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Technology Use Proposal: The Podcaster Badge System

The Podcaster Badge System is designed to create a game-based learning system in the classroom. Digital badge systems function as part of a feedback loop. Feedback loops are a central concept in both "gamification" and "systems thinking." Gamification brings the intrinsic motivators from the digital and non-digital games into the real world. Systems thinking studies how components interconnect, as well as how those relationships fit within other systems (Senge, 2006). For instance, a teacher and a student work together in a feedback system of learning. In the Podcaster Badge System, digital badges provide the intrinsic feedback within the activity of podcasting.

In games, players voluntarily attempt to conquer arbitrary obstacles. Within the game dynamic is the badge reward system, intended to acknowledge incremental achievements. A systems thinking approach reveals that a badge system has three interconnected participants: "the issuer, the earner, and the displayer" ("Open Badges," 2013). The Podcaster Badge System is structured to include the teacher as the intended issuer and the student as the intended earner. The website For All Badges was selected as the displayer. For All Badges is a platform in which the teacher can create a virtual class of students. The teacher can use For All Badges mobile application to award badges from any location in the classroom. The student can check for progress by viewing their "journal" in their For All Badges student account ("For All Badges," 2013). The Podcaster Badge System displayer also aggregates the class's total awarded badges onto a virtual leaderboard.

Intrinsic satisfaction comes from the positive feeling one has from accomplishing a task. When a student learns to podcast, he or she is driven to work via internal

motivators, or flow, as new skills are mastered. Podcasting can be described as a "flow activity," in which the learner makes critical choices based on the new rules that are presented (Csikszentmihalyi, 1990, p. 72). Flow activities, like games, have a built-in feedback mechanism that increases the challenges as the participant masters new skills. To earn badges in Podcaster Badge System, the difficulty increases, or "levels up," in the "flow channel." To level up is "to advance from one level to the next within a game" ("Institute of Play," 2013).

The Podcaster Badge System is a gamified system in which a teacher, not a computer, acts as the flow facilitator. The teacher's role is to scaffold knowledge and skills as the student progresses through the flow channel. Examples of integrating flow into the classroom setting include allowing students to choose how they learn, providing hands-on challenges, and setting goals (Suttie, 2012). An effective podcasting flow activity would give the student the choice of the topic and should be relevant to his or her life experience. A virtual tour through a student's neighborhood could promote flow in podcasting.

Traditional school assignments are assessed with a grade after the task ends. Grading only the culminating activity is an extrinsic motivator. Badge issuance however, is an "embedded assessment," following an incremental check for understanding. Embedded assessments are built into the learning experience and serve as part of the feedback loop of intrinsic satisfaction (Salen, Torres, Wolozin, Rufo-Tepper, & Shapiro, 2011, p. 41). The first badge, known as the Newbie Podcaster Badge, is easy to earn and is intended simply is to spur on motivation. All participating students will be awarded this badge at the beginning of their "player journey" (Schell, 2008, p. 273). The

podcasting badges level up as the skills build. It is not necessary for a student to accumulate badges in a linear fashion. He or she may, or may not, decide to earn badges in any sequence, even after the activity has ended. For instance, some students may win the Smooth Talker Badge, for flawless narration, while others may win the Fun Foley Badge, for student-created sound effects. The "boss level" badge is based on the application of all of the skills and knowledge to overcome a challenging task gained up to this point (Salen, Torres, Wolozin, Rufo-Tepper, & Shapiro, 2011, p. xiv). Winning this challenge triggers the emotion of "fiero," the Italian word that describes how a person feels after overcoming a difficult challenge (Bateman, 2009, p. 11). The boss level achievement is the Master Podcaster.

Game play is frequently social. The Podcaster Badge System was designed to promote a feedback loop of social participation. The core mechanic of social engagement is when people enjoy "shared activities" (Kim, 2012). The activity of podcasting in the classroom can be viewed as a "non-zero-sum" game, in which every participant wins (Kim, 2012). A non-zero-sum is the opposite of a zero-sum game, such as tic-tac-toe, which almost always results in a tie (Salen & Zimmerman, p. 239). Accordingly, requirements to earn badges include social skills, such as sharing, expressing, and collaborating, were derived from the Social Engagement Action Model (Kim, 2012). An example is the requirement to win the Newbie Podcaster Badge: the student must share his or her new skills.

Part of the appeal of gaming is the emotional satisfaction players receive from play. Aside from the social dynamic, people play games together because it is fun. Fun can be categorized depending on the desired outcome (Bateman, 2009). Multi-player

games, for example, are engaging because the interactions stimulate "People Fun" (Bateman, 2009, p. 42). People Fun includes the "social experiences of competition, teamwork, as well as opportunity for social bonding and personal recognition that comes from playing with others" (Lazarro, 2004). The Podcaster Badge System, therefore, triggers People Fun by acknowledging the connection students make by working together.

In order to maximize the experience of fun, flow, and fiero in the Podcaster Badge System, there is a hidden challenge, known as an "Easter egg." The Magical Mystery Badge is awarded once the student deciphers a backwards recording of an inspirational message from Steve Jobs. The student must figure out on his or her own how to use the tools available to decipher the recording. A hint, written in reverse, is part of the badge's description. Easter eggs are engaging because they provide "transgressive discovery: by bending the rules of the game in just the right way, the players get to see or experience something that mores lawful players would not" (Salen & Zimmerman, 2003, p. 279). Easter eggs empower the student to test the boundaries of the learning system.

The Podcaster Badge System is considered an "open system." In an open system, badges are displayed on sites relevant to both the earner and the issuer (*Open Badges for Lifelong Learning*, 2012). The objective of an open system is to "encourage not only the sharing of information, but the sharing of pedagogies and experiences ("Horizon Report: Museum Edition," 2012). Many badge platforms support open content include Youtopia, For All Badges, and Class Badges. The educational, social media tool, Edmodo, has a badge issuance feature, however, it is within a closed, system.

The Podcaster Badge System's badges are freely shareable. Badges were created using Creative Commons licensed images, posted for free use on a web designer's blog. Creative Commons licensing is common among open content systems ("Horizon Report: K-12 Edition," 2013, p. 24). The Podcaster Badge System can be downloaded and exported to the Mozilla Open Badges Backpack. The Backpack lets earners display their "skills and achievements on social networking profiles, job sites, websites and more" ("Open Badges," 2013). The Bill Clinton Foundation proposed that an open badge system could serve as a virtual résumé for a person's skills and achievements (Lewin, 2013).

The Podcaster Badge System is a feedback loop in which the learner feels the intrinsic reward for his or her accomplishments. Effective game design must account for the player's experience and his or her emotional connection to the virtual world. Successful deployment of the Podcaster Badge Systems was designed to show the interconnection of the teacher and the learner. By applying systems thinking to the relation of flow, fun, and feedback loops, the teacher, like a game designer, can bring meaningful participation and satisfaction to learning.

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