Project Name

Accuracy and Proficiency of Auscultatory Skills in Nursing Students Using a Bluetooth Connected Stethoscope

Principal Investigator

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Campus

Delhi, College of Technology at

Year of Project

2016

Tier

Tier Two

Overview Summary

Through 3D medical illustration and open-access instructional design, we can enhance the educational value and accessibility of our pedagogical approach to a wider community of learners.

Project Abstract

The stethoscope is one of the most important tools for listening to heart, lung, and other body sounds. Teaching auscultatory skills with current equipment is cumbersome. With one diaphragm and two headsets, there is close, almost uncomfortable physical proximity between the student, the faculty, and the patient. Sound quality is poor and faculty must be present with every student, at every patient assessment in order to know what the student is hearing. The Eko stethoscope brings together Bluetooth connectivity, mobile applications, visualization of sounds, real time streaming, and sound recording to allow enhanced playback and listening for heart, lung, and other body sounds. The purpose of this study is to increase accuracy and proficiency of auscultatory skills in pre-licensure nurses through use of a Bluetooth connected stethoscope. Auscultation skills are vital in patient assessment and recognition of problematic sounds can lead to timely interventions that prevent poor patient outcomes.

Connected Learning Models

● Active Learning

Instructional Technologies

● Mobile Learning