**Gamification**

Gamification (the application of game elements and digital game design techniques to non-game settings) and game-based learning (game playing that has defined learning outcomes) are seeing greater adoption and recognition in educational and professional settings.

**How It’s Developing**

The popularity of gamification and game-based learning is evident in gaming’s increasing role in professional training situations; integration into elementary, high school, and even higher education settings; and use in solving social issues, as evidenced by the work of Jane McGonigal, game designer, author, and director of game research and development at the Institute for the Future, whose games seek real-world solution to pressing issues. [[1](http://www.ala.org/transforminglibraries/future/trends/gamification#Notes and Resources)] Improvements in technology have allowed for the growth of gaming and mobile gaming has made it easier for people to access games wherever they are. Advances in virtual reality technologies will likely offer more and new ways to engage in play. [[2](http://www.ala.org/transforminglibraries/future/trends/gamification#Notes and Resources)]

Gaming advocates promote the spatial reasoning, math, and logic often required for game mastery, skills that have become more important with a focus on STEM, but gaming is also increasingly credited with promoting curiosity, socialization, and the continuous processing of information. [[3](http://www.ala.org/transforminglibraries/future/trends/gamification#Notes and Resources)]

Games in educational settings have been a regular option to help make learning more playful and to engage learners. But more recent pushes for gamification seek to expand games’ importance from just fun and engaging, to more important roles in teaching content, monitoring learning progress, and practicing skills. [[4](http://www.ala.org/transforminglibraries/future/trends/gamification#Notes and Resources)]

A Joan Ganz Cooney Center (<http://www.joanganzcooneycenter.org/>) survey of 694 K-8 teachers found that nearly three quarters (74%) used digital games for instruction, with 80% of those teachers reporting playing games at least monthly and 55% at least weekly. [[5](http://www.ala.org/transforminglibraries/future/trends/gamification#Notes and Resources)] Gaming’s use in education, however, may need to be balanced as educators focus on delivering content required by local, state or national curriculum standards.  The Cooney Center’s survey found that few teachers were using immersive learning games, the kind that encourage deep exploration, and instead utilized short-form games that likely were easier to map to curriculum standards. [[6](http://www.ala.org/transforminglibraries/future/trends/gamification#Notes and Resources)]

Gamification, game based learning, and gaming may also pose challenges. It may be over-applied, with users believing that simply applying “game rewards” (points, leveling, badges) will make activities more interesting and achievable. [[7](http://www.ala.org/transforminglibraries/future/trends/gamification#Notes and Resources)] Gaming, and especially video games, may prove addictive, which even in the context of education may prove harmful. [[8](http://www.ala.org/transforminglibraries/future/trends/gamification#Notes and Resources)] And there have been long-held concerns with violence and gender and diversity issues.

**Why It Matters**

Gaming offers and important opportunity to develop emerging and traditional forms of literacy. With minimal instructions, players are motivated to seek out information about how games work, including communicating with experts, watching or creating tutorials, or reviewing how-to texts (online or in print). [[9](http://www.ala.org/transforminglibraries/future/trends/gamification#Notes and Resources)]

Libraries, recognized as spaces for interest-driven learning and self-directed discovery, are ideal for the type of learning and discovery promoted by games. Equally important, libraries as public gathering spaces can capitalize on the benefits of co-play, helping to improve players’ social skills by encouraging play together, in small groups, or large classes. [[10](http://www.ala.org/transforminglibraries/future/trends/gamification#Notes and Resources)] The social setting of the library may also encourage users to be reflective in their play, building awareness, asking questions, and processing what is being learned through play. [[11](http://www.ala.org/transforminglibraries/future/trends/gamification#Notes and Resources)]

The skills that games help develop - digital literacy and understanding how systems (computer and otherwise) work, for example - will become increasingly important in a work environment where jobs and responsibilities are regularly changing. [[12](http://www.ala.org/transforminglibraries/future/trends/gamification#Notes and Resources)] Libraries and librarians interested in supporting next generation job skills may find benefit in promoting games and game-based learning.

**Notes and Resources**

[1] “The Gamification of Education.” World Future Society. The Futurist. September – October 2011. Available from[http://www.wfs.org/content/futurist/september-october-2011-vol-45-no-5/g...](http://www.wfs.org/content/futurist/september-october-2011-vol-45-no-5/gamification-education)

[2] “In the Future, Everyone Will Play Video Games.” David J. Hill. SingularitryHUB. November 9, 2014. Available from[http://singularityhub.com/2014/11/09/in-the-future-everyone-will-play-vi...](http://singularityhub.com/2014/11/09/in-the-future-everyone-will-play-video-games/)

[3] “How Videogames Like Minecraft Actually Help Kids Learn to Read.” Clive Thompson. Wired. October 9, 2014. Available from <http://www.wired.com/2014/10/video-game-literacy/>

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[5] “Level Up Learning: A National Survey on Teaching with Digital Games.” Lori Takeuchi and Sarah Vaala. Games and Learning Publishing Council, a project of the Joan Ganz Cooney Center. October 20, 2014. Available from[http://www.joanganzcooneycenter.org/publication/level-up-learning-a-nati...](http://www.joanganzcooneycenter.org/publication/level-up-learning-a-national-survey-on-teaching-with-digital-games/)

[6] “Level Up Learning: A National Survey on Teaching with Digital Games.” Lori Takeuchi and Sarah Vaala. Games and Learning Publishing Council, a project of the Joan Ganz Cooney Center. October 20, 2014. Available from[http://www.joanganzcooneycenter.org/publication/level-up-learning-a-nati...](http://www.joanganzcooneycenter.org/publication/level-up-learning-a-national-survey-on-teaching-with-digital-games/)

[7] “’Gamification’ Is Dead, Long Live Games for Learning.” Michael John. TechCrunch. October 5, 2014. Available from[http://techcrunch.com/2014/10/05/gamification-is-dead-long-live-games-fo...](http://techcrunch.com/2014/10/05/gamification-is-dead-long-live-games-for-learning/)

[8] “The Gamification of Education.” World Future Society. The Futurist. September – October 2011. Available from[http://www.wfs.org/content/futurist/september-october-2011-vol-45-no-5/g...](http://www.wfs.org/content/futurist/september-october-2011-vol-45-no-5/gamification-education)

[9] “How Videogames Like Minecraft Actually Help Kids Learn to Read.” Clive Thompson. Wired. October 9, 2014. Available from <http://www.wired.com/2014/10/video-game-literacy/>

[10] “Level Up Learning: A National Survey on Teaching with Digital Games.” Lori Takeuchi and Sarah Vaala. Games and Learning Publishing Council, a project of the Joan Ganz Cooney Center. October 20, 2014. Available from[http://www.joanganzcooneycenter.org/publication/level-up-learning-a-nati...](http://www.joanganzcooneycenter.org/publication/level-up-learning-a-national-survey-on-teaching-with-digital-games/)

[11] “Some Struggles Teachers Face Using Games in the Classroom.” Katrina Schwartz. Mind/Shift. November 24, 2014. Available from [http://blogs.kqed.org/mindshift/2014/11/some-struggles-teachers-face-usi...](http://blogs.kqed.org/mindshift/2014/11/some-struggles-teachers-face-using-games-in-the-classroom/)

[12] “Fact or Fiction?: Video Games Are the Future of Education.” Elena Malykhina. Scientific American. September 12, 2014. Available from [http://www.scientificamerican.com/article/fact-or-fiction-video-games-ar...](http://www.scientificamerican.com/article/fact-or-fiction-video-games-are-the-future-of-education/)