

Ethical use of Student Data for Learning Analytics Policy FAQs

1. What is different about the learning analytics policy and why isn't all of this covered by the Data Protection and Retention Policies? It can be confusing having so many different policies.

The University has developed a policy on the ethical use of student data for learning analytics to recognise that there are potential privacy issues around combining and analysing student data. We want to be transparent about how and why we use different types of information and set boundaries for our information analysts and employed researchers. Nowadays, data processing tools exist that can combine large amounts of data from different systems and different data sources. We want to reassure students that any information we may analyse has already been provided directly by them or collected in the course of their studies, and any conclusions drawn from the analysis will be for their benefit.

2. Where can I find the Data Protection Policy and the Policy on the Retention of Student Data and Records?

These policies can be found at <u>www.open.ac.uk/students/charter/essential-documents/a-to-z</u>.

3. What data does the University hold about me and how is it used?

The University has always analysed data collected routinely from students in order to improve how it works. The current emphasis on learning analytics is an extension of this work to take advantage of new techniques and new data generated by online study activity. Data will only be used for routine analytics after investigation has shown that it gives value and is consistent in providing evidence to support agreed decisions. Not all data will be used and analytical investigations so far have been concerned only with a small part of this data.

Data made available will be used in three main ways. The first is a monitoring approach which aims to identify students who meet certain criteria based on previous insight. For example: students who haven't yet submitted an assignment when we might be expecting one or students who appear not to be actively engaging with their studies. Criteria such as these will set out by each Student Support Team who have an in-depth understanding of the issues and study behaviours that are relevant to their modules and qualifications.

The second approach uses predictive modelling to identify students who, based on their characteristics or study behaviours, might be considered to be at potential risk of non-submission or non-completion of their module, for example. This approach allows us to focus in a timely way on those students to offer relevant support or guidance. We

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understand that this approach is based on a statistical analysis of past students and does not in any way suggest a predetermined outcome for any individual student.

The final approach uses the data generated to evaluate teaching and learning design and technology at an aggregate level. The data and insight generated may be used to inform improvements to teaching and learning design; for example the assessment strategy for a module; as well as improvements to existing learning systems.

All data selected for use in learning analytics will be subject to data quality checks. These determine whether, for instance, the data is present and valid and the records are up to date. Depending on the purpose, analytics may use data as recorded at the start of a module, or apply some other snapshot capturing the situation at a key moment in time. Other purposes will use the most recent data and systems will need to reflect this requirement.

Below are examples of the data available to the University as a result of student registration and study potentially available to support learning analytics.

Examples of data

Personal information required to register:

The student is required to provide this information in order to register. Much of it can be updated by the student and the student is prompted to review and update it when registering for a new module.

Examples:

- Sex
- Date of birth
- Previous education qualifications
- Disability information
- Occupational status
- Credit transfer
- Study motivation code
- Study goal code
- Highest award intention
- Sponsored
- Ethnicity
- Source of financial support

Study record:

Much of this data is entered by the OU and not under the control of the student Examples:

- Module of registration
- Credit for previous modules
- Studied at OU
- Basement scores by module

- Result by module
- Qualification of registration
- Electronically submitted TMAs and EMAs1

Enquirer/student contact data:

This overlaps with the first category above (personal information) in that some data captured prior to registration is then confirmed by the registration process - e.g. the postcode, which will determine the fee regime the student is subject to.

Example:

• Data held on customer relationship management system (VOICE)

Enquirer/student interactive content

Examples:

- Diagnostic tests
- Posts to forums

System generated

Examples:

- Virtual Learning Environment (VLE) web hits (number and date)
- Date of registration
- Personal identifier (PI)

Derived

Typically system-generated information from recorded data that is saved to the system to record a situation at a given point in time.

Examples:

- Equivalent or lower qualifications (ELQ) status
- Total number of modules registered for in academic year
- Index of Multiple Deprivation²
- Market segment
- HEFCE quintile³
- Concurrent study

¹ Content stored in an archive.

² This is derived by comparing a student's post code to the IMD - a government backed scheme to compare deprivation across the UK and used by the OU to undertake some analysis of widening participation issues.

³ Another system of classification for widening participation.

Other

Use of this data for learning analytics would need to be covered in the statement of use provided to participants.

Example:

• Student survey data collected by individual researchers or carried out by the University for quality assurance and other purposes and where there is a means to link to other student data held by the OU (e.g. by inclusion of a personal identifier).

