

The suitability of a multimedia resource for teaching undergraduate histology in a developing country.

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The suitability of a multimedia resource for teaching undergraduate histology in a developing country.

By

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Thesis

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Abstract

The suitability of a multimedia resource for teaching undergraduate histology in a developing country.

A thesis by

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This thesis reports on a literature survey and an investigation that was done on the Histology course for MBChB II learners at Medunsa. All aspects of the course were investigated including the present course as well as the possibility of replacing the lectures by multimedia computer presentations and a video. The multimedia computer presentations were specially developed for the study while an earlier developed video was also included into the study. Two instruments were used to gather information from the learners. Responses from a questionnaire as well as learner records were statistically evaluated. This information as well as information gathered from the literature was used to design a new proposed course in histology.

A number of issues emerged from the study. The first issue is that histology is the least favourite of all the subsections of Anatomy. Learners prefer to study their histology by watching a video. The learners who watched the video more than four times did not do better than the others. Multimedia changed the attitude of the learners towards histology to some extent. Learners have a perception, which could not be proved, that if they study with the aid of multimedia their marks and their recollection will improve.

Learners often left lectures before the end or did not attend. The reason that the learners indicated for this tendency was lack of concentration. Most learners want the system of lectures changed. They want some lectures to be replaced by multimedia. Most learners rate the histology lectures as good. The majority of learners do not want the histology course to be changed into a multimedia course.

From the study it is clear that the microscope can be successfully replaced by an instructivist way of learning like a video or a multimedia computer presentation. It is however not ideal to replace a constructivist way of learning, like using a microscope,

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with a way of learning that is only instructivist, therefore it is suggested that the microscope is replaced by another constructivist way of learning. Providing groups of learners with unique images from the histology slides to be studied and annotated was suggested.

It also became clear that if a computer-based histology course is to be implemented in future, learners will have to go through a transitional phase where the lectures and practicals are gradually replaced by multimedia.

Keywords:

Histology; anatomy; multimedia computer presentations; practicals; lectures; video; histology textbook; questionnaire; records; microscope;

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