Application of Gamification on Remote Teaching for Theoretical Specialization Subjects in Faculties of Engineering and Arts Applied on technological subjects (Materials – Floors – Walls – Roofs) Dr. Shaimaa Samir Fahmy Mohamed Lecturer at The Higher institute of Applied arts - 6 October

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Abstract

Games are a key feature in human life because it provides players the joy of winning and receiving rewards, thus; people always seek to collect these rewards especially when they need a motive to complete their tasks.

The term "gamification" has been recently introduced, which is based on motivation using game elements in contexts that are unrelated to gaming, such as marketing, education, work environments ...etc. Studies have found that game-based education based can positively impact the students' problem-solving skills and stimulate their knowledge gain and sharing.

Despite the importance of practical subjects in interior design field, the study analyzes and applies the concept of gamification in higher education and shows its impact on teaching the theoretical interior design subjects remotely.

The problem of this study came from the Covid-19 pandemic and its rapid spread, resulting in the transformation of the teaching method in some universities around the world; from direct communication between students and professors within campus, into a virtual community that remotely gathers professors with their students. This situation has decreased the ability to communicate and comprehend, thus; it minimizes the professor's ability to determine how well the scientific content was delivered to their students; and how well have they conceived it.

The objectives of the study are to obtain positive outcomes from remote learning in faculties of engineering and arts and to realistically highlight the research done in the field of gamification-based education, by focusing on experimental evidence rather than beliefs or preferences; with the purpose of achieving progress in education through games.

The significance of this study is that it presents challenges, promotes the students' pride of their achievements, and identifies modern education techniques, in order to improve the knowledge gain, scientific content comprehension and motivation for the students in the faculties of engineering and arts.

The study concludes that utilizing gamification in higher education results in a behavioral change of the learners; it also supports knowledge retention and makes learning more enjoyable. The experimental methodology was used in this study, by teaching the theoretical curriculums of interior design to university female students using the gamification method; followed by a questionnaire to identify the comprehension level of the scientific content.

Keywords:

gamification, games-based learning, electronic education, remote education