

Abstract

The objective of this study was to test how different teaching methods and the matching strategies (between students' preference and teachers' adoption of teaching methods) work on undergraduates' learning outcomes. Nine approaches from teacher-centered (TCM), interactive (ITM) and student-centered (SCM) teaching were used in the present research. The data was collected from 726 sophomore students by using the questionnaire of MOTERDS (Macao Tertiary Education Research Data System) and analyzed by SPSS. Descriptive results of this present research indicated that although university teachers adopted various types of teaching methods, teacher-centered teaching approaches were most widely used. The main results of regression show that: 1) teachers can increase students' academic achievement by using more multimedia-assisted instruction, research/experiment and group design/presentation; 2) not only the approaches from ITM has effects on students' learning behaviors, but also the approaches from SCM (i.e., Lecture) and TCM (i.e., Group Design/Presentation) can increase or reduce students' involvement in learning; 3) the matching strategies between students' preference and teachers' adoption of teaching methods had positive effects on students' learning behaviors but had no directly effects on their academic achievements.

Keywords: teaching methods, methods match, academic achievement, learning performance, higher education.