

# **Supporting University transition for new undergraduate students using LEGO®**

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## **ABSTRACT**

The transition to University for new undergraduate learners is often a difficult time and can lead to early attrition. This article reflects on one project (Flying Start) over the course of two years. The aim of the Flying Start sessions was to help students transition to university by challenging their misconceptions of higher education, working with staff and reflecting on their previous attitudes to education. To make these sessions distinctive and memorable LEGO® was used as a teaching and reflection tool. Over two years Flying Start (funded by the Office for Students), was run in the Colleges of Business, Arts and Social Sciences and Health and Life Sciences between weeks 0 and 8 in term 1.

## **INTRODUCTION**

Flying Start was designed to support the transition of new FHEQ Level 4 students to Brunel through either one or a couple of sessions. They were designed to give students an idea of the initial academic skills they would need, as well as tips about the Brunel campus. The aims for Flying Start were to challenge misconceptions of higher education but also to ask students to reflect upon their previous experiences of study and consider how they might want to change or adapt for their university studies.

Since its pilot in September 2017/18 in Arts and Humanities, Flying Start has expanded to other areas of the Colleges of Business Arts and Social Sciences (CBASS) and College of Health and Life Sciences (CHLS). The origins of Flying Start came about from academic staff approaching ASK to discuss how we could improve the transition of all Level 4 students and the issues that arise in their particular course (such as academic skills, familiarity with campus and being unaware of what was expected of them as a student.) To make these sessions engaging and unique from other content delivered by other services during Welcome Week, LEGO® was integrated as part of the session to incorporate methodologies

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and ideas associated with LEGO® Serious Play (LSP). The key ideas for LSP focus on enabling creation and learning through play (Open Source, 2010) by reflecting and using your hands to play and build, participants can create visual reminders of different parts of an issue or problem. It is important to state that the limited amount of time for all sessions were far below the amount of time that normally one would give to a LSP session, however within the time and timetabling constraints with students at this time we could not do any longer. It is an example how LEGO® principles and ideas can be adapted within a higher education setting.

Having used LEGO®, gamification and learning through play in the past, I felt that LEGO® would be an engaging session during Welcome Week and the first 6 weeks but would also utilise the reflective element so crucial to the LSP methodology. The students were asked at the end of each session to complete evaluation sheets asking them what they found most valuable and what could be improved.

### **OUTLINES OF THE SESSIONS**

The first Flying Start pilot session in 2017/18 ran for 2 hours (one hour for the LEGO® session and one hour for an academic skills session with another member of staff from the Academic Skills Team within the Brunel Educational Excellence Centre.) The session plan consisted of the following:

- Icebreaker: The students were encouraged to grab as much LEGO® as possible and use what they have collected to build the tallest tower possible in 30 seconds
- Ask students for a number of assumptions about higher education with a few suggestions created for the session, including, 'you can only make friends during Welcome Week and 'I need to be perfect, I can't make any mistakes'
- Each student in the groups to take a number of misconceptions of Higher Education and create a LEGO® model representing that myth and then they fed back to the wider cohort in their group, discussing why they are myths and why based on their previous educational experiences before picking another.

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- Then ask students to create models based on their understanding of independent learning

For 2018/19, the outline of the sessions for Welcome Week were adapted to be flexible enough to work for different courses' timetabling, as well as the number of sessions we were given. Due to the CBASS 6-week extended induction for Games Design and Law sessions. I ran 3 sessions across the first 6-8 weeks of term 1. In order for the sessions to be different but also not to overuse the LEGO®, I chose to integrate other traditional methods to provide variety. This included the following:

- LEGO® based icebreaker: either students could make a tower or a bridge, with the aim that the more creative they were, the better.
- Misconceptions of Higher Education and independent learning: students were encouraged to walk around the room to 'debunk' common first year misconceptions by writing on large flip chart paper. Students could create these misconceptions through LEGO® models if they preferred (or if there was a large group or large lecture theatre). Students would then create a LEGO® model based on their perceptions of independent learning followed by feedback
- Note making: Key points about notetaking including context and different strategies delivered as a short workshop
- Living with your degree: this was a time management session about how to utilise campus and commuting to benefit a student's degree
- Reading and writing: an hour-long initial session delivered by the relevant ASK advisor
- Reflection on the term so far: using LEGO® skills building (story making using 'student heaven' model and 'student hell' model), placement of these models and students then place themselves where they are now in week 6 or 8. This was followed by a quick quiz on student services

