

An Overview of the Current Trends on the Use of Gamification in Higher Ed Engagement and Recruitment

Christopher P. Johnson Ed.D. Lasell College & Patrick R. Goncalves M.S. Boston College

Introduction

Gamification is defined as: the process of adding games or game-like elements to something (such as a task) so as to encourage participation.¹ There are many examples of gamification in higher education; games have been shown to motivate students to engage more with their study tasks. Even though the use of gamification (as an engagement and recruitment strategy in higher ed) has been utilized since 1999 (Fairmont State), only a select few universities have leveraged gamification as a tool for engagement and recruitment over the last 18 years. The strategy overall has not garnered much research but since gaming culture is now more ubiquitous than ever (67 percent of American households own a device used to play video games²) it is inevitable that more gamified-based recruitment strategies will start to take shape in the near future. The objective of this paper is to provide a detailed overview of the current trends based on the following gamified recruitment initiatives:

- Broncoland (Western Michigan University)
- Game of Your Life (Özyeğin University)
- Get a Life (Fairmont State/Texas A&M)
- ChatterHigh

DOI: JMCHE/v1i101

Gamification used for engagement and recruitment in Higher Education

In a study by Marguerite Cronk (2012), college students were rewarded for engaging in class discussions through a virtual reward-based system in the shape of a tree that grew and developed in response to points assigned for actively participating in class discussions. The majority of students reported an increase in their class participation because of the game-based reward system.³ Similar findings were found in a 2017 qualitative content analysis of 1002 course review comments and 182 comments from a third-party source that showed a place for gamification during lectures as a means of encouraging student engagement and participation throughout the entire course.⁴

¹ "definition of: gamification," Mirriam-Webster. <u>www.merriam-webster.com/dictionary/gamification</u> (accessed June 1, 2018).

² "2017 Essential Facts on Computer Video Game Industry," Entertainment Software Association (ESA). www.theesa.com/article/2017-essential-facts-computer-video-game-industry/ (accessed June 1, 2018).

³ Marguerite Cronk, *Using Gamification to Increase Student Engagement and Participation in Class Discussion*, (North Carolina, Association for the Advancement of Computing in Education (AACE), 2012)

⁴ Szymon Tomasz Machajewski, *Application of Gamification in a College STEM Introductory Course: A Case Study*, (California, Northcentral University School of Business, 2017), 63.



Many students are afraid to apply to a college out of fear of rejection; in fact, college enrollment rates are down across the country and colleges are beginning to close their doors. Including games in the admissions process could provide an environment where students can take risk without any true repercussions; losing a game only provides an opportunity to try again and solve the problem. This event acts as a prime opportunity for higher education to implement innovative recruiting techniques such as social media, which lends itself to gamified environments geared towards the new generation of tech-savvy workers. By providing students with a gamified application process that includes rewards for completing a form partially, then fully, prospective students may be more willing to complete their application just as they would be willing to play a game on their phone. Other gamified features associated with university admissions include students playing a scavenger hunt game during a virtual tour of a campus or an augmented reality tour to help them learn more about a particular campus setting.

Broncoland

In 2011 Western Michigan University (WMU) released an online, interactive gaming experience (Broncoland) targeted towards perspective students. Kevin Abott (Interactive Media Specialist at WMU IT) led a team of eight student employees and interns from various disciplines to develop a 3D replica of the WMU campus. Users explored various parts of the campus while collecting "Golden Horseshoes" that presented information about key areas of the University such as student services, housing, arts and recreation; users were also able to opt to take an automated tour with WMU's mascot, Buster Bronco in the "Broncoland" game. According to a thesis (The Potential of Gamification as a Marketing Tool for Universities) written by Masaryk University student Perhaps Eva, WMU's impetus was to leverage a new media, gamified recruitment strategy stemming from declining enrollment rates. The following graph indicates the Fall and Spring enrollment totals of WMU from 2004-2018.

⁵ Matt Krupnich, "When a college closes, what does a student do next?" PBS. www.pbs.org/newshour/education/students-go-college-closes (accessed May 3, 2018).

