Gamification of Critical Thinking: Use of Genially Application for Students' Retention and Understanding

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Abstract:

This short action research investigates the potential of game-based learning to enhance the understanding and retention of logical fallacies within the diploma and foundation critical thinking units. A gamified activity was designed using the interactive features of the Genially app to combine logical fallacies taught in the units with immersive gameplay, offering students an engaging learning experience. The game included questions aligned with logical fallacies previously studied that were structured to corresponding Bloom's Taxonomy. It progressed from remembering and understanding (Game Level 1), applying (Game Level 2), analysing (Game Level 3), to evaluating (Game Level 4). After playing the game, students completed a survey to assess their experiences in three areas: (1) overall gaming experience, (2) comprehension and retention at each level, and (3) self-perception of critical thinking skills.

Initial findings through a pilot study suggest that students found the activity engaging and enjoyable. Based on the findings, on average 80% of the respondents were more confident with their knowledge of logical fallacies from the games that they played. Several have reported that it helped clarify fallacies they were previously unsure about, helpful for reinforcing their understanding and learning of logical fallacies. The study highlights the potential of interactive, game-based tools to enhance traditional approaches to critical thinking education.