Chapter 65

Balancing Entertainment and Educational Objectives in Academic Game Creation

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ABSTRACT

Production experiences are important to the educational progression of game design and development students. Coursework that leads to a quality deliverable is highly desirable by students, faculty, and industry for both pedagogical and portfolio purposes, including a focus on multi-disciplinary teamwork, and professional practice at scale. Despite the impetus to provide meaningful production experiences, successful execution within an academic context can be difficult. The situation is further exasperated when the result of the production experience is more than just an entertainment product – i.e. a game that embodies and facilitates a learning outcome. This chapter presents the successes, challenges, and lessons learned from two cases in which the authors created a production-oriented classroom experience utilizing a game studio model. The authors also address the balance between entertainment goals and learning outcomes in educational game production, including how such balance influences faculty and learner comprehension of design and process techniques.

INTRODUCTION

Game design and development academic programs have a strong presence on the collegial landscape, and such programs approach the field from a number of perspectives. Some stress development, others emphasize game art, while others focus directly on design in a variety of contexts. No matter the emphasis, these programs all share a common characteristic in they provide students the opportunity

to study and prepare for careers creating entertainment products to varying degrees, and they typically engage students in creating such applications either in whole or in part.

While programs strive to impart the fundamental knowledge and skills that would ensure success in the field, they also recognize that students must be able to synthesize their various skills to create novel game applications. Both students and faculty want curricular experiences that illustrate the student's ability to create complex games, thereby demonstrating such students are able to work productively in their field of practice, which often manifests in a production course or capstone experience. In addition to synthesizing knowledge across numerous preparatory experiences, such courses are often compounded and complicated by the fact that such applications are typically produced in teams, necessitating the application of strong communication and collaboration skills. Such experiences also demonstrate the students' ability to perform effective time management and manage a production workflow, and such experiences are seen as appropriate preparation for professional work.

Despite all of the positive characteristics of production courses, there are still many potential hazards, especially when the production course moves away from passion-based student projects and moves toward outcomes that are not simply measured by their entertainment value alone. Games that have a learning outcome must create a balance between an entertaining experience that captures the player's attention and an experience that makes the player think and reflect. These designs are a compound problem not only of entertainment product design, but also of pedagogical complexity. Thus, the difficulty lies in balancing competing concerns: an educational game must be both fun *and* effective in an educational context, and this often creates tension as students will focus on one area or another instead of the relationship between the two.

This chapter begins with an exploration of production courses in the technologies and the arts, and depicts how students in game design and development programs may approach production experiences. The chapter then focuses on the configuration of a hybrid approach employed by the authors, which combined a collegiate course with a semi-commercial game studio on campus. The chapter continues by exploring two cases in which students published educational games with a learning outcome, one at the formation of the hybrid model and one after a few offerings. The authors then conclude by proposing solutions and recommendations that can be utilized in other production-oriented experiences. It should be noted that this chapter covers the period of time when both authors worked at the same institution, and were both instrumental in the construction of academic games program and a campus-based, commercial games studio that operated in tandem with a university-wide games research center.

BACKGROUND

The concept of production-oriented coursework, especially for capstone experiences, is not new in the computing disciplines or in the studio arts. The literature is full of examples of such offerings for computer science (Chamillard & Braun, 2002; Engelsma, 2014; Vanhanen, Lehtinen, & Lassenius, 2012), information technology (Gorka, Miller, & Howe, 2007), and software engineering (Reichlmayr, 2006). Similarly, most undergraduate degrees in studio art conclude with a capstone or senior show of some form. These experiences share common themes through their desire to synthesize knowledge and skills from prior courses and apply that ability towards a particular project or theme (Umphress, Hendrix, & Cross, 2002).

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