4. What sensitive data does the University hold about me and how is it used?

There are eight categories of sensitive data defined in the Data Protection Act. The University asks students to provide five of these categories of information:

- Ethnic origin in order to prepare anonymous aggregated (summarised) statistics to perform equal opportunity monitoring. These aggregated summaries do not identify individual students by name or personal identifier. However, on an individual basis, ethnic background can also be used to identify students who may need additional support in their studies. The OU is looking to address the black and minority ethnic (BME) attainment gap as a priority.
- Medical or health conditions in order to provide appropriate services to you, for example, as described in your Disability and Additional Requirements profile. If you have told us you have a disability, we will also use this to prepare anonymous aggregated (summarised) statistics to perform equal opportunity monitoring. These aggregated summaries do not identify individual students by name or personal identifier.
- Religion or belief in order to prepare anonymous aggregated (summarised) statistics to perform equal opportunity monitoring. These aggregated summaries do not identify individual students by name or personal identifier.
- Sexual orientation in order to prepare anonymous aggregated (summarised) statistics to perform equal opportunity monitoring. These aggregated summaries do not identify individual students by name or personal identifier.
- Offences some programmes such as Social Work, Nursing and Teaching ask you to declare any criminal convictions in order to help us decide if you are suitable for this type of study and work. This information is only available to a small number of staff and is retained in line with the Policy on the Retention of Student Data and Records.

We pass on information about your ethnic origin, type of medical or health condition, religion or belief and sexual orientation to the Higher Education Statistics Agency (HESA) as part of regulatory requirements. This forms part of your HESA student record and HESA use this to perform their own equal opportunity monitoring on UK Higher Education as a whole.

5. I understand that the University needs to collect a certain amount of personal data, such as my ethnicity, age and previous educational experience. Can I choose not to have my data included in any analysis that links to learning analytics?

Unfortunately, it is not possible, at present, to have your data excluded. In order to have a complete dataset, the University will use all student data to analyse patterns of behaviour. The analysis stage works on the dataset as a whole, that is, it does not identify an individual student by name or PI. It is important to maintain a full dataset here as any significant loss in student data may mean that the remaining dataset is not representative of the whole.

There is an ongoing consultation that will determine options available to students in the future with regard to their data and its use in any analysis. This consultation is expected to result in recommendations in July 2015.

6. Is it possible to ask for my data not to be used as the basis for targeting me for particular types of support?

Currently it is not possible to do this (except where the contact relates to marketing and you have asked not to receive additional marketing contact). Some data is routinely collected by the University at the point of registration and may be used solely for reporting purposes or may be used to link students to relevant support interventions. Some data items will never be used to trigger interventions and those categories are specified as out of scope. There may be potential for students to review consent for use of their data set in the future – the University is currently undertaking further consultative review of this aspect of the work.

There is an ongoing consultation that will determine options available to students in the future with regard to their data. This consultation will involve students to particularly focus on students' concerns in this area and is expected to result in recommendations in July 2015.

7. What should I do to ensure that the information the University holds about me is kept up to date so that I receive appropriate messages and support?

When you registered for your first qualification or module, you provided us essential personal data, some of which may change over time. Obvious examples would be: your address, occupational status, study motivation and, if this applies to you, information about disability. You can check your profile on StudentHome to see if your information is up to date and change it.

Keeping your personal details up to date and checking them for accuracy helps us to make appropriate contact with you and provide support targeted to your needs. Student Support Team staff, including Associate Lecturers, have access to information relevant to their role in supporting you and all staff are bound by the same policies governing data protection and confidentiality.

8. How can you know from learning analytic data whether a student has made a definite and informed decision to stop studying? If you don't connect this with other data you might unnecessarily contact students about 'dropping out'.

If a student does not formally notify the University of their intent to stop studying partway through a module, either by withdrawing or opting to return to a later presentation, say, the University will assume that the student remains 'live'. In monitoring study progress it might be safely assumed that non-completion of key study milestones, such as assignment submission, or non-engagement on the Virtual Learning Environment (if relevant to the student's module) is a fair indication that a student is not studying and about to 'drop out'. In this situation, direct contact may be made with the student to check that all is well.

