

The Use of Emerging Technologies in Higher Education Institutions: A Case of Nelson Mandela University, South Africa

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Abstract : The COVID-19 pandemic has disrupted the established practices of higher education institutions (HEIs). Most higher education institutions worldwide had to shift from traditional face-to-face to online learning. The online environment and new online tools are disrupting the way in which higher education is presented. Furthermore, the structures of higher education institutions have been impacted by rapid advancements in information and communication technologies. Emerging technologies should not be viewed in a negative light because, as opposed to the traditional curriculum that worked to create productive and efficient researchers, emerging technologies encourage creativity and innovation. Therefore, using technology together with traditional means will enhance teaching and learning. Emerging technologies in higher education not only change the experience of students, lecturers, and the content, but it is also influencing the attraction and retention of students. Higher education institutions are under immense pressure because not only are they competing locally and nationally, but emerging technologies also expand the competition internationally. Emerging technologies have eliminated border barriers, allowing students to study in the country of their choice regardless of where they are in the world. Higher education institutions are becoming indifferent as technology is finding its way into the lecture room day by day. Academics need to utilise technology at their disposal if they want to get through to their students. Academics are now competing for students' attention with social media platforms such as WhatsApp, Snapchat, Instagram, Facebook, TikTok, and others. This is posing a significant challenge to higher education institutions. It is, therefore, critical to pay attention to emerging technologies in order to see how they can be incorporated into the classroom in order to improve educational quality while remaining relevant in the work industry. This study aims to understand how emerging technologies have been utilised at Nelson Mandela University in presenting teaching and learning activities since April 2020. The primary objective of this study is to analyse how academics are incorporating emerging technologies in their teaching and learning activities. This primary objective was achieved by conducting a literature review on clarifying and conceptualising the emerging technologies being utilised by higher education institutions, reviewing and analysing the use of emerging technologies, and will further be investigated through an empirical analysis of the use of emerging technologies at Nelson Mandela University. Findings from the literature review revealed that emerging technology is impacting several key areas in higher education institutions, such as the attraction and retention of students, enhancement of teaching and learning, increase in global competition, elimination of border barriers, and highlighting the digital divide. The literature review further identified that learning management systems, open educational resources, learning analytics, and artificial intelligence are the most prevalent emerging technologies being used in higher education institutions. The identified emerging technologies will be further analysed through an empirical analysis to identify how they are being utilised at Nelson Mandela University.

Keywords : artificial intelligence, emerging technologies, learning analytics, learner management systems, open educational resources

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