

Making the Case for Gamification in Higher Education:
A Review of Kevin Bell's *Game On! Gamification, Gameful Design and the Rise of the*
***Gamer Educator*. John Hopkins Press, 2017, 203 pages.**

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Across the United States and much of the world, educators are exploring the world of gamification and gameful design in order to increase engagement in their courses. In the book *Game On! Gamification, Gameful Design, and the Rise of the Gamer Educator*, Dr. Kevin Bell, former Pro Vice-Chancellor of Digital Futures at Western Sydney University and current Head of Higher Education and Research for ANZ Amazon Web Services, illustrates the status of digital education in the higher education space through five case studies of gamification in courses taught at universities across America. Bell describes gamification as the way educators are working to make learning more fun while reducing the negative effects of failure and refers to gameful design as incorporating the elements intrinsic to games into learning activities to improve outcomes. This book aims not only to identify qualities of gamification and gameful design that have been effective in course design, but also to point out courses that have had a transformative effect on the educational institutions in which they were offered.

To assist in evaluating the potential effect of gamification in university-level courses, Bell developed a gamification rubric called the Student Intrinsic Motivation for Persistence in Learning Environments (SIMPLE) matrix. This book provides samples of course-level gamification across multiple subjects and universities seemingly targeted toward convincing

college administrators that gamification and gameful design have an important role to play in higher education instructional design strategies.

Summary

The overall structure of the book divides naturally into three categories with 1) an introduction to the history and impetus for gamification and online education; 2) five case studies of individual courses that make use of gamification; and 3) a cross-case analysis with the introduction of the SIMPLE matrix and future implications for study.

The prologue and first two chapters are an introduction to the concepts of gamification, the explosive growth of demand for online schooling (even before the COVID-19 pandemic), and the growth in theory related to online education. Bell's tone in these chapters is familiar to those with experience in the literature of gamification and online education, yet inclusive enough to provide a welcoming introduction to those not heavily immersed in the topic. Bell lays out why higher education is looking toward gamification to increase student engagement and details the surging demand for higher education that will soon exceed the physical facilities of current college campuses. It is in the confluence of these issues that Bell finds innovators seeking to create more engaging digital learning content. While the book uses references that may feel dated to an audience in the 2020s due to much of the research taking place in the mid-2010s, it is easy enough to substitute *World of Warcraft* with *Fortnite* and come to the same overall conclusions about societal engagement in gaming and its effect on the college-aged populace.

Chapters three through seven each follow the same template of describing the university, department, and professor for each case study before describing the course and wrapping up with the transcript of an interview with the professor. For example, one case study covered a course called EconJourney, a Macroeconomics 101 course at the University of New Hampshire, which

used a story-based approach to learning economic principles. The course's creator, department chair and instructor, Dr. Neil Niman, shared the course's philosophy of students experiencing the course through their own imagination, and described how he used competition, collaboration, and rewards to gamify the course. EconJourney began as a revamped Microeconomics 101 course in which students had to memorize concrete facts, logic, and rules that needed to be applied to situations beyond the classroom. The model for gamification included focusing on removing the fear of failure by creating personalized story-based narratives with chapters and challenges for students to overcome using economic reasoning. The chapter wraps up with an interview two years after the implementation of EconJourney in which Niman discusses revisions to the project and the growth it experienced.

Each of the case study chapters includes the overall goals and documents the successes, failures, and subsequent revisions of each program's attempts to implement gamification in their diverse fields of literature, economics, ethics, philosophy, and security and risk analysis. The five cases display different aspects and levels of gamification, showing how it can be used in a university environment to increase student interest and engagement. Several of the hidden pearls of wisdom in the book come from the transcripts of the follow-up interviews with each instructor, which took place a few years after the original case study. The instructors' insights and reflections into the successes and failures of their endeavors address several issues with the expansion of their programs and the difficult issues of scalability, funding, and overall efficiency of gamification as a model for course design.

In the final three chapters, Bell cites Csikszentmihalyi's (1975, 1990) work on flow theory, the theory that individuals enter a highly attentive state in which they are fully absorbed like a current in a river, and Kapp's (2012) work on assessing gamification, examining

each case from the previous chapters. The discussion covers issues endemic to many gamification models in which the lack of immediate feedback is an inherent roadblock to achieving flow. Bell uses these limitations to establish the SIMPLE matrix. The SIMPLE matrix combines elements from Csikszentmihalyi's flow theory such as clarity and challenge, with Kapp's gamification elements of a narrative and aesthetics. It contains 11 criteria (such as clear and effective rules or a clear sense of progress) ranked as either *absent*, *arguably/could be*, *established/functional*, or *a signature element* to produce an overall score that reflects the quality of gamification present in a course.

While the SIMPLE matrix provides a quick way to assess the gamification of courses, Bell acknowledges there are other factors at play in expanding gamification on university campuses that are far beyond the matrix's scope. Each case study was primarily driven by mid-career educators who had a burning desire to use gaming to increase student engagement, largely due to their own love of games. Their success in making an impact on higher education was based more on individual circumstances than on the qualities of the specific gamification in their course. Bell does not describe a method or structure to encourage the proliferation of gamified courses on a university campus, nor does the SIMPLE matrix offer one. The case studies offered in the book would be difficult to replicate without the driven educator at the center of the study. Returning to the case study of Dr. Niman at the University of New Hampshire, for example: Niman's EconJourney course received a middle-of-the-road score on the SIMPLE matrix, yet propelled him to create a gamified course focused on immersion in college life for all new freshmen at the Peter T. Paul College of Business and Economics. Despite documented successes such as EconJourney at University of New Hampshire, Bell concludes that even the

best gamefully-designed course is unlikely to revolutionize college campuses without significant institutional support, individual leadership, and continued experimentation.

Discussion

Bell's book would be a useful read for anyone in higher education who is interested in models of gamification and gameful design on their campuses, specifically academic deans and chancellors. It does not paint an idealized view that gamification can replace direct instruction in education. Instead, it addresses the real issues of allocation of resources, workload, and cost associated with the gamification of college courses. Bell's work begins to paint a picture of what could be possible through wider adoption of gamification and gameful design, and the SIMPLE matrix provides a high-level tool to assess the implementation of gamification and gameful design in college-level courses. For faculty interested in building gamification into their own courses, this book provides examples but little framework about the process of designing a gamified course from the ground up. Rather than providing instructions on how to design courses gamefully, this book makes the point that gamification and gameful design should be a consideration in overall institutional pedagogy. If you are already an advocate of gamification and gameful design, you might consider buying this book for your boss.

References

Csikszentmihalyi, M. (1975). Play and intrinsic rewards. *Journal of Humanistic Psychology*

15(3), 41–63. <https://doi.org/10.1177/002216787501500306>

Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. Harper.

<https://doi.org/10.1080/00222216.1992.11969876>

Kapp, K. M. 2012. *The Gamification of learning and instruction: Game-based methods and strategies for training and education*. Pfeiffer: ASTD.