Part VII
Speculative

Chapter 50

GameShift Futures: Reimagining the University Through Speculative Play

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Abstract

On a bright July morning in 2025, a robot strolling down a Manhattan street greeted passersby—a scene that captures both the promise and the unease of our technological age. As Yogi Berra once said, "the future isn't what it used to be". The accelerating pace of change across technological, social, and institutional domains demands that higher education reimagine not only *what* it teaches, but *how* learning itself is structured. This chapter proposes game design and immersive media—what I term *expanded media*—as frameworks for rethinking pedagogy and institutional practice. Drawing on Anthony Dunne and Fiona Raby's notion of design as speculation, I argue that expanded media serve as models for systems thinking, collaborative problem-solving, and iterative learning, offering higher education a methodology for cultivating adaptability and foresight in the face of uncertainty.

To test these ideas, I introduce *GameShift*, a prototype no-code, AI-assisted platform developed in collaboration with SeaMonster Studio (Cape Town) and gaming-impact expert Charles Gasper. *GameShift* enables faculty to design interactive experiences aligned with disciplinary content and learning objectives, translating principles of game design—choice, narrative, and interaction—into frameworks for classroom innovation. By reframing play as a mode of inquiry rather than distraction, the project explores how game-based methodologies can help universities prototype adaptive, student-centred learning environments. Ultimately, the chapter positions gaming and immersive media not as supplemental engagement tools, but as epistemic frameworks for an education system capable of navigating and co-creating futures that lie ahead.

Keywords: *Game-based Learning, Design Thinking, Expanded Media, Higher Education Innovation, Immersive Pedagogy, Speculative Design, Play as Methodology, AI-assisted Learning Design, Pedagogical Transformation*

Introduction

On a sunny July morning in 2025, a robot walked down the street in New York City, greeting curious onlookers with a warm hello, the kind of 'futuristic' scene we imagined decades ago. As Yogi Berra famously remarked, "the future isn't what it used to be," a paradox that captures the uncertainty shaping our present moment. Alongside a robot leisurely strolling through Manhattan, we contend with a fear of technology's dominance over humanity, and the broader challenge of a literally unpredictable future, as conditions and visions change rapidly. While we can only make educated guesses about the future,

we certainly have the ability today to shape the future we want to see—and higher education, in its mission to prepare students, who have a vital role to play, both as future workers and as engaged citizens The question is not just what skills, competencies, and professions universities should focus on, but also on how these are imparted. In other words, it is not just about what we teach, but how we teach it.

One vital framework for imagining the university of the future is gaming and immersive media, also known as expanded media. I take my cue from Anthony Dunne and Fiona Raby, who argue for design not as a process for making things, but as a means of speculating about how things could be[1]. Focusing specifically on gaming and immersive media design, we can change not just what we teach, but how we teach it. Games do more than deliver content. They model systems and simulate possible futures, and, perhaps most important, they engage students in dynamic, participatory problem solving. Games bring interaction, the most salient feature of our digital age[2], fully into the university classroom.

As higher education faces escalating uncertainty, especially as universities weigh how to future-proof their students for a rapidly changing world, gaming and immersive media can provide critical tools for institutional transformation. Games can be used to prototype adaptive, student-centred, and technologically fluent learning environments, while challenging entrenched assumptions about curriculum, assessment, and structure. By cultivating agility, experiential engagement, and future-oriented thinking, expanded media equips students with tools suited to a world in which the future may be very different from what we imagine today.

The Challenges

Higher education stands at a critical juncture. As societies confront overlapping crises of information overload, institutional distrust, cognitive fragmentation, and economic inequity, the university must reimagine its role in preparing students not only for employment but for participation in an increasingly complex and unstable world. For that matter, the academy itself—with its entrenched rules and institutional procedures, operates on a temporal register that feels out of sync with the world beyond its walls—must also be reimagined to keep pace with this rapid pace of transformation. These challenges demand a recalibration of pedagogical priorities and institutional commitments to ensure that students graduate with core knowledge, as well as a flexible, adaptive toolkit for navigating and shaping the future of work, civic life, and global citizenship.

