

ONLINE STUDENT ENGAGEMENT GUIDANCE

Version No.	Description	Author	Effective Date
1.0	Online Student Engagement Guidance	Education Enhancement	01 December 2020

01/12/2020

Version 1.0

the place of useful learning

The University of Strathclyde is a charitable body, registered in Scotland, number SC015263

Online Student Engagement

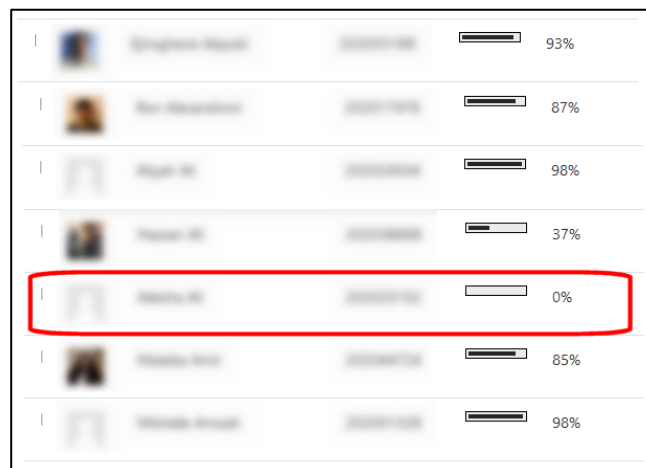
The following guidance is provided for teaching staff to assist their consideration of 1) risk to individual student retention in an online class and 2) risk of low engagement of an individual student in an online class.

Online Module Student Engagement – Retention

Student Logins

The simplest indicator indicating lack of online engagement is Virtual Learning Environment (VLE) logins. University of Glasgow reported that, under normal circumstances with campus-based teaching, an early lack of logins to the institutional VLE correlated with the risk of a student dropping out (University of Glasgow, 2013). It is likely that in modules currently being studied entirely online that this is a much stronger correlation since in many modules there is currently no face-to-face component to compensate for lack of online engagement.

On a module basis this can be viewed in a Myplace report “Student Class Engagement” (Example 1). Note that despite the name of this report, this provides an indication if a student is wholly disengaged, rather than providing more reliable, nuanced information and should be treated with caution.



Example 1 – “Student Class Engagement” Report

Student Activity

Massive Open Online Courses (MOOCs) experience their largest drop in participation between the first and second weeks of a course as initial enthusiasm drops in those with less motivation. The end of the first week and start of the second week of a semester is therefore potentially a risk point for such courses. When considering students in typical online courses, it may be useful to consider at what point in the module on-campus students tend to show less engagement in scheduled classes i.e. this can be when assessments start to be due and in classes scheduled to be delivered early in the morning or later in the day. Evidence of student activity at these stages of the module suggests lower likelihood that a student is an immediate retention risk. This is shown as recorded clicks (Example 2) as opposed to engagement in learning such as performance in, for example, formative tasks.

We are Strathclyde August 2020

Activity module
3.13: Video: Students tell us about their academic writing

Look back Choose... Show only Student Show actions

View Go

First name / Surname	View
[Redacted]	Yes (1)
[Redacted]	No
[Redacted]	Yes (1)
[Redacted]	Yes (1)
[Redacted]	Yes (1)
[Redacted]	Yes (1)
[Redacted]	Yes (1)

Example 2 – Myplace report showing student engagement in an end-of-week activity. The data shows only that the page which displays a video has been clicked on.

