

# **Performance in Secondary School in German States – A Longitudinal Three-Level Approach**

Jan Skopek\* and Jaap Dronkers§

\* European University Institute  
Via dei Roccettini 9  
50014 San Domenico di Fiesole, Italy  
Email: jan.skopek@eui.eu

§ Maastricht University, ROA  
the Netherlands  
Email:  
j.dronkers@maastrichtuniversity.nl

(Working Paper, August 2015)

## **Abstract**

This paper contributes to the ongoing debate on how educational systems impact on academic performance in secondary schools by studying the impact of tracking on achievement in secondary education in Germany. We exploit federal heterogeneity in the 16 German states' educational systems by classifying them into three tracking regimes. Using recent, representative, and longitudinal from the NEPS, our study overcomes three severe methodological drawbacks of previous research on the impact of tracking and educational differentiation on level and (social) inequality in achievement: (1) the exclusion of the mediating level of schools, (2) the reliance on cross-sectional data, (3) the failure to account for students' prior ability especially before tracking occurred. Our findings based on a three-level model incorporating states, schools and students highlight the importance of accounting for the mediating role of schools when analyzing effects of educational systems but also the importance of including prior abilities in the study of secondary school performance.

*Key words:* educational systems; inequality in educational achievement; educational differentiation; ability tracking; school effects; multilevel modeling

## *Acknowledgements*

We thank Hartmut Esser, Walter Müller, and Hans-Peter Blossfeld for intensive discussions and helpful comments on earlier versions of the paper. In addition, we are grateful for valuable comments from a group of researchers at the European University Institute. Jan Skopek acknowledges financial support from the European Research Council (eduLIFE project).