Using Board Games as Tools for Learning in the University Classroom

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Overview and Background

- Game Based Learning = **GBL** - an approach that uses games to achieve specific learning outcomes.
- Key Rationale = University instructors tend to see GBL as 'fun' but not appropriate for the university context, citing a lack of academic rigor. We wanted to determine whether GBL could be BOTH fun and effective in enhancing student learning for the university context.
- This project stemmed from a first-year course at UTM on the topic of *Intercultural Communication*. Three games were played over the course of the term: *Chinatown, Pandemic,* and *Power Grid Deluxe*. These games were chosen because the concepts outlined in the games matched the topics that were being discussed in the course textbook, namely, (1) stereotypes, (2) business negotiation, (3) business practices, and (4) health and wellness.

Research Questions

1. How do students perceive the use of GBL in the classroom?

2. To what extent does the use of GBL assist students in their understanding of a particular course topic?

Methods

In addition to the games, students were assigned corresponding readings from an *Intercultural Communication* textbook. During the final exam, students were assessed on how well they could integrate the outcomes from the games with the theories from the text.

Students were asked to give informal feedback on their game experiences after the game in the lecture and through anonymous feedback (RQ1)

Students were given 6 Multiple Choice Questions (MCQs) and 2 Short Answer questions asking them to link theory to practice on Final Exam (RQ2). Final Exam was marked by the course Teaching Assistant (TA).

52 students in the first year university course, **35 agreed to participate** (67%). A Research Assistant (RA) collected all survey data and consent. Exam data, consent, & additional information were not reviewed until after the course was complete.

It's All Fun and Games...or is it?

- 32/35 (91%) of participants thought *all* the games were fun. 25/35 (71%) thought that there was an obvious link between the games and the course concepts.

  "I enjoyed the lecture sessions as they are really engaging. Unlike my regular lectures, I am actively participating in events and activities."

- On average, students did better on the final exam questions relating to the games.

- With respect to the participating students:
  - The final exam average of all questions was 63%
  - The average score on the Multiple Choice Questions related to GBL was 78%
  - The average score on the Short Answer Questions related to GBL was 69%

- Students did better on the questions that related to the GBL questions than they did on the non-GBL questions.

  "It was nice as there were a lot of examples that I could relate the topics with in real life. Such examples are playing board games etc."

Links between GBL and Theory

Students were able to link what they experienced in GBL to course theory. The findings below from students' short answer questions are examples related to *Pandemic* and its link to course content (course terms from the textbook appear in **purple**)

"Pandemic can be approached differently based on an individual's power dimension. Due to being a collectivistic game, cultures with large power distance would allow a leader to call the shots while the others just contribute..."

"Pandemic involves a collectivistic approach on eradicating a disease...someone from an individualistic culture might struggle more with the teamwork...someone from a high context culture may not have direct communications skills ...or their voice may not be heard."

Students were able to make direct connections between the games and the course theories.

Conclusions & References

Games can be 'fun' and educational within the university context. Students are active learners in the classroom when games are utilized. Outcomes suggest that not only are students able to link the topics in the games to the wider context, but that they achieve better results in comprehension compared to non-game based topics.

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