

## UAA Spirit Quest

### Lessons from a Campus-wide Game Development Project

Jennifer C. Stone (University of Alaska Anchorage), Kenrick Mock (University of Alaska Anchorage), & Dave Dannenberg (University of Alaska Anchorage)

#### Abstract

This poster examines a campus-wide game development project at a comprehensive public university. The game, *UAA Spirit Quest*, incentivizes students to learn about campus services, faculty, student life, and the “habits of mind” of effective college students. The game also aligns with several campus initiatives related to general education and student success. The team that proposed and created the game comprises faculty and administrators from across campus, including departments of engineering, English, education, and developmental studies, as well as administrative units related to instructional technology, student services, learning resources, and general education. The poster discusses the process of conceptualizing and creating the game from multiple institutional perspectives, including the lead designer and project lead, the lead developer, and the lead administrative liaison. Together, these perspectives offer different points of view on the lessons learned as the team engaged in a complex game development project.

#### Gamifying Student Success

Over the past few decades, scholars have illuminated the ways that games can support learning and engagement (Gee, 2007; Squire, 2011; Steinkuehler, Squire, & Barab, 2012). Within the emerging field of games studies, scholars have investigated the potential of games and game-based principles for enhancing learning. One strand of research on “serious games” has looked at how games can be designed and used for solving major problems, supporting education, enhancing job training, and shaping public policy (McGonigal, 2011; Michael & Chen, 2005; Sawyer & Rejeski, 2002).

A well-designed game can be simultaneously addicting, rewarding, challenging, and fun. Gamification is a term that refers to the application of such gaming principles to non-game contexts with the goal of increasing engagement, motivating action, enhancing mastery, or solving problems. Educational interest in gamification has risen dramatically in recent years, with entire conferences and special journal editions devoted to the topic (Borges et al., 2014; Kapp, 2012; Kim, 2015). Gamification has been applied to courses in many disciplines by incorporating game features such as adventure roleplaying (Gellar-Goad, 2013), badges (Stone, 2015), experience points (Gehring, 2013), or leaderboards (Barata et al., 2013) into curricula. Instructors have reported positive results that show improvement in attention, participation, and learning. Additionally, the principles of gamification appear particularly suited to the social motivations of Millennials (Bowser et al., 2013).

While the application of gaming in higher education is on the rise, the primary emphasis has been confined to the curriculum of a single classroom. In this project we developed a game that would be applicable beyond the classroom to engage all students in student success, reframe our general education requirements, and support a common first-year experience.

### The *UAA Spirit Quest* Initiative

*UAA Spirit Quest* came out of an ongoing collaboration between Jennifer and Kenrick, along with a request to adapt a previous game to promote a newly opened academic coaching center. The team quickly realized that the game could more broadly integrate many important first-year experiences. The game engages students in a games-based experience that teaches the “habits of mind” of effective, informed, and persistent students (Council of Writing Program Administrators, 2011). *UAA Spirit Quest*, which is currently being designed, developed, and tested, capitalizes on the capacity of games and gamification principles to support learning and engagement.

In *UAA Spirit Quest*, the university’s spirit has been fractured and spread around the campus. Players need to help the school mascot on his quest to recover the spirit by engaging in quests related to six main attributes: 1) navigating the university (perception), 2) getting connected (social), 3) developing a sense of self (wisdom), 4) engaging in productive academic habits and connecting to academic resources (intellect), 5) developing healthy and balanced life habits (balance), and 6) making the most of the university through opportunities like undergraduate research and community engagement (strategy). Students earn badges related to each of these attributes by completing questlines. The Questlines and resulting badges tie together related quests and provide virtual rewards that acknowledge mastery of content. Each questline engages students in a series of activities related to the attribute. Quests vary in activity and difficulty, and for each questline students must earn a certain number of points to earn a badge.

### Lessons from *UAA Spirit Quest*

The team that proposed and created the game includes faculty and administrators from across campus, including departments of engineering, English, education, and developmental studies, as well as administrative units related to instructional technology, student services, learning resources, and general education. The team of ten faculty, staff, students, and administrators collaborated to conceptualize the game, acquire funding, create the game, and test it with students.

The poster discusses the process of conceptualizing and creating the game from multiple institutional perspectives, including the lead designer and project lead (Jennifer), the lead developer (Kenrick), and the lead administrative liaison (Dave). Together, these perspectives offer different points of view on the lessons learned as the team engaged in a complex, campus-wide game development project. The poster focuses on how the team negotiated institutional boundaries, developed consistent design and development processes, and adapted as the game project grew from a simple project to highlight a single campus resource to a campus-wide initiative.

### References

Barata, G., Gama, S., Jorge, J., & Gonçalves, D. (2013). Improving participation and learning with

gamification. In *Proceedings of the First International Conference on Gameful Design, Research, and Applications* (Gamification '13). ACM, New York, NY, USA, 10-17.

Borges, S., Durelli, V., Reis, H., & Isotani, S. (2014). A systematic mapping on gamification applied to education. In *Proceedings of the 29th Annual ACM Symposium on Applied Computing* (SAC '14). ACM, New York, NY, 216-222.

Bowser, A., Hansen, D., He, Y., Boston, C., Reid, M., Gunnell, L., & Preece, J. (2013). Using gamification to inspire new citizen science volunteers. In *Proceedings of the First International Conference on Gameful Design, Research, and Applications* (Gamification '13). ACM, New York, NY, 18-25.

Council of Writing Program Administrators. (2011). Framework for success in postsecondary writing. Retrieved from <http://wpacouncil.org/files/framework-for-success-postsecondary-writing.pdf>

Gee, J.P. (2007). *What video games have to teach us about learning and literacy*. (Second Edition: Revised and Updated). New York, NY: Palgrave Macmillan.

Gehring, E.F. (2013). Grading by experience points: An example from computer ethics. *ISSOTL* .

Gellar-Goad, T.H.M. (2013). Mythological roleplaying adventures in Latin prose composition: Gamifying a foreign-language grammar course. *ISSOTL*.

Kapp, K. M. (2012). *Gamification of learning and instruction : Game-based methods and strategies for training and education*. Somerset, NJ: John Wiley & Sons. Retrieved from <http://www.ebrary.com>

Kim, B. (2015). Gamification. *Library Technology Reports*, 51(2), 10-16.

McGonigal, J. (2011). *Reality is broken: Why games make us better and how they can change the world*. New York, NY: Penguin Books.

Michael, D. & Chen, S. (2005). *Serious Games: Games that educate, train, and inform*. Mason, OH: Cengage.

Sawyer, B., & Rejeski, D. (2002). *Serious Games: Improving public policy through game-based learning and simulation*. Woodrow Wilson International Center for Scholars.

Squire, K. (2011). *Video games and learning: Teaching and participatory culture in the digital age*. New York, NY: Teachers College Press.

Steinkuehler, C., Squire, K. & Barab, S. (2012). *Games, learning and society: Learning and meaning in the digital age*. New York, NY: Cambridge University Press.

Stone, J.C. (2015, March 31). Gamifying English. EduTips. Retrieved from <http://edutips.commons.uaa.alaska.edu/edutip-gamifying-english/>

## Acknowledgments

This project was supported by an Innovate Award from the Office of Research at the University of

Alaska Anchorage. Special thanks to the remaining *UAA Spirit Quest* team, including Kevin Bartlett, Whitney Brown, John Cripps, Sharon Emmerichs, Trish Grega, Dan Kline, and Claudia Pearson.