1 - Pregraduate Education

OC-110 - (23873) - THE USE OF GAME BASED LEARNING FOR TEACHING HISTOLOGY

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Histology is a transversal subject in medical, dental and veterinary curricula. Classical teaching approaches are often undermined by lower motivation and engagement, which may be addressed by innovative techniques and by active learning strategies. The aim of this study was to develop a Game Based Learning (GBL) approach and compare it with a classical procedure for teaching Histology.
The GBL approach was named Histopoly and consisted of a web application for the teacher/game-master, a digital gaming application used by the students (game controller), and a board game. The board had continuous lines for the four fundamental tissues (Epithelial/Connective/Muscular/Nervous) and tiles, some with questions, others with more demanding activities (such as drawing, taking pictures, presenting slides to the class). All students of an academic year were enrolled and laboratory sessions were similar except that 4 classes (n=94) played Histopoly at the end of all sessions, whereas other 2 classes (n=28) had small evaluations every 3 weeks at the beginning of sessions.
According to the questionnaires' answers, students using GBL were more motivated, engaged and interconnected with classmates. The activity was considered fun, comforting and students enjoyed the classes. The percentage of correct answers provided throughout the game was significantly higher comparing with the classical teaching approach. However, no differences in the examination scores were found.
Overall, these findings argue for including GBL as an active learning modern approach for teaching Histology.

Palavras-chave : Histology, Veterinary, Microscopy