

THE Awards 2019 – Technological or Digital Innovation of the Year	
Institution/Nominee	The Open University
Title	Predictive analytics in online and distance education: The case of OUA
Key personnel	Dr Christothea Herodotou Avinash Boroowa Dr Martin Hlosta Prof Bart Rienties Kevin Mayles Prof Zdrahal Zdenek
URL	https://analyse.kmi.open.ac.uk
Submission	Online distance education faces significant challenges about how to effectively engage and retain large numbers of learners. The OU has an 'open entry' policy, which traditionally has much higher student withdrawal rates, so there is a major challenge to improve student retention and performance.
	In response to this challenge, the OU has been testing and implementing the use of predictive learning analytics indicators and establishing how they may be operationalised, through rigorous testing and evaluation with more than 1,182 teachers and 23,640 students in 231 courses. Building on the technological strengths of machine learning and Artificial Intelligence, an interdisciplinary team of academics and professional staff has designed and extensively piloted OU Analyse (OUA), which produces predictions as to whether students are at risk of failing their studies. In particular, OUA predicts whether a given student will submit their next teacher-marked assignment, and flags this using a traffic light system.
	Insights from OUA are presented visually in a dashboard that is accessible by teachers, staff tutors, and other academics at the university.