Recently, the nature of work—for which universities are meant to prepare many—has undergone a fundamental transformation, from shared physical space to distributed networks and asynchronous collaboration. Teams now operate across time zones, geographies, and cultural contexts. Preparing students for this new reality involves far more than teaching them to use Zoom or other remote communication tools. It requires fostering the interpersonal, strategic, and adaptive capacities needed to collaborate effectively in non-co-located environments. In this respect, game-based learning—

[1]Anthony, Dunne and Fiona Raby, Speculative Everything: Design, Fiction, and Social Dreaming (Boston: MIT Press, 2013).

[2]Janet Murry, Inventing the Medium: Principles of Interaction Design as Cultural Practice (Boston: MIT Press, 2011).

especially in multiplayer or role-based formats—can serve as powerful rehearsals for the ambiguity, negotiation, and teamwork required in these emergent professional settings.

Universities must also focus on preparing students for civic life through the cultivation of critical literacy. As information is ever more ubiquitous, higher education's historical mission, to transmit knowledge, is less essential. Instead, the central pedagogical challenge becomes imparting an ability to evaluate the sources, contexts, and ideological underpinnings of what counts as knowledge, to combat the erosion of epistemic uncertainty. Students must be equipped to interrogate authority, assess credibility, and discern among competing narratives.

Compounding this challenge is a broader crisis of trust in public institutions, including those responsible for producing and disseminating knowledge, whether political, journalistic, scientific, or educational. As disinformation proliferates and institutional authority is repeatedly undermined or dismissed, the university's status as a trusted arbiter of knowledge has grown precarious. In response, higher education must not retreat into defensiveness or insularity. Instead, it must model transparency, deliberation, and intellectual accountability, all of which will offer students and society a renewed vision of public trust grounded in openness and rigor.

At the same time, our cognitive and affective landscapes are increasingly shaped by the relentless demands of digital life. Incessant notifications, multitasking pressures, and algorithmically engineered distractions have all fragmented our attention and reduced our capacity for sustained inquiry. One of the most urgent tasks for educators, therefore, is to design learning environments that retrain attention—with the conviction that focused attention is now as much an ethical stance as it is a cognitive skill. This requires pedagogical strategies that meet students where they are, including the integration of familiar tools like games, while also subverting their most addictive, dopamine-driven mechanics in favour of practices that promote deeper engagement and reflection.

All of this is unfolding within a broader socio-economic climate marked by increasing enclosure: the gating of information through media paywalls, algorithmic filters, and platform monopolies; the privatization of public discourse; and the rising costs of access to education itself. In this context, although knowledge may be seemingly available to all, the ability to critically assess and use that knowledge becomes increasingly inequitable. So, the university must make extra effort to resist further insulation and instead reassert its role as a public commons: a site for open inquiry, civic engagement, and the dismantling of intellectual and structural barriers.

Expanded Media: A Tool of Alignment

Games are often viewed as another form of entertainment media[3], as is immersive media. Some advocates have excitedly promoted gamification—the application of game elements like points, levels, and rewards to non-game contexts—as a panacea for increasing engagement in education, business, and beyond[4]. However, both of these approaches miss their unique characteristics and potentials. I

[3]Colleen Macklin and John Sharp, Games, Design and Play: A Detailed Approach to Iterative Game Design (Boston: Addison-Wesley, 2016).

[4]Caponetto, I. et al., Gamification and education: A literature review. In Proceedings of the 8th European Conference on Games-Based Learning. Quoted in Dichev, C., & Dicheva, D, 2017, Gamifying education: What

propose game-based and immersive media not as merely supplemental tools, or as a lure for learning. Rather, I seek to draw on the underlying design principles and methodologies of games to build essential scaffolds and blueprints for contemporary education.

