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:

Gamification is the concept of imbedding elements, such as game mechanics, from games into real-world situations, with the aim of enhancing engagement and motivating people to feel more involved and promote productivity (Kapp, 2013; Fischer, 2017). As recorded by Prasad and Mangipudi (2021) and Hammedi, Leclerq, and Van Riel (2016), across many industries gamification strategies have been implemented with positive outcomes recorded regarding employee engagement.

The need to belong, according to Baumeister and Leary (1995), is fundamental to human beings. They considered and researched many aspects of belonging, including cognitive interaction, emotional impact, the positive and negative long and short-term effects on health, and the psychological underpinnings of where this desire for kinship may originate. The implications are wide-ranging for the student as a growing, functioning person; but the particular aspect of belonging focused on in this case would be *institutional belonging*, as described by Vallerand (1997, p.300, quoted in Thomas, 2012), which is a subjective feeling of being connected to an institution. This is supported by research from Baumeister and Leary (1995), who 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 fit with the expected profile 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. Happy Educated People Inc (HEPI) reported in 2022 that studies indicated that only 39% of students surveyed felt a connection to their chosen university community. Furthermore 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 (2009), 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).

An avatar, in a video game context, is typically regarded as the means in which the player is represented in the game world, and also how the player feels connected to the game they are playing (Jin, 2011; Gilbert *et al., 2013*). Further research would be required to determine if this were solely due to the physical representation of the player or the actions and moral and ethical choices they are required to make in the game. The avatar need not be an accurate representation of the player either, with many games in the fantasy and sci-fi genre, particularly Role-Playing Games and Massively Multiplayer Online Games, offering options to play as different races and species. Schenkler (1980) coined the term ‘impression management’ to describe the ways in which an avatar may be used to present a more idealised self, in that ones’ perceived physical flaws could be altered or negated. In this regard, the connection between the player and their avatar can be seen as a form of outward expression. This can potentially have the negative consequence of gamers becoming overly absorbed in their avatar, strong avatar identification being linked to gaming disorder (Green, Delfabbro and King, 2021). Careful consideration and more research will be required to ensure that these negative aspects are recognised and mitigated.

By allowing students to create a customisable avatar that will grow and develop with them on their academic journey, it is hoped that it will provide a route, through gamification and self-identification, by which the student will increase engagement with their course, peers, and the university community as a whole.

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Research methodology and the work breakdown (500 word limit).

Plan of work should contain a breakdown of the tasks to be undertaken, methodologies employed in stages or phases and include an indication of the associated time scales.

Stage One – Research.

Stage Two – Practical steps towards implementation of avatar generation.