On Integrated Peer-Assisted Learning Clusters Among Students in a Nigerian University

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ABSTRACT

Peer interaction to assist and learn from each other has been extended online in recent times. This study was conducted to find the pattern of participation in integrated peer-assisted learning and to investigate factors known to affect such participation among students in their peer-assisted learning clusters. The pattern of participation was established through the frequency with which the respondent used their preferred mode of peer interaction. Structural equation modeling was implemented to study the relationship between participation and the factors considered. Social media is the most prevalent among the online means of interaction considered. Conflict, cohesion, and effective leadership in the clusters have more direct effects on the other factors considered. The frequency of participation does not correlate significantly with the other personal and interpersonal factors considered. These findings suggest that the decisions for voluntary participation in peer-assisted learning clusters are possibly driven by other factors such as academic need.

KEYWORDS

E-Learning, Learning Technology, Mobile Learning, Online Learning, Peer-Assisted Learning, Peer-to-Peer Interaction, Shared Database, Social Media, University Students, Virtual Learning Communities

INTRODUCTION

Learning, preparation for gainful employment, career advancement, and development into responsible citizens are some of the overarching goals of university education for students. Peer-assisted learning has emerged as an essential pedagogy in university education as students seek to meet the demand of their studies. This has evolved from the unofficial interaction between students to a tool recognized, encouraged, and implemented by many universities based on its merits (Huijser, Kimmins, & Evans, 2008; Schuetz et al., 2017). Learning is known to be maximized when the process focuses directly on what the learner wants to learn as opposed to what the teacher wants to teach. Therefore, student-centered learning allows individual students to take responsibility for the accumulation of personal skills and knowledge. This form of collaborative learning is beneficial to all participants in terms of cognitive gains and positive learning outcomes (Osman, Sauid, & Azizan, 2015). The student-centered learning that is characteristic of peer-assisted learning complement the formal mode of learning.

Peer-assisted learning refers to situations where students support each other academically through teaching and learning from each other. Peer-assisted learning has been explained from the five meta-

spaces in the concept of 'spaces of influence' covering aspects of cognitive and social congruence. The core elements of PAL include collaboration, reflection, communication, self-and peer assessment (Boud, Cohen, & Sampson, 2016). The implementation of such initiatives is sometimes labeled Peer-Assisted Student Support (PASS) or Supplemental Instruction (SI) among others (Packham & Miller, 2000). These schemes address three elements of student need: engaging learning experience, practical and timely support services, and a sense of community.

Peer-assisted learning can happen in a variety of ways. It can also cut across formal, informal learning clusters. The development of domain-specific peer-assisted learning digital models has interested learning scientists and teacher education researchers for a while (Latifi, Noroozi, Hatami, & Biemans, 2019; Noroozi & Mulder, 2017; Noroozi, Weinberger, Biemans, Mulder, & Chizari, 2013). Such efforts have covered aspects of understanding the cognitive models that are involved in giving and receiving peer feedback (Nicol, Thomson, & Breslin, 2014), types of feedbacks (Bayerlein, 2014; Latifi et al., 2019), the role of gender (Noroozi et al., 2020), change in attitude (Huisman, Saab, van Driel, & van den Broek, 2018), and the contribution such feedbacks make on the students' essay writing skills and learning in general(Noroozi, Biemans, & Mulder, 2016; Noroozi, Kirschner, Biemans, & Mulder, 2018). In many of these studies, peer feedbacks were received/given via a digital platform.

There are also instances where a face-to-face peer-assisted learning scheme has been offered to students as a free and voluntary learning support option under peer-tutoring experiments. In such programmes, a pool of tutors (students) is recruited based on the recommendation of faculty staff, paid, trained, and provided with instructional materials. With these supports, participation, effectiveness, quality, and cost of the programme can be monitored. The role of the tutor and tutee can be either fixed or flipped depending on the variance of the programme being implemented (Miravet, Ciges, & García, 2014). Notwithstanding, the programme remains flexible, collaborative, interactive, intentional, systemic, and mutually beneficial. These programmes were a low-cost initiative to increase student participation in peer-assisted learning in general(Kim, Jillapali, & Boyd, 2021), and reduced the failure rate (Pugatch & Wilson, 2018). However, even the meager cost for such a programme could be a limitation to its implementation where there are budget constraints.

Part of the factor that makes peer-assisted learning so effective is the ease of communication between peers. Potential intimidatory factors such as highly structured lectures, tutorials, and hierarchical differences are minimized. The advantages of these schemes to students have been identified as additional assistance with challenges; *especially from peers,* a broader perspective on problems, access to expertise, more meaningful participation, and a stronger sense of identity. Peer-assisted learning can be particularly beneficial to students from diverse cultural and educational backgrounds especially first-year students and international students(Huijser et al., 2008) as they adapt to a new environment. It has also been leveraged to sustain learning during the COVID-19 pandemic(Ala, Yang, & Ala, 2021a; Oyediran, Omoare, Owoyemi, Adejobi, & Fasasi, 2020; Oyedotun, 2020).

Study shows that students in strictly online study groups desire more face-to-face interaction to have a 'sense of community (Drouin & Vartanian, 2010). This underscores the fact that any form of learning technology is not a replacement for face-to-face interaction, however, it can help where such is not feasible or provide a platform for extended engagement beyond the confines of face-to-face interaction. New technology tools can complement traditional forms of learning (Moghavvemi, Sulaiman, & Jaafar, 2018) by removing traditional barriers. The new trend of increasing access to communication technology devices and broadband is also driving a new form of integrated peer-assisted learning in recent times. Technology has been employed as a tool to assist in the objectives of peer-assisted learning.

The online component in integrated peer-assisted learning complements face-to-face interaction. However, some responses can be delayed and students could face some difficulties in communicating abstract and technical ideas due to the limitations of the means of interaction. Advances in social media platforms have also made them more adaptable for online peer-assisted learning. Features

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