

# Lessons Learned from the BIM Extracurricular Activity for Construction Students in the Architecture and Built Environment Faculty at LSBU

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## Introduction

Building Information Modelling (BIM) is a catalyst in collaborative working within the construction industry and seen as the positive way forward in working to deliver a more effective and efficient project, away from the traditional silo approach.

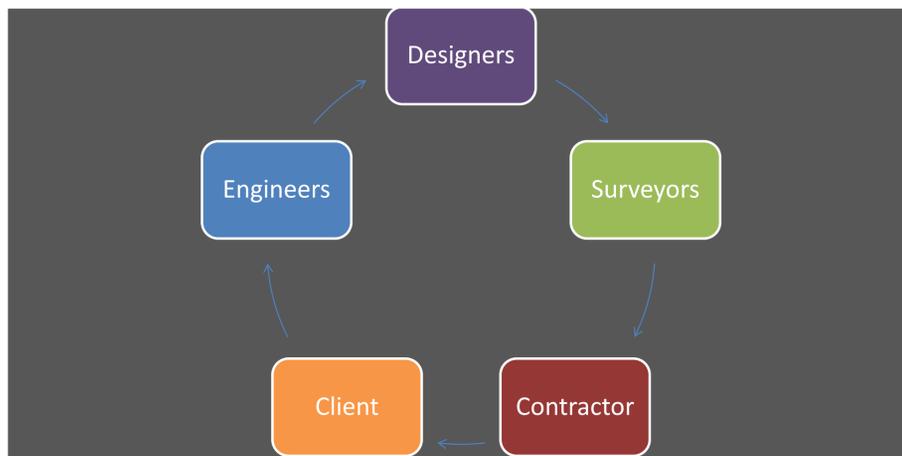


Figure 1: BIM as collaborative working tool in the construction industry sector

Although there is no requirement yet within the Built Environment Higher Education sector to implement it, London South Bank University (LSBU) has anticipated that this will change in the near future. In September 2012, staff organised an extra-curricular activity for Level 5 students who wanted experience of using BIM. The extra-curricular activity lasted for 11 weeks in Semester 2 of the 2013-2014 academic year. Students from different disciplines worked together on a design project.

