



Potential for radical change in Higher Education learning spaces after the pandemic

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Abstract

The article situates the challenges that higher education faces before the onset of COVID-19. A future that situates disruptive and immediate transformation for higher education curricula is described to save global universities from the ravages of the “stay-at-home” policies. The move to a totally online environment took place overnight, and most institutions of higher education were totally unprepared. Yet, a future of possibilities could be adopted in the coming five years, one, in particular, being game-based learning, an andragogy based upon experiential education.

“Four thousand volumes of metaphysics will not teach us what the soul [spirit] is.” Voltaire

The trigger for critical transformation in Higher Education

In the Spring of 2020, a panic forced a jump across an abyss of higher education instructional resistance and inertia into online learning. That disruptive, ‘black swan’ moment demonstrated just how poorly higher education was prepared for a radical change in instructional delivery (Basilaia & Kvavadze, 2020; Hammond et al., 2020; Platje et al., 2020; Strielkowski, 2020; Toquero, 2020). In order to dramatically increase the value proposition of our higher educational systems for learners, we should rethink new approaches for digital delivery of experiential education. Game-based learning (GBL) is one of these potential priorities that has been waiting for this significant opportunity. This essay describes a vision of the emergent thinking that could be embraced over the next five years to propel increased engagement, enthusiasm, and commitment to experiential education, instead of the staid, tired and valueless traditional approaches to higher education, (such as lectures, tests, quizzes, and exams).

Most institutions were loath to transform instructional methods for a wide range of reasons: from outdated syllabi that were good enough for the previous semester; tenured

professors with little interest in engaging their students; lack of professor-based coaching and mentoring skills to increase competencies associated with fun, play and learning; ignorance about and lack of experience with action learning; to an absence of empathy by instructors to educate students with the necessary emotional intelligence skills to survive and thrive. Students are bored out of their minds (Géring et al., 2018; Jason, 2017). The current educational ecosystems are seriously flawed — they focus on professor-centric teaching rather than learner-centric learning (El Sebai, 2006; Sheraz & Beg, 2015; Thanh, 2010).

A near-term future based upon a VUCA world

How can we prepare learners and employees (exacerbated by the crisis spawned through the COVID-19 virus) for a future typified by a Volatile, Uncertain, Complex and Ambiguous (VUCA) environment (Bennett & Lemoine, 2014; George, 2017; Kraaijenbrink, 2018)? The skills and competencies necessary for post-pandemic success in education during the next five years needs to be founded upon the adoption of emotional intelligence skills; learning and innovation skills; and information, media and technology skills (Germaine et al., 2016; International Society for Technology in Education, 2016, 2017). All these competencies and skill sets are embedded in the “playing human” immersed within game-based learning frameworks (Huizinga, 2016).

Game-based learning has emerged as a remarkably effective method for building collaboration, diversity of thought, design thinking, critical thinking, decision-making, emotional intelligence, problem-solving, and sensemaking competencies. Games stimulate pleasure in the brain while engaging the consciousness of the player within an experiential learning context. Research associated with learning through play and fun has been amassed over the last seven decades; yet this research has not been widely trusted or adopted as the foundation for the transformation of educational pedagogy (education of children) and andragogy (education of adults) in higher education (Beroz et al., 2020; Campos et al., 2020; Girard et al., 2013; Hays,

2005).

The time-honored teaching method, the lecture, needs to disappear immediately (Bajak, 2014; Cederquist & Golüke, 2016). This method must morph into a hotbed of discussion, enthusiasm, and significant engagement (Barzilai & Blau, 2014; Bodinet, 2016; Kim et al., 2009). Learning is a human game. The power of storytelling, gaming, and human emotion are the emergent methods and tools to jump start student re-engagement and commitment, taking static material and making it come alive in a fun and playful environment (Angheloiu et al., 2020; Stahlke et al., 2020; Jorge & Sutton, 2017; Lu & Lien, 2020; Sutton & Allen, 2019)!

How would a critical element of the emergent learning ecosystems look like?

