

Teacher quality and student achievement in Chile : linking teachers' contribution and observable characteristics

Canales, A., & Maldonado, L. (2018). Teacher quality and student achievement in Chile: Linking teachers' contribution and observable characteristics. *International journal of educational development*, 60, 33-50. <10.1016/j.ijedudev.2017.09.009> Accessed 11 Mar 2021.

Abstract

While there is wide consensus regarding the importance of quality of teachers in student achievement; yet, accounting for teacher effects remain a puzzling task. In Chile, research on teacher quality has predominantly relied on cross-sectional data, and largely focused on identifying teacher attributes related to teaching quality. Only have few studies addressed the problem of non-random assignment of students to teachers. This paper attempts to fill these gaps. On the basis of pseudo-longitudinal data for 2011 from the Education Quality Measurement System and teachers' administrative records, we employed value-added and fixed-effect models correcting for sorting-bias, to assess the overall contribution of teachers to student achievement and identify which teacher characteristics enhance teacher effectiveness. We find that teacher contribution to students' learning in mathematics and language is very significant. In addition, teaching experience has a significant non-linear impact on test scores in math but not in reading. Both junior and senior teachers are effective in the educational system. We discuss the policy implications and limitations of these results..

Keywords

Teacher quality, Chile, Student achievement, Value-added, Fixed effects, Teacher experience.