 ⁶ Jeanne Baron, "WMU launches Broncoland interactive 3D campus tour," Western Michigan University.
www.wmich.edu/wmu/news/2011/06/008.html (accessed May 3, 2018).
⁷ Perhaps Eva, *The Potential of Gamification as a Marketing Tool for Universities*, (Czech Republic, Masaryk

Perhaps Eva, *The Potential of Gamification as a Marketing Tool for Universities*, (Czech Republic, Masaryk University, 2016,),100





Figure 1. WMU Fall and Spring Enrollment 2004-2018

In the fall of 2004 the WMU student enrollment total was 27,829 comparatively, WMU Fall 2017 student enrollment totaled 22,8948, a nearly 20% decline in enrollment. Since the initial launch of Broncoland (June 3rd, 2013) there wasn't a significant increase in enrollment in comparing Fall 2012 enrollments to Fall 2013 enrollments (24,598 Fall 2012 to 24,294 Fall 2013, a -12% difference in enrollment)⁹.

As of 2018 the Broncoland site is no longer accessible. There could be several reasons for this. According to the Broncoland introduction page, the site was accessed through the url: "wmich.edu/broncoland." The url redirects the user to the "Visit WMU" page where the user is then presented with several options and steps to consider as part of the WMU orientation process. Incorporating a download link or a play link within a multitude of options could have impeded the trial rate of Broncoland due to many other competing calls-to-action. There would have been a social media promotional strategy as part of the June 2013 launch but interestingly enough hashtags such as #broncoland, #broncolandgame, #wmubroncoland, and #broncolandWMU don't list any content related to the game. In addition, the introduction page doesn't introduce any hashtags either, despite the fact that the introduction page includes a social

DOI: JMCHE/v1i101

⁸ Data on Students Enrolled Fall Semester 2017 Census Day All Campus Unduplicated, (Michigan, Office of Institutional Research, 2017

⁹ Data on Students Enrolled Fall Semester 2013 Census Day All Campus Unduplicated, (Michigan, Office of Institutional Research, 2017)



media shares widget. Also, worth noting is that there were only two publications found online concerning the launch of Broncoland. Both publications were conducted through WMU News.

In a phone conversation conducted with Broncoland project manager Kevin Abbot, Abbot confirmed that the Broncoland project "didn't quite have the marketing effort it needed." The Share of Voice SOV=Share of Market SOM principle presents a relevant explanation for Broncoland's 'echo chamber' effect. Broncoland's marketing efforts and/or SOV were relegated internally, thereby minimizing discovery to a broader external market.

Game of Your Life

Özyeğin University (OZU) was officially founded on May 18, 2007. OZU positioned itself as a university with the mission of contributing to social development by producing creative, original and applicable knowledge through its modern education system. As a result of OZU's forward-thinking approach, the University developed an award-winning Facebook application game, called "Game of Your Life," as part of an effort to increase recruitment (Game of Your Life). Students were prompted to play out their freshman year in a game. The app provided users with the opportunity to make various choices that would unfold in a "future" Facebook timeline. These timelines were media-rich, including thousands of audio-visual references in order to maximize user engagement. Facebook timelines would then be saved as 'video CVs' and were administered to a public vote. Selected 'video CV's' were then given an opportunity to win a four-year scholarship.

In 2012, Fatih Üstün performed a case study of Game of Your Life which attempted to draw parallels between the effect of social media and gamification on prospective students' university choice perception. As part of the study, 41 students who had played "Game of Your Life" were surveyed. The survey included a set of 14 questions. In addition, a model was also adapted from Selin Küçükkancabaş's study ("Understanding University Choice Decisions of Turkish Students". Küçükkancabaş's (2001) model)¹¹.

The following diagram from Üstün's study illustrates the user flow for the "Game of Your Life" Facebook app:

¹⁰ "The Game of Your Life—Case Study," 4129Grey. www.grey.com/turkey/work/key/ozyegin/id/6573/ (accessed May 25, 2018).

¹¹Üstün , Fatih, *The Effects of Social Media and Gamification on Prospective Students' University Choice Perception*, (Turkey, Isik University, 2014), 65.



