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Foundation or higher tier? Effects of moving from a modular to linear system of GCSE assessment

Conference Paper Abstract

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Abstract

Tiering is an assessment model with a long history in England. Certain General Certificates of Secondary Education (GCSEs) have two versions of their exams, known as tiers, targeted at different ability levels. Students take either the foundation tier (lower-level) or higher tier exam. Although tiering has advantages, there is always the risk that students are entered for the wrong tier, which may cap achievement (e.g., because of restricted grades). As part of the government reforms, tiering was removed from most GCSEs but kept for mathematics, science and languages. The question is whether tiering decisions for these subjects might be affected by other reforms taking place. This study focused on the move to linear assessment that occurred in 2012, which required students to take all GCSE exams at the end of the two-year course (June 2014) rather than in a modular way where exams could be taken at different time points. Importantly, this assessment reform occurred before changes to GCSE content and grading and, therefore, provided an opportunity for us to compare entry patterns between linear and modular systems without that difference being confounded by other reforms. This study was motivated by previous research, which suggested that linear assessment might disadvantage students, making teachers more likely to enter students into foundation tier and especially those with certain characteristics (e.g., male).

Tier of entry data was obtained for the first exam session of the linear system, June 2014, and for the last summer session of the modular system, June 2013. Six GCSEs were analysed in mathematics, science and languages. Multilevel logistic regression tested whether students' likelihood of being entered for the foundation tier was different in the linear than modular system, after controlling for student characteristics. The analyses also tested for interactions between assessment structure and student characteristics to examine whether the move to linear assessment affected certain groups of students more than others. The results showed that students were significantly less likely to have been entered into foundation tier in the linear than modular system for GCSEs in science and languages. However, mathematics GCSEs showed the reverse pattern. Furthermore, for some GCSEs, assessment structure significantly interacted with certain student characteristics, but not in a consistent way. Together, the findings show that effects of linear assessment on tiering decisions are more complex than suggested by previous research, differing in directionality as a function of both subject area and student characteristics.