

GAMIFYING AN ACADEMIC LIBRARY GUIDE TO CONCEPT MAPPING

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Introduction and Background

There is a growing use of gamification as an instructional tool, with points and badges often accompanying online learning objects. However, games are not just a collection of rewards. They are the interaction of any number of different elements with gameful design. They can be combined in a meaningful way to satisfy needs for competence, autonomy, and relatedness [1].

In the absence of a classification scheme for game mechanics, the author created a concept map that organizes game elements into these basic psychological needs outlined by the self-determination theory of motivation (Figure 1).

A McGill Library concept mapping guide was launched late 2017 and gamified with attention paid to the intrinsic motivation of learners [2]. Choice and narrative were used with the tutorials to promote autonomy, presenting them as a challenge that could be followed as a character: An astronaut, to explore a subject area with concept mapping; A fortune teller, to help them see the path ahead by gaining insight into their research; An artist, to use concept mapping to show off their work and communicate their research. The option was available to learn without a particular challenge to overcome. See Figure 2 for video thumbnails. There was also an invitation to try out a quiz after completing a tutorial to provide feedback.

Results

The video tutorials have had a total of 906 views, with the astronaut in the lead (354 views), followed by no character (246), the artist (161), and fortune teller (145). The views do not reflect total tutorial usage, as PDF alternatives to the videos are available. The guide has had 6,837 pageviews.

With 47 responses the quiz has not played a huge role, but it continues to be utilized. Questions test the information presented in the tutorials, and the last one asks: How do you see yourself using concept mapping? Responses include: to organize, visualize, and disseminate research, to assist with a research proposal, to learn a new subject, to structure a paper, and get feedback on what is missing.