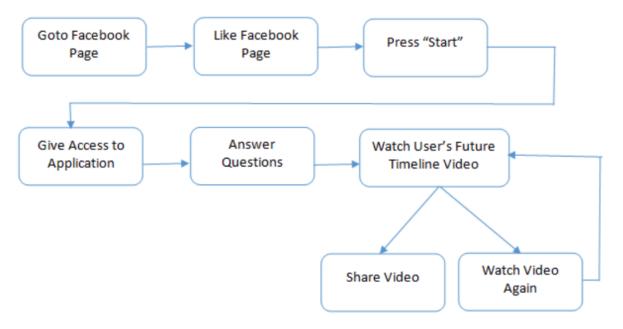


Figure 2. Game Steps of the "Game of Your Life". Graph from Fatih Üstün, The Effects of Social Media and Gamification on Perspective Students' University Choice Perception, (Işik University, 2014) 27. PDF



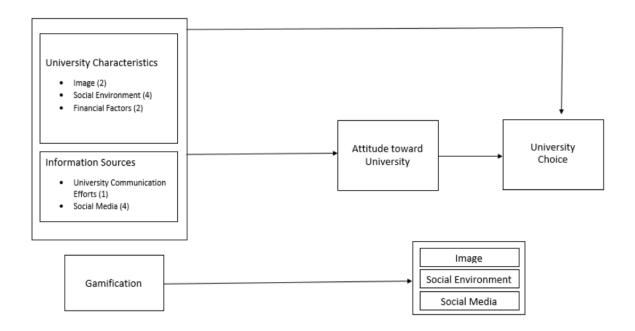


Figure 2. Üstün's adapted model from *Understanding University Choice Decisions of Turkish Students*. Küçükkancabaş's (2001) model

Üstün's study found that "Game of Your Life" earned OZU two million dollars in earned media coverage and reached an amazing 250,000 students¹² and it showed that attributes such as social environment, university image/brand value had a positive influence in prospective students' university choice perception. Conversely, there was no significant relation between gamification and social environment or university brand value. Nonetheless, the study reinforced that gamification had a significant relationship to social media.

Üstün acknowledged that his case study was narrow in scope, as it addressed one program, and he looked forward to more comprehensive research on the subject moving forward.¹³

Get a Life

In an attempt to demonstrate to middle and high school students and their families the difference in quality of life with a college degree versus without a college degree, Fairmont State hosted a card game program from 1999 through 2012 where students participated in a scenario where they

¹² "The Game of Your Life—Case Study," 4129Grey. <u>www.grey.com/turkey/work/key/ozyegin/id/6573/#theinsight</u> (accessed May 25, 2018).

¹³ Üstün , Fatih, *The Effects*, 51–52.



act out how life may play out given specific circumstances. Students received "individual college-based or no-college-based job cards," subsequently taking "students through a series of real-world situations that could come straight out of any adult professional's life.¹⁴

Circumstances ranged from their career, family size, car, vacations, and many other aspects of life. The game (Get a Life) was adapted by Texas GEAR UP (Gaining Early Awareness and Readiness). Fairmont State was able to raise \$52 million over a twelve-year period which allowed them to work with 56 schools. According to a page from fairmontstate.edu's website, "GEAR UP was designed to:

- Demonstrate the importance of education in today's world
- Encourage all middle and high school students to set high educational and career goals
- Help students learn how to prepare, enter and succeed in college and other postsecondary training
- Provide parents with the information and resources they needed to stay involved in their students' education and to help them lay out plans for the future
- Provide teachers with the tools and training needed to raise both academic expectations and student achievement in the classroom¹⁵

Eventually, the success of Fairmont State's program spread, and in 2008, Bryan ISD GEAR UP faculty partnered with Texas A&M to create their own version. ¹⁶ (Texas A&M University; Texas GEAR UP). As it stands now, Texas GEAR UP offers a version that people can share with students of any school free of charge. The website: Texasgearup.com allows users to download the Get a Life playing card game. Students are shown the benefits they can receive from college, providing them time to talk with their peers regarding different outcomes while providing clarification on why they should attend college. The gamification aspect encourages prospect students to learn about the value of education, which in turn increases student enrollment.

