

Virtual Reality ★ Pediatric Nursing

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Objectives

- (1) To maximize students' learning by allowing them to learn in their own pace with the use of the developed courseware;
- (2) To support flipped classroom implementation in the course;
- (3) To engage students in an active learning environment.

Topic

The topic was "Pediatric intravenous infusion".



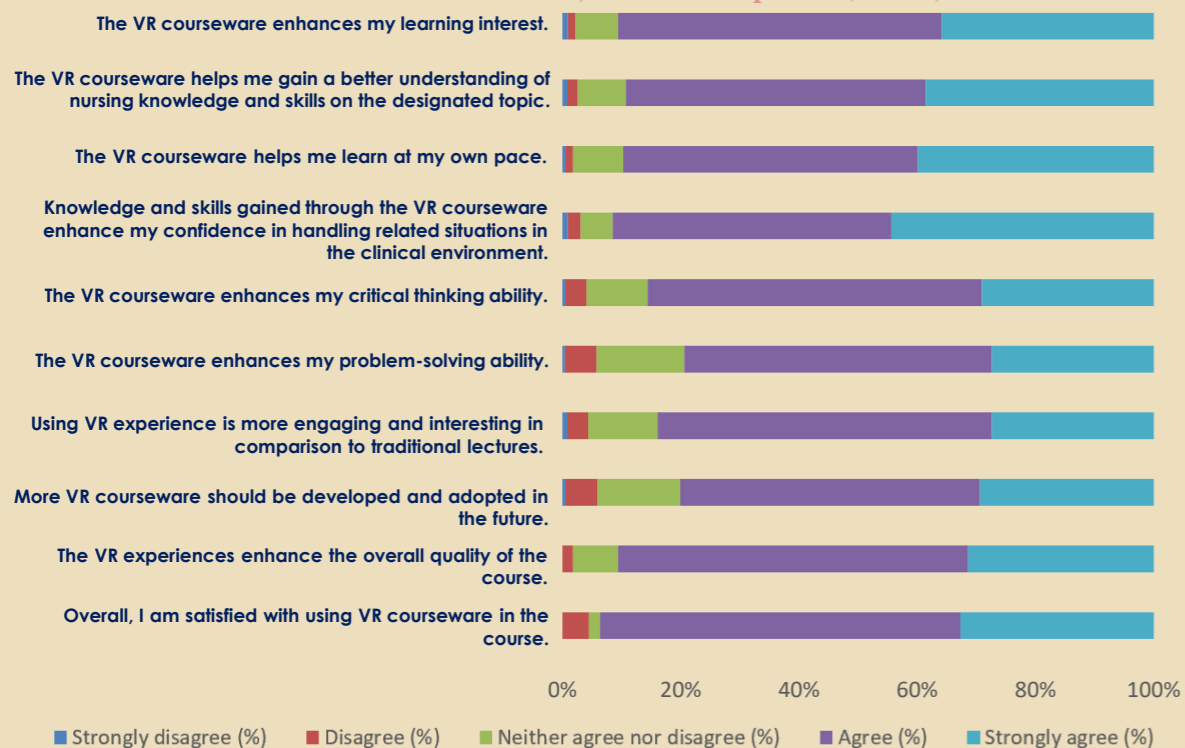
Results

The project has been evaluated by

1. student surveys
2. teachers' reflection
3. qualitative interviews.

Satisfaction with virtual reality courseware

243 students enrolled in this course, 223 valid responses (79.1%) were received.



The 22-item Approaches to Teaching Inventory is a 5-point Likert scale (1=only rarely to 5=almost always) used to explore teachers' approaches to teaching as a measure of teaching quality.

Overall, teachers adopted various approaches in teaching this course with mean score of the items ranged from 3.50 to 5.00.

Teachers' reflection

VR promoted our engagement and increased our interest in learning in the laboratory sessions.

VR allowed us to make mistakes and learn from error.

The VR scenarios were "real" and "similar to what we encountered during clinical practicum".



22 students were recruited for qualitative interviews

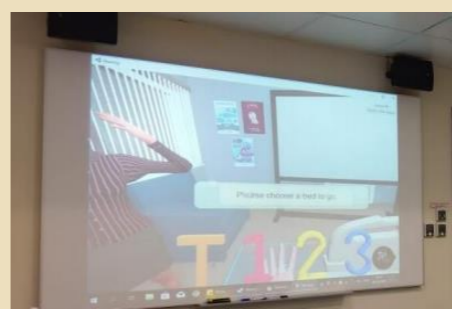
Qualitative interviews

Achievements

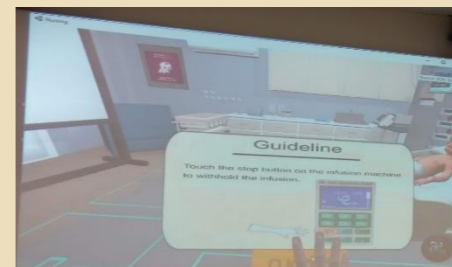
A courseware consisted of three scenarios that covered the topic has been produced and used in the course.

Scenario 1: Pediatric intravenous infusion assessment

The objective was to equip students with foundational knowledge in conducting assessment before intravenous infusion.



Scenario 2: Problems solving during intravenous infusion



The students were required to identify factors that inhibit the intravenous infusion and to consider appropriate intervention for it.



Scenario 3: Manage complications during intravenous infusion



A pediatric client presented with complications of intravenous infusion was shown.



Students were required to identify these factors and to implement appropriate interventions to manage the complications.

Conclusions

The evaluation indicated that the project has achieved its objectives effectively and completely.

Acknowledgements & Contacts

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