

**Introduction of a learning management system at the Kilimanjaro
Christian Medical University College**

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Background. Medical schools in Africa face daunting challenges including faculty shortages, growing class sizes, and inadequate resources. Learning management systems (LMS) may be powerful tools for organising and presenting curricular learning materials, with the potential for monitoring and evaluation functions.

Objective. To introduce a LMS for the first-year medical student curriculum at the Kilimanjaro Christian Medical University College (KCMU Co), in Moshi, Tanzania, in partnership with the Duke University School of Medicine (Durham, North Carolina, USA).

Methods. Observations were made on the requisite information technology (IT) infrastructure and human resource needs, and participation in training exercises. LMS utilisation was recorded, and two (student and faculty) surveys were done.

Results. The KCMU Co IT infrastructure was upgraded, and an expert team trained for LMS implementation. An introductory LMS workshop for faculty had 7 out of 25 invitees, but attendance improved to more than 50% in subsequent workshops. Student attendance at workshops was mandatory. Use of the LMS by students rapidly expanded, and growing faculty utilisation followed later. By the end of the second semester, online examinations were offered, resulting in greater student and faculty satisfaction owing to rapid availability of results. A year after LMS introduction, 90% of students were accessing the LMS at least 4 days/week. A student survey identified high levels of satisfaction with the LMS software, quality of content, and learning enhancement.

Conclusion. LMS can be a useful and efficient tool for curriculum organisation, administration of online examinations, and continuous monitoring. The lessons learned from KCMU Co may be useful for similar academic settings.

