University of Edinburgh Development of the University's Policy on Learning Analytics – Draft Policy Principles and Objectives

Overview

Learning analytics has been defined as 'the measurement, collection, analysis and reporting of data about learners and their contexts, for purposes of understanding and optimising learning and the environments in which it occurs' (Society for Learning Analytics Research, 2012). Fundamentally, it is concerned with how we might use data generated by learning management systems, student systems and other sources to better understand, and improve, the learning experiences of our students.

The University's use of learning analytics is in its early stages, and if it is to develop and expand in the future, the University needs to ground its approach on consultation with students and staff. We are currently in a strong position to learn from the University's own pilot activities, and existing expertise in education and learning sciences.

The University is in the process of developing a Policy on learning analytics. The Senate Learning and Teaching Committee's task group that is leading this work proposes to base its approach on a statement of Principles and Purposes, and to develop a more detailed policy and procedure to set out how it will manage data stewardship issues such as transparency, consent, ethics, privacy and access, retention and disposal of data in line with these Principles and Purposes.

The following is an initial draft of the Principle and Purposes:

Policy Principles

The policy starts from the position that all uses of data analytics for learning and teaching within the University should be ethical, transparent and focused on the enhancement of the student experience.

- 1. As an institution we understand that data never provides the whole picture about students' capacities or likelihood of success, and it will therefore never be used to inform action at an individual level without human intervention;
- 2. Where we use learning analytics to target support at students, we will do so in order to help all students to achieve their learning goals rather than taking a deficit model targeted at supporting students at risk of failure;
- 3. We will be transparent about how we collect and use data, where consent applies, and where responsibilities for the ethical use of data lie;
- 4. We recognise that data and algorithms can contain and perpetuate bias, and will actively work to build awareness of this and address it where it occurs;

- 5. Good governance will be core to our approach, to ensure learning analytics projects and implementations are ethically conducted and align with organisational strategy, policy and values; and
- 6. Data generated from learning analytics will not be used to monitor staff performance, as learning analytics is a field that seeks to understand and optimise learning and it does not aim to measure staff performance.

Purposes of Learning Analytics

Learning analytics approaches can support a range of activities within the institution. While to date they have been explored by universities primarily as means to improve retention, they also have potential benefits for the enhancement of student experience, currently of more importance to the University of Edinburgh:

- **Quality** Learning analytics can be used as a form of feedback on the efficacy of pedagogical design. Academic teams can use analytics about student activity (individual or cohort) as part of course review and re-design processes as well as potentially using analytics as a form of in-course monitoring and feedback.
- **Equity** Learning analytics approaches can allow us to see more nuanced views of our highly diverse student population, challenge assumptions that we may be making, and allow supportive resource to be directed where it is most needed.
- **Personalised feedback** Learning analytics can be used to tailor the messages and support that we offer to our students, providing more personalised feedback to support student reflection and academic planning.
- **Coping with scale** With the challenge of growing cohorts of students, learning analytics can help to strengthen the academic relationship by doing some of the heavy lifting of identifying individuals or groups of individuals that might benefit from particular interventions or information from staff.
- Student Experience In addition to supporting a more personalised experience, learning analytics can improve progression and retention, ensure that our academic offerings align with the needs and goals of students, and support satisfaction and wellbeing. Analytics can also be used to promote critical reflection skills and enable our students to take responsibility for their own learning.
- Skills Interactions with analytics as part of the University learning experience can help our students build 'digital savviness' and prompt more critical reflection on how data about them is being used more generally, what consent might actually mean and how algorithms work across datasets to define and profile individuals. Learning analytics approaches can also be used to promote the development of key employability skills. Supporting staff to develop skills in working with learning analytics applications is also an investment in institutional capacity and leadership.

• Efficiency – Learning analytics can be used to evaluate and demonstrate institutional efficiency through a) measuring the impact of initiatives and validating that benefits are being realised and b) demonstrating that publically-funded resource is being deployed in support of the best outcomes of all students.

Further information

The development of the Policy is being led by a task group convened by Prof Dragan Gasevic, Chair in Learning Analytics and Informatics.

Further information regarding the development of the Policy is available at:

http://www.ed.ac.uk/academic-services/projects/learning-analytics-policy

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