## Post COVID-19 Analysis of the Status of online Infrastructure use by Public Universities in Kenya: The Case of Masinde Muliro University of Science and Technology

## Abstract

The Covid-19 pandemic brought about a lot of interference in learning institutions. Universities were not spared by this pandemic, and this brought about a need to reconsider modes of learning which had all along been face-to-face. Online learning has proved itself as a promising instructional medium as well as a prime area for researchers to investigate its effectiveness on learning and pedagogy. Covid-19 provided an avenue to explore the use of technology in learning given that learning institutions were closed indefinitely. Online infrastructure refers to the hardware, software and internet availability in learning institutions that promote distance education or e-learning. This study sought to establish the status of online pedagogical infrastructure in public universities with a focus on Masinde Muliro University of Science and Technology (MMUST). The study adopted a descriptive survey design. The study population comprised of staff and students of MMUST. Stratified sampling was used to get a sample size of 682 respondents. Data was collected using questionnaires, interviews, Learning Management System content analysis, and observations. The study found that the available online pedagogical infrastructure in MMUST was not sufficient to facilitate online learning. Additionally, the findings indicate that majority of the students and lecturers did not have access to necessary online infrastructure. There lacks a clear policy guidelines for online learning. These findings show that MMUST has inadequate requisite ICT infrastructure and skills to enhance successful implementation of online learning. The study therefore recommends a need for public universities to create partnership with the private sector to improve ICT infrastructure to build the necessary capacity and standardize online learning programs. It further recommends that Institution Policymakers need to formulate policies that promote effective online learning across universities.

## Authors

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