

TEL019 Student Data from VLEs - Moodle

End of Project Report

Summary

The TEL019 project has provided us with insight into how the Moodle VLE platform collects and reports usage data. We have explored a broad set of tools that interpret this information so it can be delivered to assist teaching and learning. It is clear that there is no single analytical tool that meets the needs of staff and students. Any tutor wishing to access this sort of data and make it available to students should look at which of the available tools meet their needs and review what sort of effect this might have on the students.

This project has not been able to clearly assess the impact of this kind of information on students. It is hoped that future projects with a focus on analytics will be able to better determine if allowing student access to certain reports on their usage of VLEs has a positive effect on their experience and studies. Any future projects / research can benefit from the information that has been gathered by TEL019 and the way that it has been presented to tutors at this stage via the Moodle Showcase course. Future projects should also be informed by the growing body of research in this area, including research carried out here at Edinburgh.

It was clear that TEL019 would have many parallel streams with the TEL017 (Learn focussed) project and it is likely that future projects will ensure that any further investigation in this area will be conducted in parallel across both Learn and Moodle platforms. The overarching information related to analytics data and how it is used has been developed in parallel between the two projects and exists in a platform independent state.

There is an increased awareness of learning analytics and its uses. The projects have identified some more examples of the types of information that is of interest to different courses. More work needs to be done to see what data can be made available to students and if it will have a positive or negative impact on their University experience.

Project Review

Original Objectives, Deliverables, Success Criteria

Objectives

- Identify the way that student data is collected during trials of the TEL009 Moodle approaches for student analytics
- Identify ways that this information can be used and highlight any benefits and trends that this may lead to
- Make it clear to the university the types of information that is collected within Moodle and outline how this data may be used
- Make recommendations on further work that may be required in implementing student analytics in Moodle

Deliverables

- A review of existing Moodle approaches for analytics based on evidence and accounts from the staff and students involved in the trial of the tools
- An analysis of the review with implications for further work and developments for Moodle in the future

Develop information for Staff and Student on the types of data collected in Moodle and how it may be used by the University. This information must be clear and make good use of visualisations to make the content easier to understand

- Produce guidelines and support information for staff and students that shows how to use any of the chosen Moodle analytics approaches
- Work with the TEL017 project to produce information for the University community that shows how we collect and use analytical data within VLEs.

Success Criteria

- Greater awareness and transparency about the data that is being gathered within Moodle and analytics more generally, in collaboration with similar objectives in TEL017
- A better understanding of the approaches used in Moodle for collecting data with real examples of how it can be used by students and staff within the University of Edinburgh
- Evidence that the analytics have been used by staff and students
- Evidence to help identify the value of the analytics tools that have been used in the trial
- An analysis of future developments and direction for continuing to find more uses of analytics within Moodle and how to make the information available to the students

Identification of student data collected in Moodle

The reporting tools used in Moodle that are available to administrators, tutors and students themselves were identified, documented and reviewed. The process of documenting the reporting tools allowed us to identify the nature of the information being collected and in what context. Most users of Moodle were unaware of the tools that are available in the system and expressed different opinions on how these types of reports could be of use in their courses, and which information should be provided to students as a priority.

The discussions with tutors and course organisers highlighted that no single tool would meet a general need for analytics. Rather, each existing tool should be considered for each course to see if it could have a genuine impact to assist teaching and learning, and what impact this information would have on the student if the data was made visible to them.

Development of information for Staff and Students

General information for staff and students

General information relating to both Learn and Moodle is continually being developed and updated via the Learning Technology web pages. This information aims to address the types of data that is collected, who might access the information and how it might be used. The general statement is aimed at being transparent and offering additional information to support staff and students.

This information is currently available via the Learning Technology webpage, this information could be linked to from other key sources to make it more visible.

Support and Guidance for different tools

A "showcase" course has been developed in Moodle to raise awareness of the different tools and reports that are available in Moodle. The reports are grouped by type and give clear examples of the type of data that is tracked and how they might be used. Where student views for the data are present, we show examples of how these are presented to the student.

As this information is delivered via Moodle it is possible for people to access hands-on examples of the reports and see how they look from the perspective of different roles.

Due to the nature of the reports, and the lack of experience and research into the effectiveness of information that is provided to students we urge caution before using certain reports in courses. We encourage staff who wish to use analytics more proactively to get in touch with our projects to allow us to support where we can.

This support and guidance isn't currently visible to students, but it, or a student-facing version could be made available as part of the student tutorials and guidance that is already available in Moodle.

Dissemination to wider University Community (with TEL107)

This work is ongoing. The focus of the Moodle interaction with the University has been to establish links to those running a variety of courses to keep them informed of future analytics work.

Analytics was the focus of the recent Moodle User Group meeting, however this meeting was poorly attended by tutors and course organisers

Future Development of Moodle

As part of this project no development work was carried out in Moodle.

No clear outline of future development work was agreed upon. There are 3 areas where potential development work could be carried out: Making existing tools student facing; providing the ability to create custom reports; making the LTS analytics information available from within Moodle (staff and student).

Evidence of use and Impact of Student Analytics

From our focussed discussions from some of the Moodle ODL programmes we were able to identify some of the use cases where analytics has been used to support teaching and learning despite limited awareness of the available tools. This process allowed us to gather information on how tutors acted on this data, and to what extent they made this information available to students.

There is no evidence of students accessing the reports on their activity that are already available to them, but as these are hard to find and have not been actively promoted, this is not surprising.

Using Moodle data logs we have been able to compile a list of people / courses that have actively used some of the Moodle activity reports. This information, together with a list of groups who have met with us for focussed discussion about analytics, provides us with a list of potential partners for the development of future projects.

RW August 2015