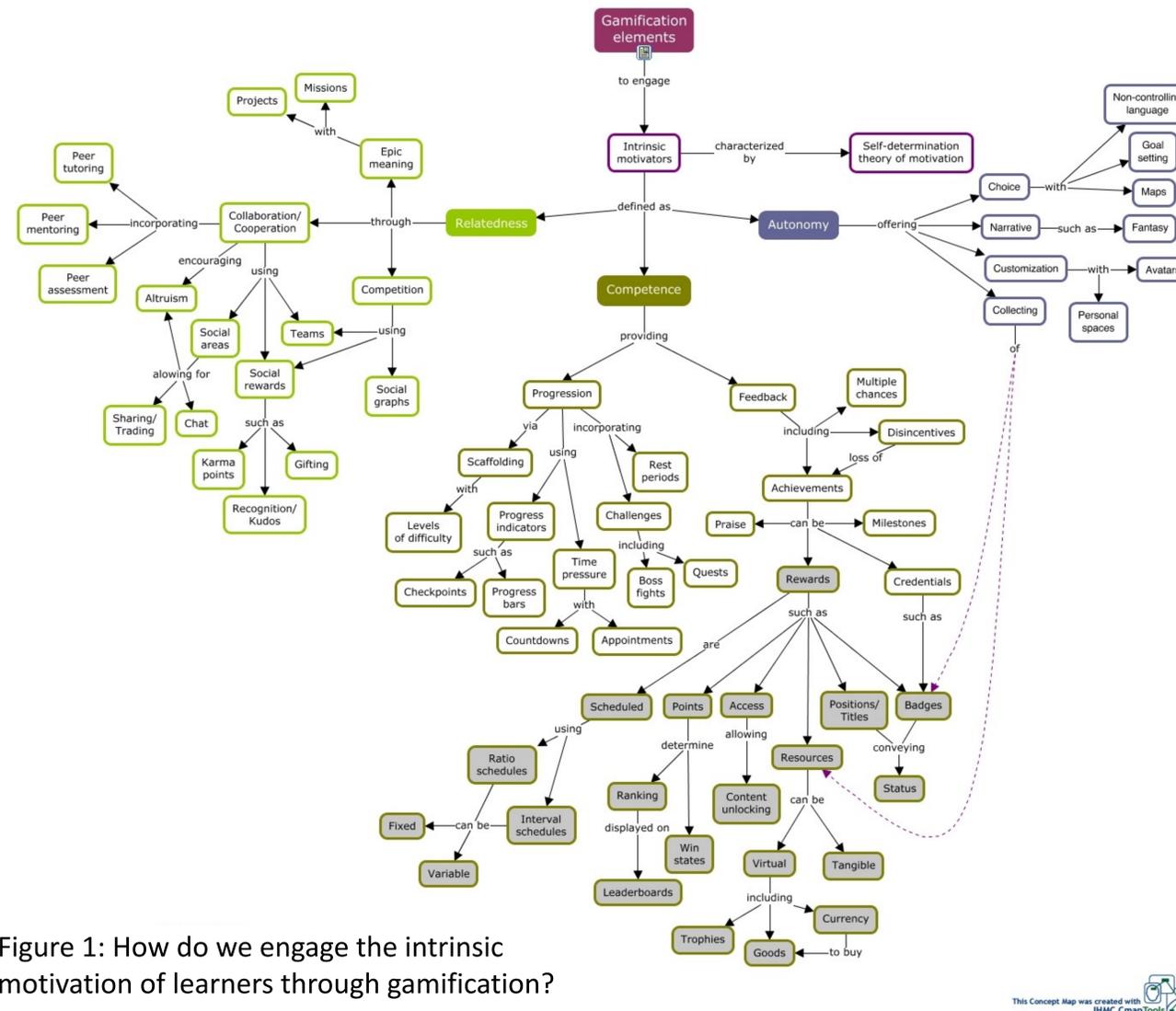


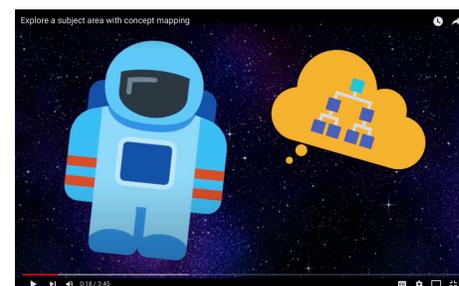
Figure 1: How do we engage the intrinsic motivation of learners through gamification?

Discussion

The subject guide was originally designed to accompany in-class and standalone workshops that incorporate group concept mapping activities and build on the need for relatedness. Along with narrative choice and quiz feedback, the teamwork engages all three motivators of self-determination theory. The guide has recently been updated to include: “Your mission, if you should choose to accept it, is to jump in and create a concept map on a topic and share it with the librarian. We love seeing your maps!”

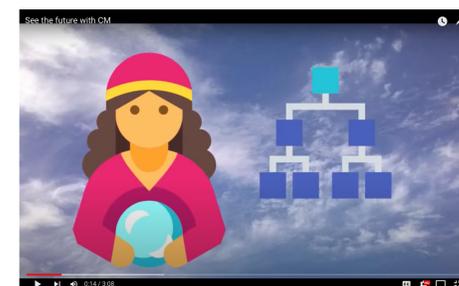
References

1. Tan, M., & Hew, K. F. (2016). Incorporating meaningful gamification in a blended learning research methods class: Examining student learning, engagement, and affective outcomes. *Australasian Journal of Educational Technology*, 32(5), 19-34.
2. McGill Library (2022). *Concept Mapping*. <https://libraryguides.mcgill.ca/conceptmapping>.



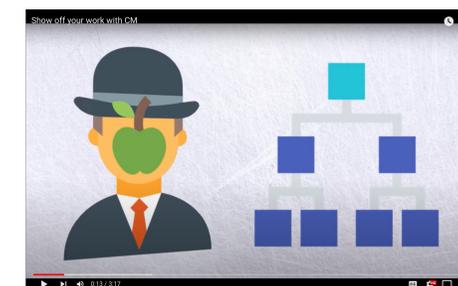
Astronaut

Select the astronaut to explore a subject area with concept mapping. It is a great challenge to choose if you are near the **beginning of your research**.



Fortune teller

Select the fortune teller to help you see the path ahead by gaining **insight into your research** if you are more experienced.



Artist

Click on the artist to use concept mapping to show off your work when it is time to **communicate your research**.



No character

Continue on to learn about concept mapping **without a particular challenge** to overcome.

Figure 2: Video tutorials of the steps to building a concept map. Found at <https://libraryguides.mcgill.ca/conceptmapping/steps>.