Thuo, J. K. & Orado, G. N. (2020). ICT Tools and Online Platforms: Teachers' Knowledge and Use in Supporting Learning during COVID-19 in Kenya

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Abstract

The benefits of technology in enhancing learning and improving learning outcomes are well documented ((Afolake, Jaleel, & Shittu, 2014; Robinson, 2016) including leveraging technology virtually to support learning (Tatli & Ayas, 2013). However, teachers' knowledge and skills in the drawing on technology to leverage learning especially in the context of prolonged school closure is not clear. Through this paper, we report the findings of a study that sought to determine teachers' knowledge and use of technology to support learning during the COVID-19 pandemic in Kenya. The study that employed a descriptive survey design involved, 472 mathematics and science teachers drawn from all the counties in Kenya. Participants responded to an online questionnaire emailed as a link through their emails. The findings of the study showed that teachers are aware of a wide range of ICT tools, resources, and platforms that can be deployed for instructional purposes. They are also knowledgeable about how to source instructional content from online sources. The disparity was in the actual deployment of the tools and usage of the learning management platforms (LMS). While WhatsApp scored the highest, ZOOM and Microsoft Meets scored lowest. Further, most of the technologies are not being deployed for instructional purposes but rather for posting assignments to the learners. The teachers cited numerous challenges including a deficiency of technical skills to navigate the LMS, curriculum areas that are practical, and easy to instruct online. Others cited a lack of sustainable facilitation and network challenges. The findings of this study have implications for policy on continuity of learning in circumstances that demand prolonged school closure such as COVID19. Furthermore, the findings of this study have implications for teacher preparation and teacher professional development in terms of teacher capacity development in ICT use to support learning remotely

Keywords: Learning Management Systems (LMS), ICT, COVID-19