

Biology Instructional Resources Availability and Extent of their Utilization in Teaching Pre-Service Biology Teachers

Abstract

Education of pre-service science teachers necessitates inquiry and resource-based instruction to ensure the production of both hands-on and mind-on skilled science teachers. This becomes possible when a variety of instructional resources regularly support the teaching process. This study aimed to identify the types of available biology instructional resources and their extent of use in teaching pre-service biology teachers. The study used a descriptive survey research design and was conducted in three private Universities selected from those offering education in Rwanda. Eighty-two pre-service biology teachers and five biology lecturers participated in the study. Observational checklist of biology instructional resources and questionnaires aided the collection of data analyzed by frequency counts and percentages. The findings revealed that biology instructional resources like classroom chairs, chalkboards, laboratories, microscopes, centrifuge, slide projectors, biology textbooks were available while resources like a class whiteboard, classroom overhead projectors, electrophoresis unit, recorders, Polymerase chain reaction machines, among others, were absent. The findings also revealed low-level use of available biology instructional resources in teaching pre-service biology teachers. The implication is the likelihood of producing less competent future biology teachers. The provision of adequate biology instructional resources, as well as the monitoring of their use in teaching biology, was recommended

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