

A Study on Education System, Learning Environment and Students' Academic Outcomes

Abstract

This research highlights the importance of considering the degree students' integration into school classes when estimating school effects. Combining and using two different datasets collected before and after education reform in Taiwan, the study compares school effects under two different education systems in order to answer the question about the efficiency of education reform.

I estimate multilevel growth models to assess how school environments affect changes in students' initial and change rate of their academic performance across junior high school years. Besides, two-part random-effects models are also introduced into the analyses to testify how school environment influence adolescent performance in their high school enrollments. My results support and extend Blau's structural theory, revealed that school contexts and school networks directly and indirectly influences students' performance in their school classes and in their high school enrollments, suggesting students' outcome are conditioning by the local structure, the school environments. However, through making more friends inside and outside school classes, students still have their own power to modify the environmental impacts on themselves.

With respect to the comparisons of school effects on individuals' performance under two different education systems in Taiwan, the decreasing peer influences and the decreasing significance of school networks indicate that the school effects

gradually decline after the administration of education reform. One should note that simply a little change on education system might alter students, parents, and teachers' behaviors. The decreasing peer effects and the decreasing school effects on students' academic performance suggesting that students might change their behaviors on interacting with their friends and change their behaviors at schools in order to jostle higher education after education reform. The increasing cram schooling and the increasing significance of family SES support the inference that students modify their behaviors to come up against the education reform in Taiwan.

These findings suggest the need for more panel datasets collected from the newly cohorts after education reform was administrated for a period and the need for more studies of education reform and school effects, to have more understanding about the mechanisms of school efficiency.

