Abstracts of the 2021 Technology, Mind, & Society Conference

Development of Curriculum Guides for the Assassin’s Creed Discovery Tour Games to Enhance Teachers’ Adoption of Games for Learning

Chu Xu (McGill University), Robin Sharma (McGill University), and Adam K. Dubé (McGill University).

While games are often used for learning, educators hesitate to adopt them into classrooms due to a lack of acceptance and knowledge of how to teach with games (e.g., Callaghan et al., 2017). In this project, we created curriculum guides for two educational games, Assassin’s Creed Discovery Tour: Ancient Greece and Egypt, to a) identify methods and theories appropriate for creating teacher guides for game-based learning; and b) test if such guides can facilitate teachers’ adoption of games. The theories used to develop the guides included the Technological, Pedagogical, Content Knowledge framework (TPACK, Mishra & Koehler, 2006), the Technology Acceptance Model (TAM, Davis, 1989), and the Learning Mechanics-Game Mechanics framework (Arnab et al., 2015). The guide is an interactive website containing four sections: 1) Curriculum Section, learning goals are selected from a list and then game and classroom activities are suggested; 2) Game-Activity Section, in-game activities are selected and then links are drawn to learning outcomes; 3) Lesson Plans tailored to different subjects, ages, and instruction modalities (student vs teacher led); and 4) Technical FAQ, addressing common technical and practical barriers. To test whether the curriculum guides improve adoption, a post-test only between-subjects experiment are being conducted with in-service teachers (n=120) to see if exposure to the guide increases their TPACK and TAM. Follow-up focus groups will be conducted to provide in-depth interpretations of teachers’ feedback. This project presents a methodological model illustrating the development of curriculum guides that will support teachers’ implementation of video games for learning.