Computer and video games have been around for a bit longer than a quarter of a century. Almost as long as these games have been around is the controversy about whether they are an effective tool for learning. Proponents argue that games engage an individual in interactions that are perceived as enjoyable, filled with desirable levels of uncertainty, separate from the real world, and governed by rules (Garris, Ahlers & Driskell, 2002). But with all of these attributes, do they motivate a person in ways that foster learning or is the motivation more likely aimed at having fun? Again, it depends on who you ask. However, there does seem to be an evolving body of knowledge that suggests that certain attributes of computer and video games can foster the kind of motivation that facilitates learning. The resources provided below are a sampling of some of the perspectives being explored on how games can be powerful motivators for learning. Several of the articles provide conceptualizations that the authors suggest provide a vantage point for future research in the area of learner motivation in games.

Key Questions for Discussion

- Should student learning be situated in fun activities?
- How does self efficacy, locus of control and perceived value of the experience influence the willingness of a learner to persist when the task teeters on the brink of being too challenging or too easy?
- At what point does the game cease to be a game with its desirable characteristics and become a less desirable learning task? (Contributed by Leo Cao, Doctoral Student, School of Information and Library Science)
- How does learner motivation intersect with the technological elements of a game, the emotions that games elicit, the expectations that the player has of the game, and the agency of the individual in the context of the game?
- What are the best ways of integrating reflection (a key element of experiential learning) into the process of game play when a game is a contained experience that loses its motivational elements if interrupted for reflection?

Resources for Further Exploration


This study describes development of an instrument to measure learner enjoyment of e-learning games that identifies eight dimensions of learner enjoyment; concentration, goal clarity, feedback, challenge, control, immersion, social interaction, and knowledge improvement. The authors argue that enjoyment contributes to motivation to play a game; thus, facilitating learning. Some of the identified dimensions are mirrored in the literature on how games motivate learners and facilitate learning.


The authors describe the development of an input-process-outcome game model that leverages instructional content and game characteristics (the input) through a “game cycle” (the process) that includes user judgments, user behavior, and system feedback to achieve
through debriefing the learning outcomes (the outcomes). One perspective is that user judgments in the game cycle such as increased interest, challenge, enjoyment and confidence can lead to persistence and a heightened sense of performance and confidence. These perceptions when appropriately debriefed by the teacher facilitate the development of connections to the elements of the experience that align with the desired learning outcomes (p. 445).


Kolb & Kolb describe metacognitive aspects of experiential learning from the vantage point of learner motivation. Understanding how experiences help to foster understanding through the lens of reflection, consideration of mental models, and planning for use of learned material facilitates the ability of the learner to enter the next experience ready to use their understanding to negotiate the new experience. Games provide a structured opportunity to navigate the stages of learning in a structured, systematic way that is enjoyable, potentially challenging and interesting.


The author provides an overview of the value of online computer games for students, faculty and technologists in higher education based on a literature review of online computer games. Four elements were identified as necessary for effective learning environments. These elements included; pedagogical elements, organizational elements, game play elements, and user interface elements. According to the review, these elements converge to produce the development of conceptual understanding, real world skills and a collaborative culture.


Examining what motivates business students to continue to play business simulation games, this study found that perceived playfulness and learning performance positively influenced student satisfaction. Student satisfaction with their performance and with the game created a willingness to continue to play, creating a cycle of perceptions that the game enhanced their understanding of core concepts; creating learner satisfaction and an iterative cycle of learning, satisfaction and enhanced performance.