Special Edition: Games in Higher Education

James TerKeurst¹

Published online: 14 January 2020

© Springer Science+Business Media, LLC, part of Springer Nature 2020

1 Introduction

As a fairly new academic who had been trained in traditional media, I found that teaching games in the late 1990's was nothing short of astounding; a fluid and evolving technology base and a multiplicity of required graduate competencies, resulting in an upheaval in traditional pedagogy and an interrogation of almost every aspect of teaching and learning. As a new lecturer at the freshly minted University of Abertay Dundee (the phones still had the Dundee Institute of Technology logo), I was fortunate to work with a multi-disciplinary team striving to define what a games course was, whilst wondering just how far the field would expand, and what knowledge our graduates would require for success in the industry. Especially as the transformational changes in industry and technology once prompted my colleague John Sutherland to comment that 'the industry is changing so quickly we really should have a module in the final year called What's Happening Now.'

Out of this turmoil, the first glimmer of an idea for this special issue of *The Computer Games Journal* began to take form (out of necessity and desperation if I'm honest), that games educators needed a forum to discuss continuing pedagogical development. Yes, traditional pedagogic principles worked for teaching games, but they often fell short as textbooks couldn't be written and published quickly enough, and each lecturer often ended up writing a mini-textbook and developing their own hybrid pedagogic approach for everything they taught; and then redoing all their work the following year after a technology or software change.

Initially the Internet was seen as a potential solution. It had become ubiquitous by the millennium, but much its vast resources benefited learners, it often created a nightmare for academics as information could be very tangential or even counter-productive, was often inaccurate, and typically glossed over the theoretical underpinnings of a subject as it presented ready-made game appropriate solutions.

Concurrently, the Higher Education sector began to accept games as a worthwhile course offering as the new courses recruited students, and governments were keen to support digital technology degrees as the digital industries, and especially the digital

✉ James TerKeurst
james.terkeurst@solent.ac.uk

¹ School of Media Arts and Technology, Solent University, Southampton, UK

entertainment industries, grew year after year. In my opinion these trends instigated a slow shift towards employability for computer games courses, and having industry links and advisors became increasingly important as signifiers of teaching validity and industry relevant learning. This industry centred approach did however create some significant pedagogic challenges; especially in regards to appropriate pedagogy for large multi-disciplinary teams requiring teaching from multiple academics with differing specialisms. Not to mention the need for endless and expensive academic reskilling to insure all material taught was current with industry requirements and practices. In a nutshell this is where we are today.

This current reality is what the authors in this special edition are addressing. Each paper offers a unique perspective based on their authors own lived engagement with the pedagogic challenges of teaching computer games. All of the papers presented offer insights into the challenges games academics face, and hopefully these papers will begin a dialogue on computer games pedagogy that will help us define our pedagogic approaches and justify them with the larger higher education context.

The first paper, by Josh Fishburn, is written from the perspective of an experienced games academic, and questions the role of games courses within the liberal arts educational framework. In *Games Education within the Broader Liberal Arts*, Josh has built a position paper based on his own experiences of teaching on, and promoting, game courses in the United States. In an approach he describes as autoethnographic, Josh clearly presents many of the frustrations and challenges faced by games academics, and after considerable reflection finds real value for students on games courses within the liberal arts educational framework.

From a very different perspective, the next paper directly addresses issues around the relationship between games courses and the games industry. Danny Godin, Guillaume Roux-Girard, Jean-Pierre Flayeux, Jean-Philippe Boisvert, and Sébastien Savard, have developed a mutually beneficial process to help academics and the games industry, in what is often referred to in the UK as knowledge transfer.

Their paper, *Game Development Praxiography: A Methodological Approach to Setup a Knowledge Brokering Pipeline between Higher Education Institutions and the Game Development Industry*, directly addresses the core dilemma common to games courses: ‘developing historical context to their studies, developing intellectual skills, and nurturing critical thinking, verses preparing students for a future role as professional game developers.’ In my experience this dilemma is often at the core of any event that brings academics and games industry professionals together, and frequently sparks heated discussions on the role of Higher Education.

The authors also mention the work of Annakaïsa Kultima, who positions game development as an ontological deviation from games studies. A fascinating distinction, and possibly a crucial point that could help explain similar ontological distinctions between the differing approaches to games courses around the world.

