DIRECTOR'S BRIEF

CONTENTS

INTRODUCTION

This brief serves as a justification for introducing gaming and gamification into the curriculum and information literacy at the college library. It outlines gaming and gamification, and its benefits, risks, and successful implementation in the library. Research and observations from professional librarians is presented and referenced throughout.

GAMING DEFINED

"Computer and video games have been key areas for the development and proliferation of new media forms and technologies. The three main platforms for electronic gaming are stand-along arcade games, consoles that connect to televisions, and computer game software" (Miklaucic, 2003).

GAMIFICATION DEFINED

Adam Swann defines gamification as "applying game-design thinking to non-game applications to make them more fun and engaging. Tap into people's natural desire to compete and play, and it results in high levels of engagement" (2012).

USES OF GAMING AND POPULATION OF GAMERS GROWS

Gamification is expected to grow as reported in the 2013 Horizon Report for Higher Education. Gamification is the idea that our activities can be developed into games. This has resulted in the development of many mobile apps, and libraries are applying this strategy (NewMediaConsortium, 2013, February 13). Gaming has appealed to young girls and adults. The interest in gaming continues to go beyond teenage boys (McCann, 2008).

CLARIFICATION OF GAMING AND GAMIFICATION IN HIGHER EDUCATION AND THE LIBRARY

Lee and Hammer (2011), outline three areas where gaming can be an intervention tool in higher education which are cognitive, emotional, and social. In regards to the cognitive development of students, games give students the opportunity to explore, tackle, and find solutions to complex tasks that can lead to mastery of the game. In this mastery students are developing cognitive skills associated with mastering math, science, information literacy, etc. depending on the goal of the game that has been developed. Once a student has mastered one level of the game another more difficult level should be available to continue to challenge the student versus an immediate reward of instant gratification.

Students are afraid to fail, and failure is not recognized as an opportunity to learn from experience by students wanting to get an A or achieve a high G.P.A. In order to be successful at games you have to play the game repeatedly and fail. Although the student is failing they develop emotionally by not associating failure with a negative connotation. Instead, the student associates failure as part of the learning process (Lee & Hammer, 2011).

Gaming can give students the opportunity to step out and pursue academics they would otherwise assume they could not achieve success. It gives introverted students the opportunity to display leadership skills by successfully leading a group of students through a game (Lee & Hammer, 2011). It has bridged a gap with students that may not have been reached through traditional classroom learning. As educators and librarians continue to adapt active learning techniques and continue to abandon the sage on the stage method of teaching, gaming will grow as opportunity for them to reach the traditionally unreachable student.

It will be important for educators and teachers to use formative assessment to determine whether gaming and gamification benefit students cognitively, emotionally, and socially.

BENEFITS OF GAMING AND GAMIFICATION IN HIGHER EDUCATION AND THE LIBRARY

Gamification gives educators and librarians the opportunity to engage students and library patrons using a tool they are excited about in day to day life. Gaming has transcended age, gender, and ethnicity. Gaming gives educators and librarians the opportunity to reach out to a diverse group of students in the academic setting. It is difficult to reach students that have busy

lives which include family, work, coursework, and a social life. Gamification in the classroom and especially during information literacy instruction would help academic librarians engage students.

Gamification is an opportunity for students to engage in play that result in experimentation and the development of "multiple identities" (Lee & Hammer, 2011). Although some students may fail at playing the game this will provide students with an opportunity for development (Lee & Hammer, 2011). It gives academic libraries the chance that "education can be a joyful experience, and the blurring of boundaries between informal and formal learning can inspire students to learn in lifewide, lifelong, and lifedeep ways" (Lee & Hammer, 2011).

Gamification is a great opportunity for academic librarians to engage students in information literacy instruction including teaching students how to:

- avoid plagiarism;
- identify reliable information on the web;
- searching electronic databases in the library;
- use the physical library space for research using library classification systems such as Library of Congress and/or Dewey Decimal;
- creatively consider how their research skills can be used outside of the classroom including the workplace, home/family life, etc.

RISKS RELATED TO GAMING AND GAMIFICATION IN ACADEMIC LIBRARIES

As with every new endeavor it is important to consider the risks associated with it. Gamification has many risks that must be considered, but the benefits in an educational setting are just as important. Some of the risks associated with gaming and gamification in higher education are as follows:

- students may identify learning with rewards that are gained through successful play;
- the instructors and librarians resources can be consumed by the game;
- making gaming mandatory can make it feel just like school (Lee & Hammer, 2011).

Due to the possible risks in higher education it is important for educators and librarians to continue to assess the gaming projects they pursue with students.

