

Modern genomic technologies have become one of the important tools in diagnosis and guidance in symptoms management. The same technologies are commonly applied in identifying micro-organisms and viruses that further dictate specific therapeutic management or personal medicine. The personal medicine has become the future directions in health strategies and genomic technologies is an important tool applied in this new era. During the 2<sup>nd</sup> year of nursing curriculum, our nursing students will be studying strategies of laboratory identification of micro-organisms. A number of modern genomic technologies have been discussed with the working principles and their clinical applications. Most of the nursing students found the principle of genomic technologies very hard to understand. Therefore, this project aims to develop tailor-made virtual reality games for explaining the complicated concepts and showing how the knowledge can be applied in some clinical examples.

A mobile app using virtual reality technology was designed and covered the following areas:

- 1) The 3D structures of key materials of genomic technology used in clinical applications.
- 2) The working principles of the genomic technology in the 3D virtual reality environment.

A quantitative survey will be conducted to evaluate users' satisfaction. Participants will be invited to complete eleven 6-point Likert-type item for assessing their perception of those games including the clarity, depth and length of the content.

Although formal evaluation has not been conducted yet, it has been perceived the BN and MNSP students have been showing enormous interest in using the VR app during the class.

Also focus group interviews will be conducted.