The All-Party Parliamentary
University Group

<u>University APPG meeting- Big data and Higher Education</u>
<u>08:30- 10:00, Wednesday 5 December, Terrace Dining Room B</u>

Chair:
Lord Norton of Louth, Co-Chair of the APPUG

Speakers:
Dr Paul Feldman, Chief Executive, Jisc
Richard Puttock, Head of Data, Foresight and Analysis, Office for Students
Duncan Ross, Data and Analytics Director, Times Higher Education

Paul Feldman opened his contribution by explaining the role and history of Jisc as the digital body for tertiary education and research that was charged with developing the capability of the sector.

Turning to their current major project on learning analytics, he explained that they were collecting as much digital data as possible on students and a heuristic is run against the collected data in order to provide indicators as to which students may not be fulfilling their potential. He added this could include students at risk of dropping out of study, including those from disadvantaged backgrounds, or those who had the potential to be high achievers but were not participating as well as they could.

The current iteration of the project involved exploring how such analytics could identify students that were suffering with mental health issues. He also said they hoped to mine data to create a phenomenal resource for education researchers to identify excellent teaching practice.

The next major research programme was on ‘intelligent campuses’ which would see new data that tracked students around the campus, for instance to monitor their attendance at tutorials, the library or a canteen, with learning analytics data.

He acknowledged that the IT was only part of the solution and the bigger question was how to deal with the answers that emerged, such as through human interaction with tutors. Turning to ethics, he said they had agreed a code of ethics with the National Union of Students (NUS) which all institutions working with Jisc had to sign up to; processes had changed since the introduction of GDPR.

Richard Puttock told attendees that the Office for Students (OfS) had last week published its first data strategy that would be evolving as discussion progress on the principles and approach the new regulator would take. Two of the key principles of the strategy centred around transparency and reducing the burden on providers. He stressed that the different between the OfS and HEFCE was that the latter focused solely on providers rather than students.

He stressed that the ability to link data sets was crucial, particularly in terms of progress from school. LEO data was not the only option in terms of understanding student outcomes he said, speaking about the role of the graduate outcomes survey which would give softer data about how students value their careers and general university experience.

Turning to more specific areas of work he spoke about three areas: registration and ongoing regulation of individual providers, access and participation and the Teaching Excellence Framework (TEF). On the first area he explained that dashboards had been created to register providers on quality and outcomes; a whole suite of viability and financial sustainability measures had been created he added. There had been a recent change of direction in terms of providers no longer being asked just to make financial forecasts, but also stress testing looking at different financial scenarios would be implemented.

Touching on the role of the director of access and participation, he said new legislation would let the OfS be more focused on outcomes and that they would publish annual access and participation data sets with standardised measures to enable the public to see what providers were doing.

Finally on the TEF and informed student choice, he stressed that more data did not necessarily lead to better choices and therefore a more nuanced, student-centric offer needed to be provided; the Unistats website would be redesigned for this purpose. He then touched on the appointment of Dame Shirley Pearce as independent reviewer of the TEF and the data that would be published.

Duncan Ross gave a brief history of THE and the way the group had transformed itself into a data-led business to produce university rankings. He stressed that research metrics were important as well as teaching metrics, and that THE had started to explore how it could compare teaching internationally and also looking at universities' contribution to the Sustainable Development Goals (SDGs).

He described how higher education was a very international 'business' with an increasing number of students travelling internationally to learn at undergraduate level. The introduction of a fee system had had the effect of internationalising higher education to some degree due to students in the UK and abroad seeing their education as an investment. Various governments around the world, and particularly China and Singapore, were increasingly investing in higher education. He then gave the example of Shenzhen a former fishing village in China that had been transformed and now hosted a large university, SUSTech with an international recruitment strategy.

He praised the introduction of College Scorecard data in the US which he thought was a great measure of post-matriculation median salary. He stressed that the data used by THE was not 'big data' unlike the rich transactional data sets that Richard and Paul had been discussing.

Referring to the learning analytics data described by Paul, Duncan said it would be helpful to understand at which point universities should be worried about students' performance given that people learnt in different ways. He also stressed that consent should not be the end point for big data ethics as there would always be false positives and negatives and therefore an intervention based on this could be damaging.

Duncan concluded his remarks by referring to interesting examples of the use of data by Queensland University of Technology and Coventry University and a contentious example from a Chinese university that had started to monitor their students' spending in the cafeteria and would automatically put money into their accounts if they noticed spending was always on the cheapest item.