ChatterHigh

DOI: JMCHE/v1i101

ChatterHigh is an online resource based in Victoria, British Columbia. The company provides an online gamified engagement platform for high school students to discuss their higher education pursuits. The company's mission statement is simple: "Our mission is to have every student talking about their future." Prospective students get connected to colleges and universities online

¹⁴ Texas GEAR UP, "TXGU's Get a Life Game," Texas Gear Up. <u>www.texasgearup.com/educators-lounge/resources/TXGU's%20Get%20a%20Life%20Game</u> (accessed May 3, 2018)

¹⁵ Fazalare, A., & Burner, "GEAR UP—Gaining Early Awareness and Readiness for Undergraduate Programs," Fairmont State University. www.fairmontstate.edu/gearup (accessed June 1, 2018).

¹⁶ Texas A&M University, "Bryan ISD GEAR UP," Texas Gear Up. <u>www.texasgearup.com/educators-lounge/grants/bryan-isd-gear-up</u> (accessed May 3, 2018)



depending on their results through educational quizzes or games. ChatterHigh Chief Operating Officer, Carl Repp reported:

...one of the difficulties universities have is getting the kids in the [high school] classrooms to engage...Everyone wants to protect students' identity and not have corporate Canada and corporate America coming into the classroom...we're landing them (students) deep inside the website, which is more valuable than saying 'check out our website.' 17

Currently, ChatterHigh is averaging over 12,000 student engagements per day through gamified experiences. As a result, prospective students are being connected to relevant e-recruitment content. A potential downside regarding the higher education field is the fact that gamification for e-recruitment has a digital strategy component. Repp goes on to report:

Education, in general, is usually six to 10 years behind business, and three to four years behind the healthcare industry. The trends that are happening in business and health are based around analytics. It's about using data to make smart decisions and making sure you're targeting the right places and how that's working for you, not just throwing things at the wall continuously and hoping it works. ... You have to target digitally. Just having recruiters travel across the country and visit high school gyms just isn't going to work anymore.¹⁸

Competition amongst colleges and universities have opened up the race for innovative recruitment strategies; theoretically this type of competition will create opportunities for innovative institutions to lead the way in gamification. Alverez underscores the importance of universities to adopt game-based recruitment methods by drawing a comparison to what corporate organizations are already doing in the field. He writes:

The use of game mechanics in non-play contexts is beneficial for both the candidate and recruiter. Behind their colorful and attractive screens, these video games rely on neuroscience and psychology to find the best fit between the cognitive and emotional traits of potential new hires and the prototype employee that the company is seeking. Organizations can benefit from gamification by measuring an individual's digital IQ – their ability to harness the potential of digital technology in their sector – at an early stage in the recruitment process and

¹⁷ Christine Birkner, "Higher Ed Marketing: Gamification is New Tool for Recruitment," American Marketing Association. www.ama.org/publications/MarketingNews/Pages/chatter-high-gamification.aspx (accessed May 23, 2018).

¹⁸ Birkner, "Higher Ed Marketing:" (accessed May 23, 2018)



also by incorporating training and development activities on digital IQ if they want to increase their organizational digital IQ...It is important that university students across the board are made aware of such platforms as a mixture of game-based assessments are being implemented in a diverse range of industries, including the legal sector, banking, advertising/media, rail/engineering, technology companies, retail, property/estate agents and construction. They are in use across several functions across these industries: human resources, IT, supply chain, finance, R&D, etc. If universities do not equip their students for the way recruitment is changing, they will be doing them a disservice.¹⁹

Conclusion

Overall, gamified recruitment strategies in higher education have been successful in increasing engagement as was shown in the analysis of "Game of Your Life," "Get a Life" and "ChatterHigh." By creating virtual space to connect to students and potential students, these institutions have a created a more welcoming and idea-stimulating environment for a new generation of collegians.

