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Blending Synchronous with Asynchronous Learning Tools: Students' Experiences and Preferences for Online Learning Environment in a Resource-Constrained Higher Education Situations in Uganda

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Abstract : Generally, World over, COVID-19 has had adverse effects on all sectors but with more debilitating effects on the education sector. After reactive lockdowns, education institutions that could continue teaching and learning had to go a distance mediated by digital technological tools. In Uganda, the Ministry of Education thereby issued COVID-19 Online Distance E-learning (ODeL) emergent guidelines. Despite such guidelines, academic institutions in Uganda and similar developing contexts with academically constrained resource environments were caught off-guard and ill-prepared to transform from face-to-face learning to online distance learning mode. Most academic institutions that migrated spontaneously did so with no deliberate tools, systems, strategies, or software to cause active, meaningful, and engaging learning for students. By experience, most of these academic institutions shifted to Zoom and WhatsApp and instead conducted online teaching in real-time than blended synchronous and asynchronous tools. This paper provides students' experiences while blending synchronous and asynchronous content-creating and learning tools within a technological resource-constrained environment to navigate in such a challenging Uganda context. These conceptual case-based findings, using experience from Uganda Christian University (UCU), point at the design of learning activities with two certain characteristics, the enhancement of synchronous learning technologies with asynchronous ones to mitigate the challenge of system breakdown, passive learning to active learning, and enhances the types of presence (social, cognitive and facilitatory). The paper, both empirical and experiential in nature, uses online experiences from third-year students in Bachelor of Business Administration student lectured using asynchronous text, audio, and video created with Open Broadcaster Studio software and compressed with Handbrake, all open-source software to mitigate disk space and bandwidth usage challenges. The synchronous online engagements with students were a blend of zoom or BigBlueButton, to ensure that students had an alternative just in case one failed due to excessive real-time traffic. Generally, students report that compared to their previous face-to-face lectures, the pre-recorded lectures via Youtube provided them an opportunity to reflect on content in a self-paced manner, which later on enabled them to engage actively during the live zoom and/or BigBlueButton real-time discussions and presentations. The major recommendation is that lecturers and teachers in a resource-constrained environment with limited digital resources like the internet and digital devices should harness this approach to offer students access to learning content in a self-paced manner and thereby enabling reflective active learning through reflective and high-order thinking.

Keywords : synchronous learning, asynchronous learning, active learning, reflective learning, resource-constrained environment
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