9. Will my tutor be able to see all data about me? And what do you expect the tutor to do to support me?

Tutors do have access to data (excluding sensitive data) relating to students in their own tutor groups. They are expected to provide specific types of support at particular points in a module and may use their access to data to facilitate this. Levels of tutor support are determined by module specific requirements as well as the general Terms and Conditions for Associate Lecturers. Tutors may also be involved in working directly with the Student Support Team to provide further agreed interventions, although this is not currently a requirement of their role.

10. What sorts of things can Student Support Teams do now that the previous support structure couldn't?

Learning analytics enhances the ability of the Student Support Teams to offer support that better meets your particular needs. Academic and student services staff will work closely to identify points before and during your studies on a particular qualification and/or module where additional information or support may be useful to you, for example, before an important point in the study calendar.

11. How are models used to identify students in need of support, and how do you ensure that they are fit for purpose?

Information selected for use in learning analytics will have to demonstrate its value in delivering the agreed outcomes. Analytical models will aim to be transparent in that they will be kept as simple as possible, their method of working can be described to students and OU staff, they are based on simple tracking or standard statistical techniques, and they can be tested and audited to provide assurances that they use data which meet quality criteria, correctly apply data and produce results that reach an agreed level of accuracy.

12. Will learning analytics mean that you are tracking me for other purposes not related to my study?

Learning analytics will only be based on datasets and data related to your study.

13. Will you have to ask for my permission to include me in any research that includes my personal data or study behaviour?

At registration Open University students consent to their personal data being used for research aimed at enhancing the University's provision. Information about students and their academic progress can therefore be made available to legitimate researchers and data analysts who work for the University, without seeking the students' permission. The new policy also allows for researchers to make use of information about students' study behaviour that is routinely collected via the Virtual Learning Environment (VLE). In both cases, researchers would **NOT** be able to publish research findings that made individual students identifiable.

However, the University has established procedures for regulating research projects that involve the collection of new data through student surveys or other kind of contact with students. Permission would need to be sought in the first instance from the Student Research Project Panel and the Human Research Ethics Committee. Both of these committees operate under guidelines that require researchers to obtain informed consent from their participants.

14. Will I have access to the results of analyses about me?

In the near future, we aim to provide basic aggregated results to students who request this information. As learning analytics processes and procedures are currently in development, it is not yet technically and organisationally feasible to provide this data in a secure, transparent manner to students.

15. Will the University look at my activity outside of OU systems for use in learning analytics, for example, my Facebook posts?

No. Posts and data drawn from external (non OU) systems will not be used for learning analytics purposes, unless that site is an agreed formal part of the study programme. For example, some modules have used moderated closed Facebook groups as the forum for discussions between students and module teams. There are a number of social media sites which are used primarily for marketing purposes, but these would not be drawn into any learning analytics activities.

16. Will this approach mean that some students will receive a different level of support than others?

Yes, it may be that some students who have specific needs or who struggle with a particular learning unit or part of module could get extra support, for example from the Student Support Team, which will help them to successfully complete this unit.

17. Will the University pass on any of my data or predictions about my study to third parties?

The University has strict guidelines regarding the transfer of any data and these are set out in other policies (Data Protection policy, Policy on the Retention of Student Data and Records, etc.). As such any use of the data for learning analytics has to be done in strict compliance with the aforementioned policies.

The University does pass on information about you and your study to the Higher Education Statistics Agency (HESA) as part of regulatory requirements. This forms your HESA student record and HESA uses this to perform its own analyses on UK Higher Education as a whole. For more information about HESA please see <u>www.hesa.ac.uk</u>

In addition, student data may be shared with organisations undertaking data processing work on behalf of the University, and any such shared information is bound by data protection legislation and strict contracts.

18. How will predictive analytics be used?

Predictive analytics encompasses a variety of statistical techniques to analyse current and past learning activities to predict future behaviour. Predictive analytics might help to identify some (groups of) students who may struggle on a particular learning unit or module, or who may want additional support or encouragement. This could allow the university to provide additional support, for example, via Student Support Teams for specific groups of students in potential need.

19. I have a question that isn't included in the list above. How do I submit a question to be answered?

You can submit your query/question by clicking on the following URL (<u>www3.open.ac.uk/forms/analytics-ethics</u>) and following the prompts. We will attempt to respond to your query within 10 working days.

20. Will information about me be safe and secure? How/where will my data be stored?

See these policies for details:

- Ethical use of Student Data for Learning Analytics
- Data Protection