As many of the games courses in the UK are offered in the so-called new universities (formerly known as polytechnics), it is perhaps habitual for them to be more focused on the relationship of their courses to the industries that their graduates aspire to work in. In the next paper, Richard Hurford, Jessica LaCombe, and Adam Martin, present a unique new view on academics and the games industry in their work *The Mirrors Edge: Creating a dynamic games course that reflects industry*

practices and manages student expectations. This is a fascinating paper that explores the rationale behind developing such a module, and the issues involved in running a module as a simulation of professional game development practice.

This paper could also be an invaluable guide for developing a similar approach at other universities, and presents everything that they believe should be considered, from brief development, to scheduling, and assessment. Problems encountered and solutions found are honestly discussed, along with their views on student expectations and how they can be successfully managed. Additionally, the authors offer strategies for helping students appreciate the value of collaboration, teamwork, and communication; and present a strong case for student portfolio development being central to professional success.

From a teaching practice perspective, Connor McKee has recognised the broad diversity of students in Higher Education, and explores three approaches (extension activities, choice of task, and directed questioning) as ways to improve engagement and improve learning for students of differing capabilities.

In *Differentiation Techniques and their Effectiveness for Video Game Art & Design Lecturers in Higher Education* McKee uses action-based research to explore the potential benefits of differentiation methods in teaching and assessment. The results suggest that while the approaches tested do have limitations, both teaching and assessment may be more constructive and meaningful to students with one or more of the techniques. Of special interest to those dealing with larger lectures, McKee speculates that some differentiation techniques may also be appropriate for use with larger groups. It would be terrific if these initial conclusions by McKee could be further tested and the results presented in future papers.

The next two papers were written by Konstantinos Ntokos, and are interlinked by the very innovative CodePlay concept that Konstantinos developed to help with attendance, engagement, teamwork, and learning in computer programming classes. The first paper, *CodePlay: A Tabletop Role-Playing Game System used in Teaching Game Programming using Content Gamification*, explains how the CodePlay approach was designed by incorporating Content Gamification, Tabletop Role-Playing Games, and the board game Betrayal at the House on the Hill (Davieu et al. 2004).

The next paper by Konstantinos, *The Blackthorn Manor: A Case Study in Teaching Software Engineering for Computer Games Courses using CodePlay Framework* tests the CodePlay method in the classroom. The paper goes through each step in using CodePlay, and discusses the results, which were impressive as they included improved attendance and a higher pass rate. At the end of the module Konstantinos surveyed the students using both quantitative and qualitative methods, and feedback included; positive satisfaction; positive impact on learning; improved attendance; enhanced teamwork; improved problem-solving; and most remarkably 100% agreement that CodePlay gamification improves student performance. Remarkable. CodePlay is clearly an approach to be considered when teaching programming.

In the final paper in this special edition Malcolm Sutherland questions whether British universities are the best incubators of talent for the games industry. Clearly a very serious question that Malcolm grounds with a clear argument: as the UK games industry employs 16,000 staff, and the 452 games courses offered by 137 providers

have 21,000 students, why do UK games companies frequently need to recruit from outside the UK?

The paper, *Evidence of Poor Writing and Academic Standards Among University Students in the UK, and the need for More Rigorous Accreditation of Degree Courses*, draws from Malcolm's considerable experience as an editor, and discusses his experiences in relation to both the games industry skill needs and the UK Higher Education environment. Make no mistake—to UK academics this will be a controversial paper as it clearly delineates the vast amount of plagiarism and external editing and writing being used by students. Furthermore, the paper suggests that funding changes in the UK Higher Education sector are resulting in a poor fit between university graduates and the games industries' need for outstanding talent.

In conclusion, I would like to thank all of the authors who contributed to this special edition. Each paper offers readers a fresh perspective on games pedagogy in Higher Education, and it is hard to imagine that some of the novel approaches covered wouldn't benefit academics, games courses, and games students.

My thanks also to John and Malcolm Sutherland for the opportunity to develop this special edition. Both of them have been very supportive from the initial proposal to final editing, and have always offered solid guidance on tricky questions. And finally, my thanks to Springer for supporting *The Computer Games Journal*.

Reference

- Davieu, R., et al. (2004). *Betrayal at the House on the Hill*. S.L.: Avalon Hill Games, Wizards of the Coast, Hasbro.