Peer learning, self-regulated learning and academic achievement in blended learning courses: a structural equation modeling approach

ABSTRACT

The ability for students to self-regulate their learning and to learn effectively with peers become two distinctive competencies in the era of the 4th Industrial Revolution. These competencies also affect academic achievement, an important variable used to measure attainment of learning outcomes. Therefore, this study was conducted to determine the influence of peer learning and self-regulated learning (SRL) strategies on students' academic achievement. Of the 409 respondents, only 347 were valid for data analysis, forming a usable case of 84.84%. The instruments used was an online questionnaire, which was adapted from pre-existing reliable multi-item instruments. Structural Equation Model (SEM) analysis was used to examine the relationship between the constructs in the hypothesised model. Given that the structural model exhibited a good fit to the data (χ^2/df = 1.697; CFI = 0.916; IFI = 0.917; TFI = 0.912; and RMSEA = 0.045), the results unveiled that students' ability to learn with peers were found to have a positive and significant effect on academic achievement (β = 0.478, C.R. = 3.628, p = 0.000), and significantly influenced students' SRL strategies (β = 0.793; C.R. = 6.991; p = 0.000). This study also discusses the practical implications to facilitate the development of students' self-regulated learning (SRL) and peer learning competencies in blended learning courses.