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Golem (and Pygmalion) in the Classroom: The Impact of Tracking on Pupil Attainment Over Time

In Event: *International Perspectives on Tracking and Social Injustice*

Sat, April 18, 2:15 to 3:45pm, Virtual Room

Abstract

We draw on data collected during a randomized controlled trial of the 'Best Practice in Setting' intervention, undertaken in 127 secondary schools in England, which followed students from age 11 to 13, focusing on their experiences and outcomes in tracked English and mathematics classes. We explore the impact of tracking over time on student attainment.

We use studies of the effects of labelling (Rosenthal & Jacobson, 1968; Babad, Inbar & Rosenthal, 1982) and research into teacher expectations (e.g. Weinstein, 2018), synthesizing these with Fraser's (1997) identification of social injustices of recognition and distribution, to argue that as a result of labelling, some students' identities are being celebrated and promoted (Authors, 2019); and some students are subject to higher expectations from teachers and other significant groups (peers, family members) as a result.

Students' Key Stage 2 SAT results for mathematics and English (national tests taken at age 11) were used for pre-test measures of attainment. A random sample of 30 students was drawn in each participating school to complete the outcome test in mathematics and 30 students in English. In total, 73 schools completed outcome testing in mathematics (2233 students) and 35 schools completed outcome testing in English (917 students).

Students were coded into three groups for English and mathematics respectively in each school: those in the top track; those in the middle track(s); and those in the bottom track. The total number of tracks in each school varied from three to ten with the majority having between three and five tracks.

A series of multilevel models were fitted to the data with students (level 1) clustered within individual subject tracks (level 2) and then within schools (level 3). Models A and B included pre-test score, track allocation, number of tracks in the school, household occupation, ethnicity and gender as independent variables. Models C and D excluded household occupation and ethnicity due to the large amount of missing data in these two variables (over 35%).

We find a significant increase in mathematics attainment for students in the top track (ES=.162, p<.001) and a significant decrease in mathematics attainment for students in the bottom track (ES=-.135, p<.001) when compared with students in the middle track. The same trend was shown for students in English where students in the top track achieved better over time (ES=.337, p<.001) and the attainment of students in the bottom track is shown to become comparatively worse (ES=-.302, p<.001) compared to the middle track. The findings are robust when household occupation and ethnicity are removed from the analysis (Models C and D). In other words, the findings of these two models show that the attainment gap widens when tracking practices are employed.

These findings are of grave concern from educational and social justice perspectives. They powerfully illustrate that self-fulfilling prophecy is affecting attainment via setting practice, with Pygmalion effect for the top sets, and Golem effects for bottom sets, resulting in a growing attainment gap, and divergence between bottom and top in comparison with middle sets.

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