



Fostering quantity surveying student success: unmasking the factors that influence student engagement

INAUGURAL LECTURE

By

Professor Gerrit J. Crafford

Delivered at Nelson Mandela University on

20 October 2022

Faculty of Engineering, the Built Environment and Technology

2022

Abstract

Since the dawning of democracy in South Africa, the main failing of the higher education sector was the absence of participation by previously disadvantaged students. The Department of Higher Education and Training (DHET) indicates that the participation rates of previously disadvantaged students have improved. However, student success and throughput rates remain a severe challenge to the higher education sector in South Africa (Chetty & Pather, 2015). The "revolving door" syndrome, in which increased access to higher education is not met by student success, continues to plague this sector (Strydom & Mentz, 2010). Thus, the high failure rate in higher education requires urgent interventions since there are substantial costs associated with re-educating students and the pressure of re-admitting failed students into continually growing classes (De Villiers & Werner, 2018).

The three most reliable predictors of student success are student engagement, academic preparation, and motivation (Kuh, Kinzie, Schuh, Whitt & Associates, 2005). Student engagement is defined as consisting of two key components: firstly, what students do, and secondly, what institutions do (Kuh, 2001). An exclusive emphasis on academic preparation and motivation as success predictors means potentially employing more stringent admission and/or selection policies as a pathway towards improving student success, weakening the strategy of increasing access to higher education (Strydom & Mentz, 2017). Therefore, using student engagement as a predictor of student success is critical, as emphasised by authoritative authors (Roberts & McNeese, 2010; Rodgers, 2008; Strydom, Mentz & Kuh, 2010). Yet, little research has been done on student engagement within quantity surveying higher education in South Africa and globally.

This lack of information on engagement related to what both students and institutions do, resulted in this in-depth inquiry into quantity surveying (QS) honours students' perceptions of the factors influencing student engagement through using an interactive qualitative analysis (IQA) research design. The outcome of the IQA process was a System Influence Diagram (SID), visually representing the themes (factors) influencing student engagement prepared according to the rigorous and replicable rules of the IQA design. A focus group formed the first inductive data collection phase that culminated in the generation of individual and group SIDs. The second data collection phase comprised of individual interviews with the focus group participants. This phase verified and provided richer narratives on the themes identified in the first phase.

In response to the question: "Tell me about what influences your academic engagement at Nelson Mandela University?" the QS students produced 41 items through inductive coding in the focus group. These items were grouped into seven factors/themes (axial coding), namely 'Physical environment', 'External realities', 'Lecturer attributes', 'Subject matter', 'Teaching methods', 'Personal factors', and 'Student interaction'. Subsequently, the student participants identified the relationships between themes (theoretical coding) from which individual SIDs were generated for each student. The individual SIDs were then converted to a group composite SID for the student focus group using the Pareto table. The group composite SID identified the 'Physical environment' and 'External realities' themes as the primary

drivers, while the 'Lecturer attributes' and 'Subject matter' themes were secondary drivers. During phase two, the themes were verified by conducting individual semi-structured interviews.

Strategic student and institutional interventions are critical to eliminating the abovementioned "revolving door" syndrome in higher education. Upon reviewing the negative student feelings in the 'Physical environment' and 'Lecturer attributes' themes, there appears to be a substantial amount of low-hanging items that can be resolved if stakeholder buy-in can be achieved. Thus, significant inroads can be made to improve student engagement immediately while careful strategic student and institutional interventions are planned for the 'External realities' and 'Subject matter' themes.