Trio-preparation of Health Care Students for Digital Era in Universiti Malaysia Sabah – Case Study

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ABSTRACT

Introduction: Creating an educational climate that engages the students in the digital era is crucial as it prepares them for the future.

Objectives: The aim of this multiple case study is to highlight the impact of creative educational environment on the students’ awareness of digital era tools.

Methods: In this study three activities were organized. Firstly, a brain storming seminar titled “Medical Practice in Artificial Intelligence Era” was held. The second event was E-poster competitions which challenged the students’ curiosity to address the health problems and to introduce innovative solutions to solve it. Medical and nursing students presented 32 posters. Third activity was MeDuino, a hands-on workshop to familiarize the students with arduino technology in medical practice.

Results: Around 260 participants attended the seminar. In their feedback, 72% of students found the topics attractive and more than 60% found its theme relevant and beneficial. E-poster competition was evaluated using a modified rubric scale. The data was analysed by SPSS showed that only “creativity” and “practicality” merits scored little above the mean range. There was no statistically significant difference in the mean score of ‘creativity’ and ‘practicality’ between medical students and nursing students. However, in general medical students’ scores were higher compared to nursing students. 90% of students said that they improved cognitively and 85% found it fascinating. In MeDuino workshop (Robotics), The 30 participants practiced mini projects. 86 % found it attractive, 81% expressed that it improved their cognitive about technology as noted in comparing the pre and post-event questionnaires. The students’ concerns included the time constraints short time and lack of lecturers’ guidance during posters’ preparation.

Conclusion(s): Transforming educational environment physically, emotionally and socially managed to address few aspects digital era. Allocating more time, facilities and training in the informal curriculum could enhance health-care students mastering of future tools.

Keywords: e-poster, creativity, robotics, educational environment.