Gaming methodologies emphasise learning not as a linear transfer of knowledge, but as a dynamic, participatory process in which students navigate complexity, inhabit multiple perspectives, and rehearse decision-making. Take, for example, the practice of modding—altering or reconfiguring existing games to create new meanings, mechanics, or narratives. More than just a creative exercise, modding can be a powerful tool for exploration in higher education, as it invites students to critically engage with systems, rules, and structures, while encouraging them to intervene in and reshape inherited frameworks. When integrated into academic contexts, modding becomes a form of institutional play—a method through which students and faculty can reimagine disciplines, challenge dominant paradigms, and co-create more adaptive and inclusive educational ecosystems. In even more practical terms, modding can be an agile, low-cost strategy for prototyping curricular innovations, for instance, or fostering interdisciplinary collaboration and supporting learner-centred approaches to knowledge production.

This approach is, in many ways, curatorial, weaving together diverse approaches, texts, and contexts to create new meaning through juxtaposition and narrative structure. Educators adopting this methodology are engaged in assembling and staging heterogeneous practices into a coherent and intentional learning experience. Game-based learning and immersive media environments are not at odds with traditional lectures, challenge-based learning, and seminar discussions. Rather, all methods can be curated—sequenced, layered, and interwoven—in ways that heighten their respective strengths and compensate for their limitations. Through this lens, pedagogy becomes a form of intellectual and affective curation: creating a learning environment that is open-ended yet intentional, structured yet generative. It invites students not only to consume knowledge but to co-author it, thus facilitating an experiential and engaged form of learning.

Gameplay, in fact, is a great allegory for education. Games come with rules to define their parameters, but also suggest wonder, excitement, and discovery. The outcomes of a given game or lesson are not necessarily clear or defined but are shaped by the students. Play, Whitton points out, "offers a powerful counterpoint to performance-driven culture, inviting curiosity, freedom, and flow"[5]. Just as importantly, as a methodology it enables experimentation without the fear of failure.

If we adopt David Gauntlett's position of games as 'objects-to-think-with', we begin to understand their value not merely as entertainment or EdTech tools, but as epistemic frameworks—means of modeling,

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is known, what is believed, and what remains uncertain—A critical review. International Journal of Educational Technology in Higher Education, *14*(9) https://doi.org/10.1186/s41239-017-0042-5; De Freitas, et al., 2010. Learning as immersive experiences: Using the four-dimensional framework for designing and evaluating immersive learning experiences in a virtual world." *British Journal of Education Technology,* 41, no. 1 (2010), 69-85.; Gee, J. P., What Video Games Have to Teach Us About Learning and Literacy (New York: Palgrave Macmillan, 2003).

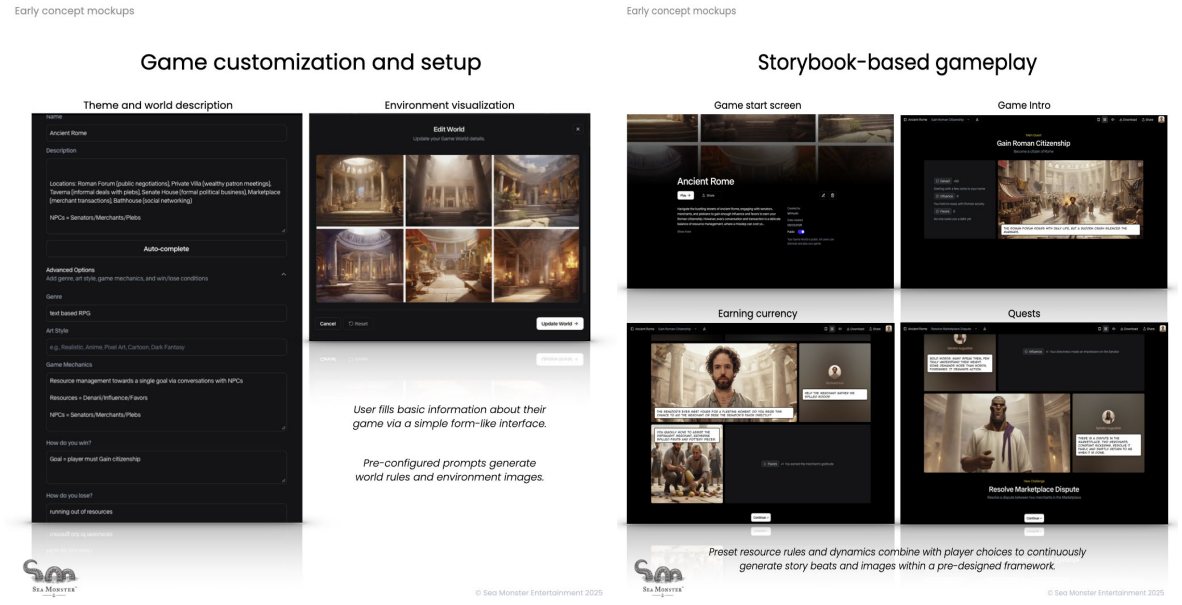
[5]Nicola Whitton, *Play and Learning in Adulthood: Reimagining Pedagogy and the Politics of Education* (Cham: Palgrave Macmillan, 2022).

