

## Perspective

# Teaching and Learning Anatomy Methods used for Undergraduate Nursing Students at Pwani University

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**Perspective**

Teaching of anatomy normally involves lectures followed by a practical, tutorial and assessment. Course content includes gross anatomy, histology and clinical relevance.

Teaching anatomy with limited resources, classrooms with poor sitting arrangement and students from diverse schools, ethnic background and learning aptitude poses a challenge. Secondary school students join University having required grades in Kenya Certificate of Secondary Education (KCSE) from National, Provincial and County schools, with variable facilities and norms of learning and tuition [1].

Nursing students are admitted having done biology and English among other subjects. There is limited career guidance although most seem to have chosen to be nurses [2,3].

This paper is based on the perspective of teaching and learning methods developed in three years of teaching first year nursing students at Pwani University and feedback from a group of students surveyed to assess effectiveness of these methods. Normally, there are about 50 students in class

Teaching of Gross Anatomy and Histology is done with Power Point with text, images of gross aspects and histology. Practical sessions include study of skeletons, using charts of gross and histology of systems and organs. E-learning modules for downloading gross and microscopic images are available in the library where there is good internet connectivity. Students can also use gross anatomy and histology atlases and books. Gross anatomy dissection and histology practical with slides are not available presently.

There are three categories of students. Those that prefer to have phone or laptop handy to access internet, keen front benchers who take notes and ones who sit in class with no indication of learning.

Teaching the nursing students for one year revealed that Power Point (PP) explanation of the topic was not enough. During interactive sessions in class, there was minimum feedback from students on aspects of core knowledge, images and learning. Some students lacked motivation to learn and understand [1].

To tackle this problem, some methods and strategies were introduced during PP presentation to assist students with no or short attention span. These were: (1) to ensure hearing, repeat core text 3-5 times and note it. (2) For what is shown, seeing images and labels, to make them draw and study them. (3) To understand the concept, make notes on core text followed by an interactive question/answer session.

In order to stimulate learning, students are given assignments in class to do individually or in small groups to avoid copy/pasting and copying from others. Student either revises individually or in groups, preferably using library resources. They are encouraged to do prior preparation for class topics.

During practical sessions, and small group tutorials in skills laboratory, integration of Anatomy and Physiology to understand structure and function motivated the students. Clinical relevance of the topics studied using stethoscope, images of ultrasounds and radiographs were done during practical sessions. This helped in the importance of anatomy and physiology in the nursing career. In addition, we wish to introduce occasional lectures from clinicians to further mentor and stimulate learning.

**Survey Results**

Following introduction of the methods for one semester, feedback survey of 47 students was conducted with open and close ended questionnaire. The majority of students (40), understood and learnt better with the new methods of hearing, seeing and interactive session. They found class assignments very useful for learning, 7 students admitted to tendency of copying if home assignment. About 70 % preferred individual study and 30% group study, though they tended to practice both. Prior preparation of topic and use of library resources was done by 60%. They were satisfied with PP presentations, skills laboratory practical and clinical relevance sessions. However, most would like to see human specimens and histology slides. Postmortem demonstration was also a good option to see human organs.

**Examination and Assessments**

Students do two Continuous Assessment Tests (CATs) in one semester accounting for 30% marks. These are about 1-2 hours and contain multiple choices, short and long answer questions.

Final examination accounts for 70% and has multiple choices, short and long answer questions. The students also do an oral examination.

Examinations showed that a majority of the students do not read the question properly to answer what is required. Often, they add a lot of additional text not relevant to the question and thus struggle for time. Illustrations are poor and labeling is lacking.

Student's basic grasp of English is average. Revision seems to be at variance to learning shown by tests and thus end year examination is not predictable. Reviews of tests are carried out to guide students on examination questions and highlight mistakes. More efforts are needed on improving answering questions.

All first year Pwani University students attend a course in critical thinking. This is emphasized in class. Not many apply critical thinking when learning and writing exams where clarity of information and good clear understanding is important.

## Conclusion

This perspective is on methods used in teaching and learning of anatomy to students with diverse "learning attitudes" and socio-cultural background. This is in context of limited resources and teaching aids. Further evaluation of examination outcome following use of these methods may reveal effectiveness of these methods.

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## References

1. Mbogho A, Hassanali J. Tackling classroom apathy among undergraduate students in a developing world context at Pwani University INTED Proceedings. 2017; 2337-2340.
2. Hassanali J. Teaching and research experience in Anatomy and Oral Biology in School of Health Sciences, University of Nairobi. Austin Journal of Anatomy. 2016; 3: 1-4.
3. Hassanali J. Importance of knowledge and awareness on career choices of students undertaking health profession courses. Editorial J Ken Dent Asssoc. 2014; 2: 196-197.