# Use of digital marketing simulation software to enhance student engagement

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## Introduction

The Higher Education sector has faced significant changes, challenges and opportunities over the last few years, particularly due to the Covid-19 pandemic. Countries entering into lockdown across the world has seen a plethora of challenges concerning student satisfaction and engagement. Research has established gamification to be a successful engagement and motivation tactic for students across management disciplines (e.g. Bitrian et al., 2020; Majuri et al., 2018). Furthermore, business simulation software has been examined across Business Management disciplines and has been regularly found to be a successful student engagement tactic in providing students with representations of real commercial situations in a risk-free environment. However, to the authors' knowledge, no research has investigated the use of simulation software to enhance digital marketing students' engagement and understanding.

The purpose of this research is to investigate whether the utilisation of simulations enhances student engagement. The objectives of this paper are to establish the relevant background, the research approach taken and to offer early findings and discussion for practical and theoretical implications.

## Background

Experiential and authentic learning have become the forefront of effective means of students' understanding and applying knowledge to contextual scenarios (Smith et al., 2014). Experiential learning is defined by Kolb as "*learning through reflection of doing*" which allows for a reflective approach to students' learning. The Kolb cycle and the Taxonomy of (Educational) Instructional Objectives (Bloom et al., 1956; Siddique et al., 2010) demonstrate the role of higher order skills in which students move towards a more active, rather than passive, attitude and engagement to their learning (Gadola & Chindamo, 2019). Such "active learning" allows students the opportunity to apply the material they learn in class to a set of skills and outputs (De Freitas, 2006). Engaging in experiential learning teaching strategies encourage students to take more ownership of their learning and develop their skills and application further and has also been proven to increase student motivation (Sjostedt, 2015; Watts et al., 2011). Within the post-Covid teaching environment whereby students are returning to the physical classroom, it is important to evaluate the motivational nature of experiential learning and the tools in which it can be assessed against student engagement.

Simulation has been found to enhance business students' affective engagement in which they enjoy engaging with the software and want to continue to experiment (Gatti et al., 2019). Furthermore, students often find simulations to be useful, interesting and rewarding which, in turn, improves their performance and overall interest in the field (Buil et al., 2019), and enhance their overarching motivation. Despite literature drawing on the benefits of simulation software for student engagement, other literature draws on its limitations in various contexts. Some research reports that simulations can cause anxiety and frustration when placed in a competitive context, which leads to reduced engagement and ultimate learning (e.g. Doyle & Brown, 2000; Matute & Melero, 2016). Furthermore, research acknowledge the potential limitation of

simulation when treated as a group activity as it can give rise to team conflicts and freeloading which causes frustration and disinterest from the team (Adobor & Daneshfar, 2006). As such, research should first investigate social media simulation software in a non-competitive individual environment to establish initial student engagement.

## Research Approach

The research approach for this research is to conduct two sets of groups interviews; one set of interviews prior to a simulation software usage and the other set upon completion of the simulation usage. The purpose of this approach is to be able to measure differences in engagement between two time points. The first set of interviews (Study 1) focused on asking students to reflect on their previous semester (as no modules in that semester had involved the use of simulation). It was designed to allow students to freely discuss their experiences and to organically arrive at various themes concerning their engagement, motivation and ultimate learning experiences from the previous semester. The second interviews (Study 2) will focus on asking them to reflect on their second semester (having experienced the simulation) and will replicate the semi-structured approach of the first set of interviews.

The sample used is MSc Digital Marketing Management students at Cardiff Metropolitan University. Three group interviews (n=18) were conducted for Study 1; showing a total of 6 males and 12 females, aged between 20-40. The group interviews each lasted 40 minutes and were recorded and transcribed. NVivo was used to conduct a thematic analysis between the groups. The group interviews for Study 2 have yet to be collected as the students have not completed their academic semester. Nevertheless, findings from the first study have offered early insights into engagement and are reported in the next section.

## Results, discussion and implications

The results of Study 1 have revealed three main themes. The first theme reveals a need and desire for practical application to their studies, which was supported across groups; they explained how opportunities to apply their learning to practical settings in creative ways not only enhances their understanding but also helps prepare them for the world of work. The second theme revolved around the notion of "engagement", whereby student felt more engaged when more practical opportunities were offered to them. A final theme was the apparent and strong focus on assessments; the students continuously referred to wanting additional support and guidance for assessment preparation, which has also indicated towards a more discrete theme which will aim to be further analysed in Study 2.

The findings of this study will be of interest to practitioners as well as academics from both a pedagogical research perspective as well as with active teaching enhancements. Simulations are complicated systems that are time and money intensive to develop and buy and so it is important from the perspective of universities to establish the extent to which such investments contribute to student engagement and ultimate learning experience. Pedagogy is continuously developing, and it is also important for tutors to be aware of the appropriate resources to enhance teaching methods.

***References available upon request**