testing, and iterating ideas in dynamic, interactive environments.[6] In higher education, this positions game design principles as an effective means for critical inquiry and creative experimentation, allowing students to engage with complex systems, simulate alternative futures, and prototype responses to real-world challenges. Much like Gauntlett's use of physical media (such as LEGO blocks) to externalise and explore thought, game design as a methodology offers a procedural medium through which students can visualise abstract concepts, test relationships between variables, and reflect on the consequences of different choices across a variety of disciplines. This makes it particularly valuable for interdisciplinary learning, systems thinking, and the cultivation of flexible problem-solving skills—precisely the capacities needed to navigate an increasingly volatile world.

This is not about turning all matters of higher education into a game. Rather, it is an invitation for a paradigm shift, one that is premised on a bouquet of practices, with design thinking at its centrepiece. Games, in this context, become one among many tools. It is a shift that aligns with broader efforts in higher education to foster student agency and intrinsic experiential learning.

GameShift

To begin testing these ideas in practice, I am currently collaborating with gaming impact expert Charles Gasper and SeaMonster Studio in Cape Town to develop *GameShift*, a prototype platform that explores how game design methodologies might be mobilised within higher education. Conceived as a no-code, AI-assisted platform, *GameShift* is intended to allow instructors to design games aligned with curricular goals, in a way that requires no programming expertise. The prototype accommodates a range of formats, from role-playing simulations and branching narratives to board games and decision trees, thus enabling instructors to test how different ludic structures can translate into distinct modes of learning. Importantly, *GameShift*'s AI functions not as a producer of content in itself, but as a tool for scaffolding: it assists faculty in aligning scenarios, choices, and narrative arcs with disciplinary concepts and pedagogical objectives.



[6]David Gauntlett, Making is Connecting: The Social Meaning of Creativity, from DIY and Knitting to YouTube and Web 2.0. (Cambridge, UK: Polity Press, 2011).

At this stage, *GameShift* should be understood less as a finished product than as a research environment for experimenting with the affordances of game logics—choice, contingency, narrative, and systemic interaction—in structuring educational experience. Its development highlights how games might be reframed not as supplementary 'engagement tools', but as epistemic frameworks through which knowledge is assessed, organised, tested, and transmitted. As such, the project does not resolve the questions posed in this essay but rather provides a site through which they may be advanced, debated, and refined.

Conclusion

In the decades ahead, the university must become a shared act of speculation—iterative, playful, and open-ended. Game design offers not a metaphor but a method: a way of staging uncertainty, distributing agency, and building worlds together. If higher education is to matter in 2050, it is because it has dared to redesign itself as a living, experimental commons, without always knowing or having a fixed outcome. It is about acquiring the skills of improvisation, critical foresight, and collaborative sense-making—the capacities to navigate complexity, anticipate and nimbly address emergent challenges, and co-create meaningful possibilities in a world that will continue to be defined by constant flux.

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Declaration

The authors declare that artificial intelligence tools were used in the preparation of this manuscript. The use of these tools was limited to assisting with grammar and language, and all outputs were carefully reviewed, verified, and edited by the authors to ensure accuracy, originality, and alignment with academic standards. The authors take full responsibility for the content of this manuscript, including any sections that were supported by AI tools. No AI system was used to generate original research findings, interpret results independently, or draw conclusions without human intervention.

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