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## DISCUSSION

For undergraduate students' pre-entry, transition and academic skills interventions have become key recommendations from the Higher Education Academy (now Advance HE) and Office for Fair Access (now the Office for Students) (Thomas, 2012) due to a well-documented and positive effect upon new students (Jansen & Suhre, 2010.) Students often find it difficult to acclimatise to University, feel like they belong and get involved (McPherson, Punch and Graham, 2017). This can often lead to an over-reliance on academic staff and they struggle to make time for their studies (Heussi, 2012). It is therefore important to create a learner identity within student as early as possible (Briggs et al, 2012).

LSP was developed in 1996 and has translated well to an educational setting primarily through 'learning through play' (Finke, Ward & Smith, 1992 and Runco, 1994 and Pike, 2002). Research suggest that LSP is particularly impactful in reflective circumstances by being explorative and creative enabling learning development for students should they struggle with academic writing and other academic skills (James, 2013). The sessions that I ran were associated with the skills building part of LSP methodology (Open Source, 2010), these are short exercises that allow the students to reflect and play with the LEGO®.

When reflecting on the sessions, time constraints were difficult to work with but realistically 60- 120 minutes for a session in higher education is long for students to sit through. In addition, I wanted to get as much into the sessions as possible, so time had to be given to each section especially if I only had one session in Welcome Week. However, with sessions that were drawn out over 3 sessions across the first 6-8 weeks I was able to focus on certain areas for a longer time plus have the variety of mixing LEGO® and other techniques, as well as forming more of a relationship with myself.

Based on the 2017/18, evaluation I hoped to have more academic involvement to personalise the sessions for the students and this was achieved in 2018/19. In future to ensure that transition and academic skills are not seen as remedial and are an essential part

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of the new student journey this will therefore require collaboration with academic staff members to work with them to design and support the sessions.

The students interacted well with the LEGO® sessions over the course of the 6-8 weeks; some students were not as keen to talk as others which is to be expected especially as the students did not know as many other people in the room so were noticeably shy. There was also an issue with students who could not put the LEGO® down and kept fiddling with their creations once the group feedback was underway (a number of students mentioned this in their feedback). To counter this, for 2018/19 I created specific and prescriptive ground rules at the start of each session in order to give boundaries to myself, the session and the students particularly with regards to the LEGO® sessions. It is important to do this to allow creativity and for the students to feel part of a safe environment. This also allowed the students to come up with up with a few of the ground rules to give them ownership over the sessions.

As I never knew who would attend the sessions, I believe I will have to look further into how I can make the sessions more applicable to various mental and physical disabilities and have contingency plans should they be needed. This could be in the form of extra LEGO® in case of signers or note takers as well as bringing in another resource like Play-Doh®. Sometimes the same principles can be applied but as a resource Play-Doh® does not have the 'harsh edges' that students sometimes report that they do not like about LEGO®. Larger cohorts were also difficult due to the reflective element attributed to the LEGO® sessions and we were unable to get feedback from all students. This meant that the more confident students were willing to stand up and show their models off and we had to coax quieter students to speak which is difficult in groups as large as 90. This also leads to issues with the overall impact and evaluation of the sessions. In future we would need to design more robust measures to be able to manage large and small groups that highlight the benefits and issues with using LEGO®.

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## CONCLUSION

Supporting University transition for new first year students is important to introduce the students to the skills they will require over the course of the student journey. Overall, LEGO® practise enhanced the sessions that were run, providing a different type of induction and transition event that allowed students to reflect and challenge their perceptions at the start of their student journeys. Literature has highlighted the reflective element of LSP as a concept and the article has demonstrated a number of elements that were extracted from that to be applied in a Higher Education setting. The sessions changed over the course of the two years to ensure sustainability for the future but also to incorporate other teaching methods to ensure the LEGO® does not become a gimmick. Flying Start has established ground rules and incorporated academic support but still needs to have contingency plans for larger groups and manage the time constraints due to student time. Its impact has been emphasised through positive student feedback and the fact that the schemes have been renewed and expanded for this academic year.

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