

Gamification Essentials for Educators

Definition: *Gamification is the act of applying the game-design elements in a non-game setting in order to increase engagement, change behaviour, or achieve a specific, desired result.*

Steps for incorporating game elements in education:



- **Understand target audience:** ask yourself if game elements will benefit or engage your target audience. Gamification techniques are not beneficial to every learner.
- **Define learning objectives:** what specific learning objectives will benefit from game elements? For example, if you want learners to focus on a specific task, introducing a time limit can improve focus.
- **Structure the experience:** games are structured experiences – gamified educational activities should also be structured. The better you understand the rules of the game elements, the better your learners will understand the activity.
- **Identify resources:** what feedback loop will your gamification elements use? Will learners be rewarded with points? Leaderboards? Verbal praise? You must identify how players will receive feedback and how you will measure learner success.

- **Apply game elements:** Game elements can be divided into two categories – *self elements* and *social elements*. Self elements are any elements that encourage students to focus, encourage competition, or recognize self-achievement and includes elements like points, achievement badges, leaderboards, or time restrictions. Social elements encourage interaction, competition, and/or cooperation; these elements build learner community and celebrate group achievements.

Examples of Self Elements and Social Elements

Self-elements	Social-elements
Points	Leaderboards
Levels	Virtual Goods
Trophies/Badges	Interactive Cooperation
Virtual Goods	Storyline
Storyline	
Time Restrictions	

Resources for Educators

Bartle Test of Gamer Psychology: The Bartle Test of Gamer Psychology is an online multiple-choice assessment that generates the participant's gaming preference. The Bartle Test categorizes the gaming preference into 4 gamer types, Explorer, Achievers, Socializers, and Killers. The test is calculated from 30 questions and totals 200 points. Users are assigned a portion of those 200 points in each category, showing how much that category applies to their gaming preferences.

Zichermann Gamification Loop: Gabe Zichermann, an author and entrepreneur, originated the idea of a "Gamification Loop." A gamification loop is a challenge-achievement-reward loop that Zichermann argues promotes dopamine production in the brain, reinforcing our desire to play a game. He argues that by paying attention to how our brains respond to the stimuli of game elements, it is possible to craft extremely compelling gamified activities.



Zichermann Gamification Loop

Gamification Wiki (www.badgeville.com/wiki/education): Badgeville's Gamification Wiki provides an excellent introductory resource for educators interested in using gamification techniques. This site provides a community for educators to share resources, case studies, and curricula.

Gamification Resource Bibliography

(www.gamificationresearch.org/bibliography): This bibliography, shared using the free citation software Mendelay, contains dozens of academic papers, case studies, blogs, and websites discussing best practices for using gamification in education.

Ready for more?

Be sure to check out the companion pieces to this tip sheet:

- **“Gamification and Adult Literacy:** Investigating the history, impact and execution of gamification principals in adult education”, a full report outlining the use of gamification across multiple platforms, including adult education
- “Using Gamification Techniques to Increase Learner Comfort with Typing”, a sample exercise for adult literacy learners that includes several elements of gamification.

Both of the above documents, and this tip sheet, are available online at

www.llsc.on.ca

