30 November, 2023

We presented our research at the 13th Biennial Conference of the Comparative Education Society of Asia held in Hiroshima City on November 24-26.

Kyoko Taniguchi, Haruhiko Mitsunaga, and Koji Watanabe

A Study on Continuous Measurement of Academic Achievement in Low-Income Countries Based on Test Theory

This study proposes a methodology that investigates school dropout factors in low- and middle-income countries such as Cambodia, Malawi, Burkina Faso, and Senegal. This study uses Survival Analysis, one of the best and widely used methods in the social sciences to collect data and predict events. First, data is collected before dropout occurs. Then, it identifies who tended to dropout. Next, it follows the same cohort of students for several years, that is, it collects longitudinal data. Unlike other methods, the approach allows a data collection in which independent variables affect dependent variables with a predetermined property expressed at a specific time. This study used advanced statistical techniques in the analysis, such as Multi-level Logistic Regression or Multi-level Cox Regression. The methodology could be extended to other low- and middle-income countries to investigate factors influencing school dropout.

Lay Vichara

Factors Influencing Cambodian Student Performance in Lower Secondary School

Abstract

This study examined student-level and school-level factors influencing student performance of fifteen-year-old students in Cambodia. The study used data from the Program for International Student Assessment for Development for Cambodia in 2018, which included 5,162 students and 4,263 teachers from 170 schools. Multilevel linear regression was used in the analysis. The results showed that intra-class-correlations in the null models of reading, mathematics, and science performance were 0.37, 0.40, and 0.34, respectively. Although they indicate that individual students differed more from each other than their differences in student performance did, school-level data could explain differences more than in high-income countries. At the student level, the grade, gender, student life satisfaction, absenteeism, parents' motivation, students' work responsibilities, and the number of books at home significantly affected performance in all three subject areas. Grade repetition negatively affected student performance in all three subject areas but less in mathematics. The availability of home resources significantly affected performance, but parents' education level negatively affected science performance. At the school level, the school type and teachers who were late for their classes significantly affected all three performances. The school location significantly affected reading performance, and private tutoring significantly affected mathematics performance. The study suggested that improving the learning outcome at the lower secondary level is crucial policy dialogue since reading, mathematics, and science are still low. The factors that negatively affected performance should be taken into consideration. Furthermore, the qualitative data will be appropriate for further studies to identify the effect of socioeconomic status and leadership style on student performance.