Gamified marketing strategies are a burgeoning field. With the onset of a flourishing gaming culture in conjunction with improved engagement rates associated with the projects in question, there is a strong likelihood that the adoption of gamified recruitment strategies will continue to grow. More research is needed to best understand the most efficacious strategies, paradigms, and implementation protocols; in the case of WMU's Broncoland, for example, gamified strategies might require additional resources in order to gain awareness.

Game mechanics provides us with the power to make the boring exciting. During play, people can change the world from chaos to control or vice versa. It is this ability to imagine that gives play so much promise when applying it as a tool for higher education. "Play gives us the world, and through play we make the world ours." ²⁰

¹⁹ Birkner, "Higher Ed Marketing: (accessd May 23, 2018).

²⁰ Miguel Sicart, *Play Matters*, (Massachusetts, MIT Press, 2014),



References

"2017 Essential Facts About the Computer and Video Game Industry." *The Entertainment Software Association*, The Entertainment Software Association, 2017, www.theesa.com/article/2017-essential-facts-computer-video-game-industry/.

Baron, Jeanne. "WMU Launches Broncoland Interactive 3D Campus Tour." *WMU Launches Broncoland Interactive 3D Campus Tour*, Western Michigan University, 2011, www.wmich.edu/wmu/news/2011/06/008.html.

Birkner, Christine. "Higher Ed Marketing: Gamification Is New Tool for Recruitment." *AMA: American Marketing Association*, American Marketing Association, 2016, www.ama.org/publications/MarketingNews/Pages/chatter-high-gamification.aspx.

Cronk, M. (2012). Using Gamification to Increase Student Engagement and Participation in Class Discussion. In T. Amiel & B. Wilson (Eds.), *Proceedings of EdMedia 2012—World*

Data on Students Enrolled Fall Semester 2017 Census Day All Campus Unduplicated. Office of Institutional Research, 2017, pp. 1–1, Data on Students Enrolled Fall Semester 2017 Census Day All Campus Unduplicated.

Data on Students Enrolled Fall Semester 2013 Census Day All Campus Unduplicated. Office of Institutional Research, 2013, pp. 1–1, Data on Students Enrolled Fall Semester 2013 Census Day All Campus Unduplicated.

Eva, Perhaps. "The Potential of Gamification as a Marketing Tool for Universities" Masaryk University, 2016,

Fazalare, A., & Burner, C. (n.d.). *GEAR UP – Gaining early awareness and readiness for undergraduate programs*. Retrieved from www.fairmontstate.edu/gearup

Gamification [Def. 1]. (n.d.). *Merriam-Webster Online*. In Merriam-Webster. Retrieved from http://www.merriam-webster.com/dictionary/gamification.

Krupnick, M. (2016). When a College Closes, what does a Student do next? PBS News Hour. Retrieved from https://www.pbs.org/newshour/education/students-go-college-closes Luciano, L. (2009). The Praeger Handbook of Play Across the Life Cycle. ABC-CLIO, LLC: Santa Barbara, CA.



Machajewski, S. T. (2017). Application of Gamification in College STEM Introductory Course: A Case Study. *Northcentral University, ProQuest Dissertations Publishing*.

Sicart, Miguel. (2014). Play Matters. MIT Pres. Cambridge.

Texas A&M University. (n.d). *Bryan ISD GEAR UP*. Retrieved from www.texasgearup.com/educators-lounge/grants/bryan-isd-gear-up

Texas GEAR UP. (n.d.) *TXGU's Get a Life Game*. Retrieved from www.texasgearup.com/educators-lounge/resources/TXGU's%20Get%20a%20Life%20Game

"The Game of Your Life." *The Game of Your Life: Case Study*, Grey.com, 2012, www.grey.com/turkey/work/key/ozyegin/id/6573/

Üstün, Fatih. "The Effects of Social Media and Gamification on Prospective Students' University Choice Perception." *Acikerisim.isikun.edu*, Işik University, 2014, http://acikerisim.isikun.edu.tr/xmlui/bitstream/handle/11729/898/361004.pdf?sequence=1&isAllowed=y