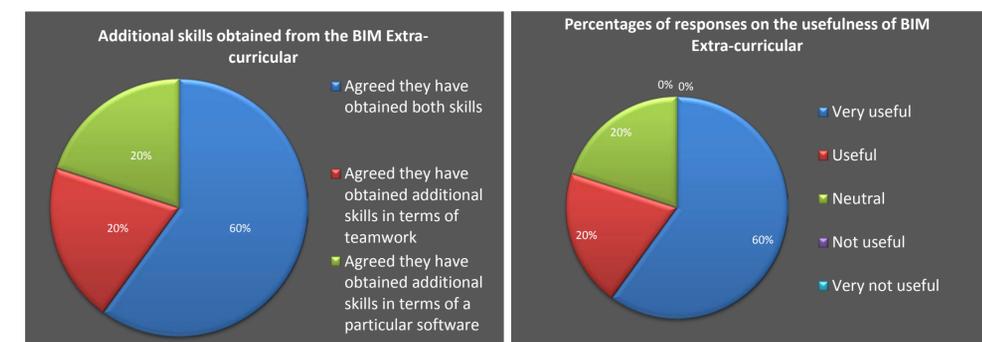
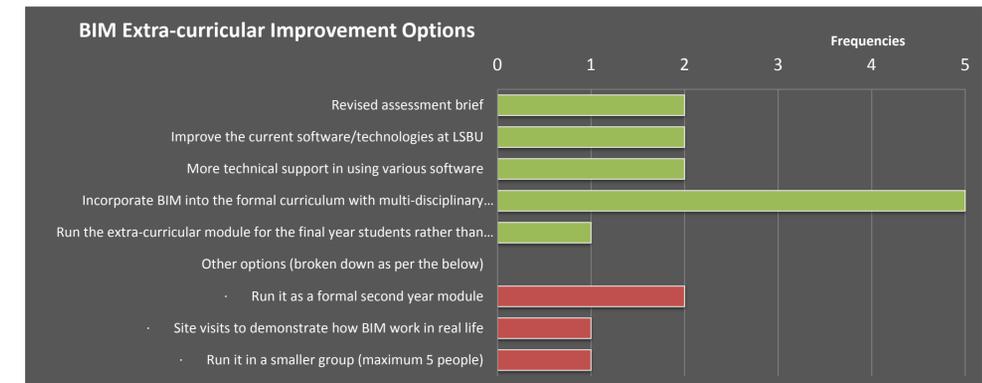
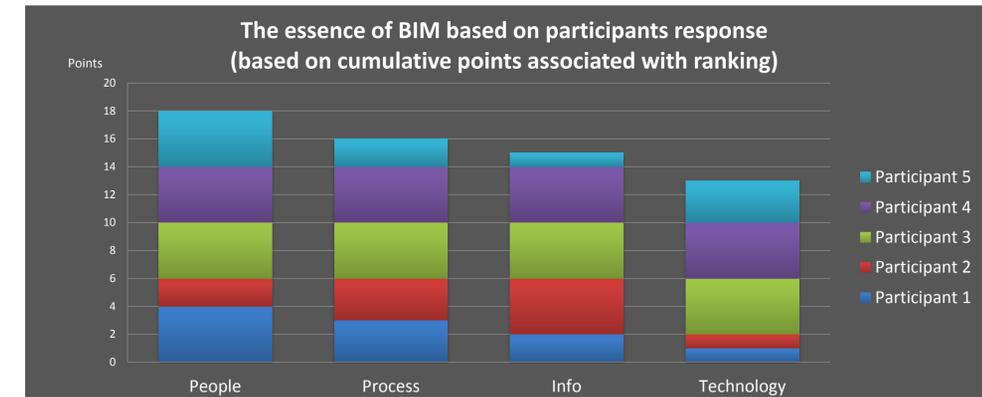
The **aim** of this research is: to determine whether students who participated in this extra-curricular have obtained any lasting benefit from it, have been able to transfer their learning and whether they have found BIM as a useful tool in facilitating collaboration.

## Research Methodology

- The case study approach was used to gain in-depth insights into students experience of the extra-curricular activity.
- Questionnaire was distributed to six students who completed the extra-curricular as primary data collection.
- It was also distributed to 19 other students who did not complete the extra-curricular to gain further data to support the research.
- An online focus group with staff who has worked in various stages of BIM was convened to get their view of BIM, its challenges and their view on ways to incorporate BIM into the curriculum.
- Ethical consent procedure was closely followed and extended ethical form was completed for approval.

## Findings

- Out of 25 students who expressed interest in the extra-curricular activity, six students successfully completed the activity, and five of them returned the questionnaire.
- They also stated that the multi-disciplinary collaborative teamwork has been very useful and it helps enhance their employability skills.
- Students agreed this extra-curricular should be re-run.
- Non-completor students raised the concern that because it is not part of the curriculum, they have lower level of motivation to complete it.
- All students participants would like BIM, especially the multi-disciplinary collaborative teamwork aspect, to be incorporated into the formal curriculum.
- The online focus group findings suggests that the main challenge is in motivating both staff and students to work collaboratively across the disciplines.
- The online focus group also suggests that it is important that appropriate training is provided to all staff members to ensure they understand what BIM is and to ensure smooth transition in incorporating BIM into the curriculum.



## Conclusion and Further Recommendation

- Research shows that students who completed the extra-curricular found it to be very useful. Especially the exposure to the multi-disciplinary collaborative teamwork.
- Students would like this extra-curricular to be incorporated into the curriculum.
- Because it is an extra-curricular activity, students seems to have lower commitment and motivation level to complete the activity which resulted in lower completion rate. Further research is needed to gather more robust data behind this and for future improvement to the extra-curricular.