RESEARCH ON GAMING AND GAMIFICATION

The research on gaming in higher education is limited and even more limited in regards to gaming and gamification as a tool in the academic library. According to Ameet Doshi, gaming provides a wonderful opportunity for academic librarians to transform their image as boring (2006, p. 15). Engaging students in information literacy instruction is a struggle, but the benefits to students are great. Such as an increase in retention and success in courses that require research. Students in a multitude of disciplines could benefit from gamification of information literacy. Doshi (2006) gives several examples including evidence-based games such as a health

science student using health databases to diagnose a patient's symptoms (p. 16). These practical applications are beneficial to students learning information literacy.

SUCCESSFUL IMPLEMENTATION OF GAMING IN THE LIBRARY

There are several novels that have been published that are based on games (Danforth, 2009). Library patrons are reading this material, and if the library can incorporate these new interests into the library it would increase attendance to outreach events. Many public libraries have game consoles available for teens to play, but incorporating gaming in other ways in the library would be beneficial. The offer board games, Bingo, chess, and checkers, but patrons of all ages are turning to games that are available online and mobile apps. Gaming is also applicable to academic libraries as well. As academic libraries compete with Amazon, eBooks, and resources available through a simple search in Google it is imperative that librarians develop new ways to engage students. The incorporation of gaming in the methods of teaching information literacy will introduce students to the library's resources. Librarians will need to pursue continuing education in order to learn more about gaming and gamification, and its possible application in the library setting.

CONCLUSION

Gaming and gamification have several benefits that should be explored by the library. The risks have been considered, and the implementation of such a project will require continuous evaluation. The introduction of gaming and gamification into the curriculum and information literacy in the library would greatly benefit students resulting in increased retention, better grades and G.P.A.'s, and the personal development of cognitive, emotional, and social skills.

ANNOTATED BIBLIOGRAPHY

References

Broadening Gaming Services in Libraries. (2008). *Library Technology Reports*, *44*(3), 24-34.

This article explores gaming in libraries. The authors explain that libraries are offering opportunities to integrate gaming into library services including information literacy instruction. The authors note that a variety of games utilize reading and critical thinking skills, which is explored in information literacy instruction.

Danforth, L. (2009). Why Games?. *Library Journal*, *134*(9), 50.

Danforth supports the user of gaming by libraries. She discusses her experience working on the Libraries, Literacy, and Gaming project for the American Library Association. She references popular novels and comics based on video games that are checked out by library patrons. Gaming gives the library an opportunity to outreach to these patrons.

Doshi, A. (2006). How gaming could improve information literacy. *Computers In Libraries*,

    26(5), 14-17.

Doshi explores the benefits of incorporating gaming into information literacy to increase student engagement, and transform the negative views of librarians and information literacy as boring. He gives several examples including playing Jeopardy with a class in order to teach them information literacy skills.

Lee, J. J., & Hammer, J. (2011). Gamification in Education: What, How, Why Bother? *Academic*

    Exchange Quarterly, *15*(2). Retrieved from

    http://www.gamifyingeducation.org/files/Lee-Hammer-AEQ-2011.pdf

Lee and Hammer define the use and application of gaming in education. The authors discusses the advantages such as the cognitive, emotional, and social benefits to students. The risks of gamification in higher education are explored, and constant assessment is recommended.

McCann, S. (2008). Not Just for Boys Anymore. *Library Journal*, *133*(19), 51.

McCann explains how the average of gamers is now 35. Gaming has reached more than just teenage boys. Girls are playing games as well.

Miklaucic, S. (2003). Gaming. In S. Jones (Ed.), *Encyclopedia of new media.* (pp. 197-201).

    Thousand Oaks, CA: SAGE Publications, Inc. doi:

    http://dx.doi.org/10.4135/9781412950657.n103

This encyclopedia entry outlines the history of gaming over time, and provides a definition for gaming.

NewMediaConsortium. (2013, February 13). NMC HORIZON REPORT: 2013 HIGHER

    EDUCATION EDITION [Video file]. Retrieved from http://youtu.be/qjUtoZllJ1I

Gaming and gamification is researched by the NMC Horizon Project, a decade-long research project, developed to identify emerging technology in higher education. The NMC Horizon Report states that gaming and gamification will be adapted within two to three years.

Swann, A. (2012). *Gamification Comes of Age*. Retrieved from

    http://www.forbes.com/sites/gyro/2012/07/16/gamification-comes-of-age/

Article summarizes and defines gamification, and explains how companies can leverage gamification to improve productivity of employees. The boosts in gaming popularity has resulted in more people gaming via mobile apps.