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Employing the Moodle Platform as a VRE Tool while Teaching eResearch Skills to Masters and PhD Students

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Abstract

Virtual research environments (VREs) are no longer an issue of serious debate in the developed world – they provide the infrastructure for researchers to easily collaborate across a variety of borders and a variety of disciplines. Transparent, collaborative online partnerships are not yet that common in Africa. Very often this is due to the fact that available technology is not enabling and skills are lacking. The authors attempted to resolve the technology problem by massaging existing tools and technologies to establishing a collaborative environment (VRE) to be used for the teaching of eResearch skills to Masters and PhD-level students doing natural product research at seven African institutions, spread across four different countries. The main objective and methodology of our work was to create an environment that would support researcher productivity and lessen the administration burden without creating a need for the development of new technology. Both a case study as well as experiential learning was used to resolve the challenges. Moodle, which is already being used extensively in Africa was identified as the enabling technology. Students and supervisors working on natural product research were used as the case study. By adapting the course structure and adding Alfresco and DSpace it was possible to incorporate and address all components of the research process - a very holistic approach to research. In its fully developed phase we anticipate that the Moodle VRE will not only simplify the prework and administration related to research – it will also enable the scientific workflow components of collaborative research. It also already includes the dissemination of reliable scientific information and data that would be of use to a variety of stakeholder groupings. In addition that aspect of the research project that is usually ignored - project closure, is simplified. Digital curation activities may be initialized with no additional effort to the researcher. **Conclusion**: From feedback received, active participation and the content already uploaded we were able to conclude that Moodle could indeed be successfully deployed as a collaborative research environment