

Submissions Abstract Book - All Papers (Included Submissions)

0201

Mon 06 Dec 2021

12:35 - 12:55

Where is the Learner in Your Analytics?

Danielle Thibodeau¹, Janet De Wilde¹, Sara Kotulska¹

¹*Queen Mary, University of London, London, United Kingdom*

Research Domain: Digital University and new learning technologies (DU)

Abstract: This paper discusses one part of the findings of the Flexible Ecosystems project, undertaken in partnership between Advance HE and the Queen Mary Academy, which aims to review the higher education sector's capacity for flexible learning provision. The piece addresses participant responses to surveys, roundtable discussions and interviews related to questions about learning analytics and student data literacy. While it is clear that many institutions are using learning analytics to inform decisions about curriculum development, assessment, wellness, and other forms of student engagement, much less work is being done to develop students' data literacy. We follow these findings with a discussion of why resources should be created that enable students to understand the data they are producing, how to use it, and why their input is vital for creating learning analytics outputs that best serve all stakeholders.

Paper:

[Project overview](#)

The Flexible Ecosystems project is a partnership between Advance HE and the Queen Mary Academy. The Academy supports staff and students at Queen Mary University of London to develop and enhance their practice in teaching, learning, and research. The project launched in March 2021, set out to review the higher education's sector's capacity for flexible provision, identify exemplars that support equitable transition through learning and work, and identify priority areas to be addressed by Advance HE and other providers (Advance HE Collaborative Development Fund, 2020).

Data was collected through three surveys distributed to Advance HE members, two roundtables discussions held virtually over Zoom, case studies, and interviews with both higher education staff and students. The focus of this paper will be our findings related to a cluster of questions from one of the surveys, Survey B, which was shared with Advance HE members. The survey was targeted to academics who teach and professional services staff who support learning activities and received 66 responses.

This survey explored Higher Education Institutions (HEIs) approaches and policies for learner centred educational approaches. Two sets of questions asked respondents to:

- indicate how important learning analytics are to decisions related to a range of policies and provisions, and to provide examples of current practices and future plans; and
- discuss any resources or programming their institution has developed to support their students' data literacy.

During roundtable discussions and interviews, participants were also asked to share what their experiences had been with the use of learning analytics within their institutions.

Findings

Respondents were asked to rate how important learning analytics are to five areas of work using a 5-point Likert scale. Table 1 shows the percentages of responses indicating that learning analytics are either important (4) or very important (5) to these areas.

When asked if learning analytics were being used in other ways, some responses indicated the use of analytics to do programme evaluation, or to monitor student engagement more broadly, including the use of resources and facilities such as virtual learning spaces and libraries. Most said there were no other plans to use learning analytics, or that they were unsure whether any such plans existed.

Exploring student engagement with their data, participants were asked whether their institution has developed any resources or programming to support students to find, interpret and use their own learner analytics. Only 11.3% said yes, while the majority of respondents (88.7%) either said no or that they did not know of any. Even fewer (6.5%) knew of any resources that supported students to better understand the potential of blockchain technology to accumulate and track learning credits. When asked to elaborate on these supports, some mentioned guides and workshops, though few examples moved past the availability of data, and concern was expressed for the anxiety that data may cause in students. Similarly, only 8.1% knew of any future plans to introduce such support and mirrored the previous responses in terms of simply giving students better access to their data. Discussions of these topics in roundtables reflected the findings of the survey.

Conclusions and further work

The contrast between the amount of work being done to use learning analytics, and the lack of work being done to support learners to understand and use their data is stark, and runs contrary to what other research has told us about how students want to be engaged in the collection and use of this type of data. Institutions may assume that simply giving students access to their data is enough to encourage the development of self-regulation amongst learners, Schumacher and Ifenthaler's research shows that what students want from learning analytics are complex and highly individualised supports (2018), especially for students in other kinds of flexible provision like degree apprenticeships. Interviews with such students revealed a need for better tracking systems of module credits, for example, for those balancing academic work with employer placements.

Furthermore, the more involved students are in the development of such systems, the likelier they are to engage, and in turn create, higher quality data that contributes to better supports. In their proposed principles for an ethical framework for learning analytics, Slade and Prinsloo set out the idea that students need to participate in the use of learning analytics as agents and not merely sources of data and recipients of related interventions (2013). Given what has been observed about the current practices of participating institutions, one of the project's recommendations will be that

HEIs better prepare learners to be informed and active participants in the collection and use of learning analytics.

References: Table 1 - Importance of Learning Analytics

Area of work	Scored 4 or more (percentage, N=66)
Curriculum development	41.9
Assessment policies and practices	50
Health and wellness resources	42
Student recruitment	52.5
Staff development	33.9

References

Advance HE Collaborative Development Fund. (2020). Retrieved from Advance HE: <https://www.advance-he.ac.uk/membership/advance-he-membership-benefits/collaborative-development-fund/developing-flexible-ecosystems-education-support-student-success>

Schumacher, C., & Ifenthaler, D. (2018, January). Features students really expect from learning analytics. *Computers in Human Behavior*, 78, 397-407.

Slade, S., & Prinsloo, P. (2013). Learning Analytics: Ethical Issues and Dilemmas. *American Behavioral Scientist*, 57(10), 1510-1529. doi:10.1177/0002764213479366