

Distribution of Student Cognitive and Non-Cognitive Abilities and Family Socioeconomic Status across Schools: Differences between Junior and Senior High Schools over Time and across Countries

Min-Hsiung Huang

Institute of European and American Studies, Academia Sinica

E-mail: mhhuang@sinica.edu.tw

Abstract

In many countries, screening and sorting of students into different types of schools starts after the completion of nine-year compulsory education. Here, a total of 32 education systems are selected to examine the distribution of student cognitive and noncognitive abilities as well as family SES across schools, before and after the transition from lower to upper secondary schooling. In Taiwan, Russia, South Korea and four Chinese provinces/municipalities, between-school differences in academic performance increase most markedly as students progress from lower to upper secondary schools. Russia and Croatia are very unique in that between-school differences in all three respects of student characteristics increase significantly as students transit from lower to upper secondary schools. In Taiwan, between-school differences in academic performance at the upper secondary level have decreased significantly since 2014. As to between-school differences in family SES, those at the lower secondary level are similar to those at the upper secondary level. This implies that the use of high-stakes examination for admission to different types and ranks of senior high schools, relative to mandatory school assignment based on household location and registration, does not increase the odds that Taiwanese students of different family SES to attend the same school. Taiwanese students with high social-emotional skills are widely distributed across schools, either at the lower or the upper secondary levels.

Key Words: cognitive ability, non-cognitive abilities, family SES, between-school variation, high-stakes test