

Effectiveness of blended learning on improving medical student's learning initiative and performance in the physiology study

Xiaolan Zhang, Haixia Wen, Yujia Huang, Chunmei Lv, Hui Zhu*

1. Harbin Medical University (Harbin, China)

Background: In recent years, online learning has been widely used in every course than before. However, it depends on student's learning initiative and lacks of teacher-student interaction, which can not bring desired learning performance. In our physiology teaching practice to '5+3' integration medical student, we tried to combine online and classroom learning to form the blended learning.

Objectives: This study assessed the effectiveness of the blended learning on students' learning initiative and performance in the physiology study.

Design: It included 180 full-

time students from clinical medical specialty across two academic years, 100 freshmen and 80 sophomores. These students were divided into the experimental classes receiving blended learning and the control classes receiving traditional learning. We carried out three classroom tests and one questionnaire survey.

Results: Students can accept both blended learning and traditional learning without obvious difference. However, the students of the blended learning who acquired almost all of knowledge were as twice as the students of the traditional learning. The average accurate rates were 92.65% and 90.30% from the students of the blended learning, which were higher than the rates of 79.16% and 80.72% from the students of the traditional learning. Both the times of preparing lessons and answering questions in class increased in the blended learning practice. In addition, students were affected by specific factors in blended learning and traditional learning practice with varying degrees.

Conclusions: It found that students acquired more knowledge, performed better in the classroom tests and their learning initiative was excited in the blended learning. This study provides the effect assessment and contributes to improve the teaching effect of the blended learning.

Keywords: blended learning, learning initiative, '5+3' integration medical student, teaching practice, learning effect