Chapter 16
Towards a Model of Playful Learning: Gamification Strategies in the i²Flex Classroom

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ABSTRACT
What is the role of play in learning? What ways can we as educators leverage our students’ extracurricular digital lives in meaningful ways in our digital and physical learning environments? What roles can the elements of game mechanics and game thinking serve towards these ends, especially in a blended learning environment? These are some of the initial questions that guided my action research at the American Community Schools, Athens (ACS). My project considers the efficacy of employing gamification strategies within a blended learning environment. This chapter in turn provides a brief narrative account of my research experience, focusing on an entrepreneur simulation in the ACS Academy (High School), and a series of gamified interventions done with ACS middle school students. It closes with a brief gamification toolset, a series of practical considerations drawn from this field experience and relevant research that may be helpful for teachers and administrators interested in exploring ways to gamify their own digital and physical learning communities or spaces.

INTRODUCTION

Play is the most serious undertaking of a child’s life. (Pearce, 1997)

The i²Flex Model

All of these interventions were done within an i²Flex model of instruction, a model unique to ACS Athens that has organically developed from the collective practice of faculty. Towards the goal of creating holistic and meaningful learning experiences, the model benefits from research on the blended learning as well.
as the flipped classroom with an emphasis unique to our learning community and the ACS core vision: guiding students to become ‘architects of their own learning’. According to Avgerinou, Gialamas, and Tsoukia (2014), while the model is intended to be flexible enough to manifest in distinct and inspiring ways depending on the unique learning needs of a particular ACS community, the model shares certain key, overlapping elements:

1. **Independent/Online Component**: Some elements are done by students independently online, often at their own pace; and
2. **Face-to-Face Interaction**: Rich face-to-face learning experiences.

These include both:

1. **Guided Experiences**: In which students may receive in-person guidance on solidifying their understanding or receiving clarification of developing concepts as necessary; and
2. **Authentic, Higher-Order Learning Experiences**: Which give students greater autonomy and choice, often providing students with opportunities to develop their own unique learning goals and objectives.

These face-to-face learning experiences are often collaborative in nature or enriched through collaborative elements that may anticipate the kinds of cooperative, problem-solving, inquiry-based experiences students are likely to experience in their later academic and professional lives.

This chapter is based on an action research project initiated during the 2014-2015 school year focusing on the efficacy of employing gamification strategies in the i2Flex classroom, with particular attention to a digital learning environment. I am deeply concerned about creating a learning environment (digital or otherwise) that meets the needs of my students in a way that is emotionally engaging and meaningful to them as well as efficacious and practical for me as a teacher. Are there ways to address the unique needs of my digital native, ‘game-generation’ students in a way that makes their learning more visible and more transparent both to them and me, and provides them encouragement and clear paths to complete their learning goals? With these thoughts in mind, the critical question of my project was as follows: *how will implementing game mechanics and game thinking in my digital instructional practice, impact students’ self-reported learning experience?*

Research on the efficacy of gamification in education, although in its earliest stages, suggests that, at least anecdotally, this deepening of engagement and motivation also happens when gamification strategies are used in student instruction. Among other benefits, students also report feeling greater sense of autonomy, more satisfying and transparent development of mastery in specific skill sets. Many of the largest digital learning environments such as Khan Academy are now increasingly transforming their platforms into gamified learning platforms to structure their relationship with students. With these trends in mind, it seems critical that we consider both the efficacy of the use of game-methods and game-based strategies in instruction and also develop practical guidelines that would allow teachers (with wildly varying skill sets and technological competencies) to have ability-appropriate entrances into implementing gamification strategies into their own practices. This chapter in turn provides a brief narrative account of my research experience, focusing on an entrepreneur simulation in the ACS Academy (High School), and a series of gamified interventions done with ACS middle school students. It closes with a brief