would probably be a non-LSP session but would use LEGO® to demonstrate concepts such as plagiarism and referencing.

References

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