Online Module Student Engagement – Levels of Engagement

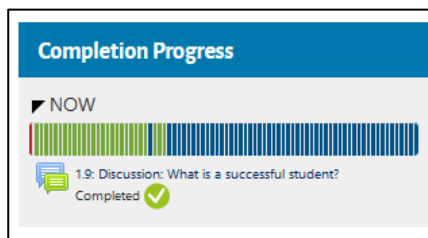
Most student engagement data in online courses is a record of clicks. This can be considered on an VLE activity level (example 2, above), or as a longer-term view of a student’s, or module’s engagement level. Mechanisms in Myplace such as [Activity Completion](#) allow more certainty around student progress. Activity Completion can be coupled with [Conditionality](#) to set up activities so that, for example, Activity B cannot be accessed until Activity A is “complete”. This allows reports to be viewed at any time giving an overview of student progression (example 3). It should be borne in mind that an activity marked as “complete” may only have been briefly viewed, rather than having had a substantial engagement with the activity such as reading, watching or listening to the resource. However, this mechanism offers me a simple method of gauging where students are at in terms of progressing from week to week.



Student	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Activity 6	Activity 7	Activity 8	Activity 9	Activity 10	Activity 11	Activity 12
Student A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Student B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Student C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Student D	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Student E	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Student F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Student G	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Student H	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Student I	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Student J	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Example 3 – Activity Completion Report highlighting an apparently inactive student

Note that this can also display progress to the student in the form of a bar showing progress (example 4). This can act as a motivational tool for many students who take reassurance from visible evidence of their progression.



Example 4 – Completion Progress Bar (student view)

Formative Assessment to Produce Data

Formative assessment is valuable in providing more meaningful data than simple clicks. Low-stakes short formative activities can provide both an indication of engagement with the VLE and also of engagement with the subject material of the module. If an expectation is made to students that formative activities should be completed by a certain date, whether verbally to the students, or by use of Activity Completion, this provides a regular weekly indication of student activity, engagement and possible difficulties students may be having with specific parts of the curriculum.

Student Reactive Behaviour

It should be noted that students, when aware that their activity is being monitored, change their behaviour (Sclater & Bailey, 2018). This was seen clearly, for example, in a Strathclyde learning analytics pilot through

students' reactions to formative assessment tasks where students "gaming the system" was reported, resulting in unreliable data. Activities designed to capture student engagement data should be designed to limit this, where possible.

Contacting Students – Staff Intervention

Contacting students in response to engagement data requires caution. Student engagement reports generated for Graduate Apprenticeship modules have instigated individual contacts from Strathclyde staff. This has allowed constructive conversations with individual students but carries a significant administrative burden which is unlikely to be scalable under current circumstances.

Contacting Students – Semi-automated Intervention

Semi-automated communications such as template messages alerting students to a concerning pattern of engagement can be effective but carry risk. A member of staff may choose, for example, to email all students receiving less than a certain grade in a formative task, or students who have engaged with fewer than 50% of the week's tasks, noting a concern and directing students to support resources. However, students who may already be struggling can be further demotivated by messages which describe them as performing below average (Wise, Hausknecht, & Zhao, 2014). Similarly, students who receive messages advising them that their engagement is satisfactory (or has become satisfactory) may feel they can relax their efforts.

Whether interventions with poorly engaged students are conducted through staff intervention or are semi-automated, it is important that information regarding sources of support is available.

Other Considerations

- Data is open to misinterpretation. For example, reports provided to a GA module lead suggested students were disengaged from the Myplace class. When course staff contacted the students, it emerged that some students were working in small peer groups, with one student logging into Myplace at a time.
- Students patterns of activity may reflect individual circumstances such as work patterns, or cultural or religious holidays.
- If staff advise students that contact has been made with them because of evidence from online data, it is possible that concern will grow in the student body as to what data is being collected, by whom, and for what purpose.

References

Sclater, N., & Bailey, P. (2018). *Code of practice for learning analytics*. Retrieved from <http://www.jisc.ac.uk/guides/code-of-practice-for-learning-analytics>

University of Glasgow. (2013). *Enhancement-led Institutional Review 2013-14 Reflective Analysis*. Retrieved from http://www.gla.ac.uk/media/media_298619_en.pdf

Wise, A. F., Hausknecht, S. N., & Zhao, Y. (2014). Attending to others' posts in asynchronous discussions: Learners' online "listening" and its relationship to speaking. *International Journal of Computer-Supported Collaborative Learning*, 9(2), 185-209. doi:10.1007/s11412-014-9192-9