Achievement Unlocked: Leading the Way to Innovation by Leveraging Game Design

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Abstract

Use of digital badges is a popular trend in academia, and library instruction is no exception. However, digital badges are just one embodiment of gamification. To truly reap the benefits of gamification requires more than simply sticking a badge, or sprinkling novelty, on top of existing services; it requires an understanding of game design principles and mechanics as well as their thoughtful, meaningful integration into a user's experience. By sharing their experiences in spearheading digital badge projects at their respective academic libraries and overviews of game design and digital badge systems, the presenters hope to provide an awareness of key concepts, highlight potential pitfalls, and to facilitate discussion of gamification in academic libraries.

Introduction

The MacArthur Foundation defines digital badges as a means of assessment and credentialing that provide a means of visibly validating learning and believes they have the potential to help transform where and how learning is valued. Many in academia—with libraries being no exception—seem to agree, as exploration of digital badge use has become increasingly popular. However, digital badges can be seen as just part of a larger movement in leveraging gamification. Gamification, the process of applying game-thinking and game mechanics to non-game contexts for the purpose engaging users and solving problems, requires more than simply creating and issuing digital badges willy-nilly; to be successful, user/player needs and motivations should be taken into account to craft meaningful and enjoyable user experiences.

Description & Key Points

The session began with an introduction of its goals and presenters. Noting that trends like digital badges, leaderboards, and other game design elements are increasingly being utilized in higher education and online pedagogy and wanting participants to have a context to facilitate understanding and grounding discussions of gamified projects, the presenters briefly introduced themselves and their own projects employing digital badges and game design. Teaching information literacy to first year students is the focus of The University of Illinois at Chicago project, while gamifying legal resource orientations and a legal research certification program are the goals of the University of La Verne College of Law Library's projects.

The presentation then proceeded to discuss the game design principles involved in gamification. Involving more than merely applying a superficial patina of fun on an otherwise dreary undertaking or just "sticking a badge on it" (to appropriate a "Portlandia" reference), the whole user experience should be designed from its core to be engaging and fun. The common misconception that fun is an inherent property—that only certain subject matters can be fun—was dispelled. Just as it's possible to suck the fun out of something that otherwise would be, the obverse is also true: it's possible to inject fun into something that typically wouldn't be considered so. This concept is intuitively understood by many, including most parents who convince their babies to eat by playing "hangar and airplane."

The following four-step process was given to help guide participants in applying game design principles:
    Step 1: Understand the Participants
    Step 2: Plan the Journey
    Step 3: "Funify" the Experience
    Step 4: Implementation

The first step to incorporating game design is understanding the participants involved, both the library and its users. Without understanding the library as an organization and its goals, there's a risk that limited resources will be devoted toward obtaining a meaningless or insubstantial return on investment. In order to determine what "players" should do—and which game mechanics to use and how to use them—knowing their motivations, personalities, and goals are essential. Motivation, in the context of game design, centers on intrinsic and extrinsic motivators. The desire for mastery, to de-stress, to have fun, and to socialize are the primary intrinsic motivators driving players to play games. In contrast, rewards such as status, access, power, and stuff are the extrinsic motivators. Player personalities can be categorized by four player types (achievers, explorers, socializers, and killers) in relation to four foci (acting, environment, interacting, and people); it's important to remember that people rarely fall into just one type, but rather have varying degrees of each.

In the second step of incorporating game design, plan the journey players will take, using their personalities and motivations as a guide. Give them objectives to achieve that are aligned with their goals and structure them to be challenging and appealing.

The third step is to "funify" their experience by skillfully and meaningfully incorporating game mechanics. Using a combination of onboarding, points, challenges/quests, levels, badges, leaderboards, and engagement loops, players' experiences can be upgraded—initially from ho-hum to fun, and then to addictive.

For the fourth and final step of implementation, it's best to start small, to build on successes, and to learn from setbacks. The process of guiding players into that emotionally satisfying and addictive sweet spot can be difficult to achieve, requiring feedback and testing.

Participants received a worksheet at this point designed to remind of them of the four stages and help them work through the interrelation of player type and motivations with organization goals and how those lead to determining desired player actions. (There was also a resource list handout given at the beginning of the session.)

The presentation then went on to the subject of digital badges systems, an increasingly popular way to gamify activities and instruction in libraries. The two most popular digital badging platforms discussed were Mozilla Open Badge (Open Badges Infrastructure) and Credly (Open Credit), with the ability of passing earned badges between the two systems being noted. The Open Badges Infrastructure was then examined more closely. Digital badges are created by issuers containing an image and all the necessary metadata to determine what was earned, by whom, and when. Once earned, they can be placed into an earner's "backpack" from which they can be further shared and displayed to others.

The session concluded with time set aside for questions and discussion.

Appendix

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