

# **USING GAMES IN CLASSES OF MEDICAL SCHOOL AS A TOOL TO EFFECT AND IMPROVING LEARNING**

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## **ABSTRACT**

Gamification as a teaching tool has contributed to the learning process, through interaction and perception directly to knowledge acquisition. The objective was to describe the application of electronic game in learning of radiological anatomy, using PowerPoint®, by comparing normal and anomalous radiological images of the Respiratory System. It was observed that the union between reading and simultaneous contemplation of radiography made the assimilation of knowledge efficient. Therefore, the use of gamification in process of learning radiographic anatomy can be an important tool for medical training, especially when it comes to improving skills and clinical reasoning.

## **1 INTRODUCTION**

Technology must be increasingly used in medical education to complement learning. Gamification is defined as the use of game design elements in non-game contexts. Despite being a relatively young field, gamification is having a major impact on a variety of industries and has aroused the interest of the academic community, with education being one of the earliest industries to introduce games as a complement to learning. However, the gamification of medical education has struggled to gain strength.

## **2 MATERIALS AND METHODS**

The authors developed a game to potentiate students learning through playing using easy accesses and simple technologies. The project consists on presenting slides in Powerpoint® system. As game begins, with the aspects of active methodology, teachers instigate and help medical students become principal agent in their learning and teaching process.

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They expose and explain orally about studied radiological variations in computer's screen or on the blackboard (whiteboard or blank slate). During games alterations in respiratory system are addressed (pneumothorax, pleural effusion, atelectasis, pneumonitis, tuberculosis). Each slide has two radiographies (normal and not normal-anormal) and information as: radiological report, etiology, clinical manifestations). Initially teachers inform activities objective to the pupils or medical students. Then, using a data show projects radiological images on whiteboard (glass board).

At this moment teacher instigates pupils to manifest themselves orally about what differences are observed and perceived on the exposed radiographies. Teacher writes each new information on the whiteboard or on the image according to his thinking or students thinking. After discussing and arguing students concerning importance of wrote data we have next step: conduct knowledge process to effect knowledgment showing how bibliographies characterize radiological alteration, as well as patient clinical condition with his respective examination.

### **3 RESULTS**

After all these paths, students who have most point out answers according to the bibliographies win biggest punctuation on practical classes. This methodology is not limited to respiratory system. This practice has been accepted by volunteers, and they asked if the others systems would be thought, ministrated or carried out in ludic, playfull and technological way and of easy access.

### **4 CONCLUSION**

In this way, knowledge will enable the student, emancipating and making him aware of the importance of science, showing a need to expand of knowledge through scientific research, in addition to deepening your knowledge of diseases, prevention, research graphics and images, to elaborate their own concepts.

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