



CONTEXTUALISING LEARNER EXPERIENCE: USING LEARNING ANALYTICS AND OTHER METHODS

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Abstract

In this workshop/discussion we will demonstrate how we have used a range of tools to measure the student experience on a second level 60 point undergraduate interdisciplinary module that is taught remotely. This module currently has 350 students who are located all over the UK, with a minority based in Europe and the rest of the world.

As with other modules offered by the Open University (OU) in the UK, our students come from a diverse background and learn from printed and VLE materials with help from their tutors, who deliver correspondence tuition and tutorials (a mixture of face to face and online tutorials). The module chair, responsible for the quality of teaching materials, does not have direct contact with the students. In our session, we will outline how, in our capacities as the module chair and TEL designer, we have compiled a comprehensive picture of our student experience, gathered from different stakeholder perspectives and using qualitative and quantitative methods to inform the changes to the module.

This workshop will demonstrate learning analytics alone is not sufficient in understanding learner experience. Different methods (including learning analytics) can help to contextualise learner experience better and hence contribute to student success more effectively.

Overview

As Lockyer et al. (2013) identify, analytics can be used both to inform course design and to offer additional metrics that support educators in making appropriate changes to improve a design. And yet a focus on the perspectives of learners is essential to fully benefit from the lessons learned (Ferguson, 2012) with some arguing learning analytics is not the panacea to solve all complexities of increasing student success (Prinsloo et al, 2012).

This session will explain how we used the learning analytics and other methods to understand the student experience on a second level undergraduate interdisciplinary module comprehensively. We will outline the context of our project, explain the tools we used to measure the student experience from different stakeholders and discuss our findings. Lastly, we will outline the changes we have made to the module and share early findings of these interventions.

The module was launched in October 2012. By October 2014, we had sufficient data to conclude that pass rate and student satisfaction rate on the module were below par, compared to other second level Undergraduate modules within the OU. To understand the issues, we carried out:

- an investigation using a number of Learning Analytics;
- a real-time project to seek student and tutor feedback;
- a mapping exercise to examine student workload throughout the module;
- an examination of student performance by comparing the percentage of students who received low pass/failed marks for the Tutor Marked Assignments (TMAs) of this module with its feeder module and a comparable second level module;
- an investigation to pinpoint when students withdrew from the module.

Students participating in the real-time project indicated difficulty keeping up with workload, which corroborated the student survey carried out in 2012-2014. The workload mapping pinpointed the study weeks for the online collaborative activity as particularly challenging. This mapping could not pinpoint workload for individual students but does provide an estimated anticipated workload for those weeks, for which there is evidence that this is an important factor for student retention (Toetenel & Rientes, 2016). These weeks also require the students to engage with a different type of activity to that which they have engaged with in previous weeks, thus providing a double impact for the students.

Tutors indicated that having 10 calendar days to produce a collaborative output remotely was demanding for the students. It is also high risk as it relied on IT to align the permissions of the sub-forums with those for the synchronous audio tool. A questionnaire designed to survey the tutors' understanding of learner experience helped us to ascertain a different stakeholder's view. This added richness to our understanding of learner experience.

The percentage of the 2013-14 cohort getting fail marks/low passes for this module was higher than its feeder module and a comparable second level module for every TMA, with TMA02 showing the highest percentage. An analysis examining when students withdrew indicated that half did so by mid-December (two weeks after the TMA02 cut-off). Therefore, we identified this as the critical point for intervention.

With the above data, we implemented the following actions for 2015-16:

- The block with the collaborative activity was rewritten to even out workload, streamline the forum structure and ease synchronous discussion. The collaborative activity was timetabled to take place towards the end of the learning unit with a warm-up activity prior to the bulk of the collaborative tasks.
- We redesigned TMA02 so that it contained steps to guide students explicitly on how, for many students, to write the first argument for a second level module.

Although we do not have the evidence to conclude the effectiveness of these interventions yet, so far the evidence is encouraging. Retention for the 2015-16 cohort has improved by 4% in March 2016, compared to the same period for the previous cohort.

References

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Biography of presenters

Daphne Chang is a staff tutor for the Department of Engineering and Innovation at the Open University. She is a social anthropologist. Her recent work focuses on the use of analytics to improve retention and progression as well as the links between gender and employability for MSc postgraduate students.

Gerald Evans works as a Senior TEL Designer in the Learning and Teaching Solutions department at The Open University, with particular scholarship interests in learning analytics and collaborative activities.