The Prussian model of education appeared to be useful for worker education during the industrial revolution (McClelland, 2019; Luhmann & Schorr, 1979), but has failed us miserably during the information and knowledge revolutions (Anderson, 2020). Conflict, *not* collaboration and co-operation, infect most of our current workplaces (Groff, 2015). Today languages of communication cannot easily convey holistic experiences to support problem-solving, decision-making, or sensemaking. Measuring teacher effectiveness by exam results ignores what makes a good educator. Richard Duke, an early proponent and designer of serious games and simulations, proposed that the future language of communication would be gaming:

Proper use of gaming/simulation offers strong promise for establishing the comprehension of totality [a gestalt] necessary for intelligent management of complex systems... As long as we are dependent on communication forms that are sequential, time constrained, dry and cumbersome, it will be difficult to comprehend the complexity of macro-problems, and we will continue to apply piecemeal solutions to problems that should be solved holistically (Duke & Geurts, 2004, p. 74).

Duke appeared to suggest that rule and time constrained educational methods, such as predominated in the Prussian model and still propagated in our educational institutions, are out of step with our VUCA embedded living environments. Placing learners into straight or curved lines of desk stations, where individuals must salute the instructor by raising their hands, is an authoritarian model of rote education — devoid of emotion, interaction, self-discovery, and collaboration. Such an inhibiting learning ecosystem does not promote original, creative, problem-solving, decision-making, critical thinking and sensemaking on the scale we need to approach today's and tomorrow's global problems (Harms, 2015; Blass & Hayward, 2014).

The outcome of game-based learning is an architecture of a new language of learning communication (Riopel et al., 2020; Yam, 2015). These rich learning spaces (Hsu & Chen, 2018; Klofsten et al., 2019):

- contribute to the socialisation, behavioural, emotional, and cognitive development of players;
- develop psychomotor skills and knowledge of physical movement/coordination;
- promote self-confidence; and
- construct values that shape the players' contribution in the local (and global) society.

Duke proposed that a quantum leap was necessary in learning from strict rule-based limitations and time constraints to something like a gestalt experience. He suggested that accelerated change and societal transformation necessitated a new language to convey experience and complexity. Today's problems are infinitely more complex, going beyond normal human comprehension and not yielding to conventional or traditional forms of education.

The application of multiplayer online role-playing games (MORPGs) over the last decade has stimulated an increased awareness and sensitivity to the practice of collaboration and the spontaneous generation of Communities of Learning, Communities of Inquiry, online instructor presence, and subsequent vivified Learning Ecosystems. Because of globalisation and the now common occurrence of multinational virtual teams, the practice and the adoption of Emotional Intelligence skills through experiential learning is critical for organisational survival and cultural development. Emotional Intelligence (EI) helps to decipher, manage, and express feelings that deal with our emotions (Bar-On, 1996; Goleman, 1995; Mayer, 2003). A range of well-tested sims and serious games has been proven to deliver a unique experience to build up interpersonal and intrapersonal EI competencies (Almeida, 2020; Rankin et al., 2009).

Design elements are embedded into well-designed games in order to motivate a player to increase their efforts to identify alternative, open-ended solutions to the set goal. Adaptive games engage our curiosity through action learning and should contain multiple, harder levels that need to be achieved in order to progress. Thus, the player should be led to personally discover new information and knowledge that will support achieving the game's goal and consequently, new 21st century skills (Alsaadat, 2019; Qian & Clark, 2016). Additionally, instant feedback provides the player with lessons learned and pragmatic knowledge that can be used to scaffold action decisions in future play (Montgomery et al., 2015).

Next steps

We are in the midst of the perfect storm because of the impact of COVID-19 on the traditional methods of teaching, learning, training, and education. Could game-based learning become the emergent paradigm to replace the staid and boring traditional educational approaches? We have a critical and significant choice to make in these post-COVID-19 times for the future of education through a new and powerful language — gaming. We have an unforeseen opportunity to

prepare students for active, concerned citizenship, uptake of necessary emotional intelligence competencies, and increased ethical leadership through game-based learning (Ferreira et al., 2019; Rojas, 2017; Sutton & Allen, 2019). A new paradigm for higher education could emerge in the coming five years if institutions of higher education could shift their paradigm from professor-centric to learner-centric andragogy (adult education). Game-based learning has a unique opportunity to become the center of focus in online education, which will continue after the pandemic, but must be revamped. The current adoption of online learning was at the last minute with little or no planning for student engagement, empowerment, or commitment to learning. The nascent model for communication of education is a foundational language founded upon *gaming*.

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