259

Understanding Engagement and Performance of Social Mobility Students

<u>Lory Barile</u>, <u>Neil Lloyd</u> University of Warwick, Coventry, United Kingdom

Research Domains

Learning, teaching and assessment (LTA)

Abstract

Inclusive education aims to improve outcomes and opportunities for all students by creating a learning environment in which every student feels welcome and can realize their true potential. To achieve these goals, education institutions must monitor both student progress and engagement. This study extends the existing literature on 'mobilities in Higher Education' by looking at the extent to which Economics students from social mobility backgrounds at the University of Warwick engage and perform within their programme of study. The paper:

- 1) Investigates the relationship between student engagement and performance using a Revealed Preferences Approach: taking into account (a) how individual characteristics e.g., socio-economic and pre-university performance affect engagement online and inperson; and (b) how this links to student performance.
- 2) Explores how students from different backgrounds engage with different modes of assessment e.g., MCQ, Essays, Group tasks and how this affects their relative performance.

Full paper

In recent years, efforts have been made to widen participation in higher education (see e.g., Tai et al., 2021). As the socio-economic profile of students on campuses shifts, universities must ensure that they continue to foster an inclusive social and learning environment. On the learning front, universities need to be aware of achievement gaps across gender, race/ethnicity, and financial-background dimensions. However, attention must also be given to understanding the ways in which these aggregate gaps relate to the forms of formative and summative assessments used and relative student engagement, both online and in-person.

With the end of the Covid 19 pandemic, while many universities have re-introduced in-person teaching, most have retained a hybrid model of learning which combines in person and online teaching resources and activities. Online learning platforms provide universities with new, often cost-effective, ways to teach, assess, and distribute educational material. However, they can also provide new ways to monitor and study student engagement, providing a valuable new tool for education researchers. To this end, we have created a rich dataset - matching student performance (by assessment), with weekly measures of in-person and online engagement, and preuniversity characteristics - to examine the ways in which student engagement impacts student performance and varies across the dimensions of gender, ethnicity, and WP-status. In addition, we look at how this relationship varies by the form of assessment and ask questions, such as: are "easy-to-get" participation grades equalizers? And does assessing participation affect student engagement in a module?

In this way we contribute to a growing literature on inclusive education in a hybrid/online learning environment. A vast literature explores the efficacy of online learning resources on student performance. Here, the results are mixed. Some studies show a positive relationship between engagement with the virtual learning environment (VLE) resources and performance in Economics

(Calafiore and Damianov, 2011; and Chen and Lin, 2012), while others report no significant impact (see e.g., Moffat and Robinson, 2015). Despite this, the "WP gap" is well documented in the literature (see e.g., Hoare and Johnston, 2010; and Chowdry et al., 2013), but only a few studies are focused on the impact of learning resources on students from disadvantages and low socio-economic backgrounds (see e.g., Barile et al., forthcoming). For assessment, there is a rich literature exploring the role of assessment in fostering an inclusive learning environment (for a review see Tai et al., 2021). However, most of these studies are based on student perspectives rather than learning and achievement outcomes or measured engagement, and focus on students with disabilities, international and linguistically diverse students (see again, Tai et al., 2021). Along the dimension of WP, we have found no studies addressing the important issue of how performance relates to the mode of assessment and student engagement.

This paper extends the existing literature by looking at the extent to which Economics students from social mobility backgrounds value online and in-person learning resources, where online resources refer to the VLE teaching and learning material. The analysis considers resource usage in 2021/22 for all core 1st year modules, and links this to students' characteristics and performance across different forms of assessment. The analysis also focuses on studying how different types of assessments affect individual performance, controlling for students' socioeconomic characteristics and entry tariffs. Results from our paper provides important lessons for the creation of inclusive, hybrid learning environments in Higher Education.

The paper provides a contribution to the literature by:

1) Analysing the relationship between student engagement and

performance using a Revealed Preferences Approach (see e.g., Elliott and Neal, 2016). Student engagement is measured by observing data access frequency of resources on the VLE and in-person classroom attendance. This is followed by investigating a) how student characteristics (e.g., socio-economic and entry performance) affect student engagement with different resources (VLE and inperson teaching), and b) how this links to student performance. Although there is a broad literature on the benefits and pitfalls associated to the use of VLE resources (for a review see Mogus et al., 2012), to the best of the authors' knowledge this is the first paper looking at the determinants of student engagement with the VLE resources in Economics, and how this translates into student performance for students from social mobility backgrounds.

2) Investigating how different types of assessments (e.g., MCQ, Essays, Group tasks) impact engagement and performance of students from social mobility backgrounds, an area that has been neglected in Economics education.

References

Barile, L., Elliott, C., and M. Mccann (forthcoming). Which online learning resources do undergraduate economics students' value and does their use improve academic attainment? A comparison and revealed preferences from before and during the Covid pandemic.

Calafiore, P. and D.S. Damianov (2011). The effect of time spent online on student achievement in online economics and finance courses. Journal of Economic Education, 42(3), 209-223.

Chen, J. and T.-F. Lin (2012). Do supplemental online recorded

lectures help students learn microeconomics? International Review of Economics Education, 11(1), 6-15.

Chowdry, H., Crawford, C., Dearden, L., Goodman, A., and A. Vignoles, A. (2013). Widening participation in higher education: analysis using linked administrative data. Journal of the Royal Statistical Society: Series A (Statistics in Society), 176(2), 431-457.

Elliott, C and D. Neal (2016). Evaluating the use of lecture capture using a revealed preference approach. Active Learning in Higher Education, 17(2), 1-15.

Hoare, A., and R. Johnston (2011). Widening participation through admissions policy–a British case study of school and university performance. Studies in Higher Education, 36(1), 21-41.

J. Moffat and C. Robinson (2015). Virtual learning environments: linking participation to evaluation. International Review of Economics Education, 19, 22-35.

Mogus, A. M., Djurdjevic, I., and N. Suvak (2012). The impact of student activity in a virtual learning environment on their final mark. Active Learning in Higher Education, 13(3), 177-189.

Tai, J., Ajjawi, R., and A., Umarova (2021). How do students experience inclusive assessment? A critical review of contemporary literature. International Journal of Inclusive Education, 1-18.