A sense of belonging: Investigating the enhancement of student community through gamification

PhD. Literature Review (1000 words)

A critical review of current and relevant literature that you have read, which supports your project aim and objectives and a discussion of the viability of your topic as being suitable for a research project (either as a PhD or Professional Doctorate or Taught Doctorate). You should provide a clear rationale/justification for the viability and significance of your proposed research, i.e. the contribution to the current body of knowledge or professional practice or management application:

The concept of ‘belonging’ is described by Vallerand (1997, p.300, quoted in Thomas, 2012) as a subjective feeling of being connected to an institution. Baumeister and Leary (1995) draw upon the importance of regular and stable social contact, and Goodenow (1993) highlights acceptance, along with being needed and valued; the student being recognised as an individual and part of a wider collective. Goodenow’s work focused on adolescent students in the USA, so it can be argued that her study may not fit with the UK Higher Education system exactly, but there is general support from the work of Maslow (1962) who observed that children who are raised in safe and nurturing environments may be more inclined to accelerate their own learning.

If this behaviour is a matter of human nature rather than age, then there could be support for a sense of belonging leading to a greater academic potential. Student attrition has been linked as a side-effect to a feeling of not belonging (Gillen-O’Neel, 2019), with a correlation to first-generation students who feel that their background does not tally with the expected narrative of a ‘typical’ university student (Maunder, 2018; Thomas 2012). Jones (2008) also noted that a lack of familiarity with the academic experience could lead to a disconnect from the course. HEPI reported in 2022 that studies indicated that only 39% of students surveyed felt a connection to their chosen university community, with 34% reporting feeling confident, and a sense of imposter syndrome in 39%. HEPI also reported that, despite being a vital role of student life, clubs and societies do not necessarily do enough to create an overall feeling of inclusion. (Jackson, 2022). Nurturing the student to feel a part of the university and connected to their chosen course is fundamentally important for their own development.

Studies conducted during the shift to online delivery during the COVID-19 pandemic charted a noted drop in the feeling of belonging among students on STEM courses (Wester et al, 2021), using Trujillo and Tanner’s 2014 study on Affected Learning, which broke the process a student goes through during engagement with their course into: Self-efficacy, a sense of belonging, and cultivating a science identity. The latter is important, not only for the adoption of appropriate methodologies and critical thinking skills, for viewing oneself as a part of the scientific community, which could help to combat the experience of imposter syndrome. Crick et al. (2020) noted a common theme, in response to the shift away from face-to-face delivery from academics during the pandemic, which was the effect on the mental health of both staff and students, and the absence of flexibility with delivering more practical subjects.

In her book, ‘Reality is Broken: Why Games Make Us Better and How They Can Change the World’, Jane McGonigal (2011) details several examples where the use of gamification has been successfully applied to everyday tasks and chores, following the notion that the real world does a poor job in replicating the fun and immersive elements of gaming. Notable mentions are ‘Nike+’, a running app designed for iPod which tracks the runner’s steps and presents them with a visual presentation of their progress (McClusky, 2009); ‘Chore Wars’ developed by Kevan Davis (2007), which seeks to gamify household chores by reimagining a household as a team of adventurers, similar to that of a fantasy-based Role-Playing Game. The players can choose an avatar and set chores as heroic quests to complete in exchange for experience points and virtual currency. The team can decide how the virtual currency is traded in real life. The underlying principle, according to author Matthew Crawford (cited in McGonigal, 2011, p68), is that a lot of the day-to-day work lacks a tangible result or individual agency. Video games, such as online multiplayer game ‘World of Warcraft’ (Blizzard, 2004), contains hours of immersive quests and activities that the player may undertake in exchange for points which they can use to improve their character. According to McGonigal, by 2011 ‘World of Warcraft’ players had collectively spent 5.93 million years, or 50 billion hours, invested in the game (p.61).

AVATARS…

References:

Blizzard, (2004). *World of Warcraft*. Available at: <https://worldofwarcraft.blizzard.com/en-gb/start>. (Accessed 25 September 2023)

Crick, T., Watermeyer, R., Knight, C., Goodall, J. (2020) The Impact of COVID-19 and “Emergency Remote Teaching” on the UK Computer Science Education Community. *United Kingdom & Ireland*

*Computing Education Research conference. (UKICER ’20), September 3–4, 2020, Glasgow, United Kingdom.* https://doi.org/10.1145/3416465.3416472.

Davis, K. (2007) *Chore Wars.* Available at: <https://www.chorewars.com/index.php>. (Accessed 25 September 2023)

Gillen-O’Neel, C. 2019. “Sense of Belonging and Student Engagement: A Daily Study of First- and Continuing-generation College Students.” Research in Higher Education. doi:10.1007/s11162-019-09570-y

Goodenow, C. & Grady, K.E. 1993, "The Relationship of School Belonging and Friends' Values to Academic Motivation Among Urban Adolescent Students", *The Journal of Experimental Education,*vol. 62, no. 1, pp. 60.

Jackson, A (2022). *What have we leant about student belonging and inclusion?* [Online] Available at: <https://www.hepi.ac.uk/2022/05/23/student-belonging-and-inclusion/>. [Accessed 11 September 2023]

Jones, R. (2008). Student Retention and Success: A Synthesis of Research. EvidenceNet, Higher Education Academy.

Maslow, A.H., (2018) Toward a Psychology of Being, Start Publishing LLC, New York. Available from: ProQuest Ebook Central. (8 September 2023).

Maunder, R.E. (2018) Students’ peer relationships and their contribution to university adjustment: the need to belong in the university community, Journal of Further and Higher Education, 42:6, 756-768, DOI: [10.1080/0309877X.2017.1311996](https://doi-org.ezproxy.cardiffmet.ac.uk/10.1080/0309877X.2017.1311996)

McClusky, M. (2009) *The Nike Experiment: How the Shoe Giant Unleashed the Power of Personal Metrics*. Available at: <https://www.wired.com/2009/06/lbnp-nike/?currentPage=all> (Accessed 25 September 2023)

McGonigal, J. (2011) *Reality is Broken: Why Games Make Us Better and How They Can Change the World*. London: Penguin Books.

Thomas, L (2012) Building student engagement and belonging in Higher Education at a time of change: final report from the What Works? Student Retention & Success programme. Available at: <https://www.phf.org.uk/wp-content/uploads/2014/10/What-Works-report-final.pdf> (Accessed 8 September 2023)

Trujillo, G., Tanner K.D. (2014) Considering the Role of Affect in Learning: Monitoring Students’ Self-Efficacy, Sense of Belonging, and Science Identity. *CBE – Life Sciences Education 13, 1.* DOI: 10.1187/cbe.13-12-0241

Wester, E.R., Walsh. L. L., Aarango-Caro, S., Callis-Duehl K.L., (2021) Student Engagement Declines in STEM Undergraduates during COVID-19-Driven Remote Learning. DOI: https://doi.org/10.1128/jmbe.v22i1.2385 [Online] Available at: https://journals.asm.org/journal/jmbe (Accessed 4 September 2023)