

Application of PBL pedagogy based on virtual reality technology in the teaching of sports anatomy

ABSTRACT

Purposes To explore the teaching effect and value of virtual reality technology combined with PBL teaching method applied to sports anatomy. **Procedures** 119 undergraduate students majoring in physical education of Xianyang Normal University were selected as research objects. Randomly divided into experimental group (N=59) and control group (N=60). **Methods** The experimental group used virtual reality technology combined with PBL teaching method, and the control group used traditional teaching method to teach. At the end of the course, the test scores of the two groups and the evaluation results of self-learning effect were statistically analyzed. **Results** the test scores of the students in the experimental group were significantly higher than those in the control group ($P < 0.05$); Most of the items in which the experimental students self-evaluated the learning effectiveness were also superior to the control group ($P < 0.05$), and the difference was statistically significant. **Conclusions** VR technology combined with PBL teaching method can improve academic performance, enhance students' learning interest and independent learning ability, and cultivate students' ability to find and solve problems. It is a teaching method worth promoting.