



A 'WIN-WIN' GENOMIC SCIENCE EDUCATION ACHIEVED BY STUDENT PEER TUTOR PROGRAMME

Chun Sing LAM, Ho Lun WONG, Edmond Pui Hang CHOI
School of Nursing, Li Ka Shing Faculty of Medicine, The University of Hong Kong



HKU Med LKS Faculty of Medicine
School of Nursing
香港大學護理學院



01 Introduction

Genomic science education is essential to pre-registration nursing students for understanding the pathophysiology of diseases. Yet, pre-registration nursing students often perceive the concepts as too abstract to learn, resulting in a lack of motivation and engagement in learning. Besides, due to the large class size, pre-registration nursing students may not be able to gain timely feedback and valuable one-to-one discussion with lecturers.

02 Objective

We aim to introduce student peer tutor programme which provide academic support to enhance pre-registration nursing students' engagement in genomic science class. Meanwhile, the programme provides student peer tutors a platform to obtain teaching hours for fellowship application of Advance Higher Education (UK).

03 Methodology

Student peer tutors were selected based on academic credentials. They co-designed the teaching materials such as online discussion forum (Padlet), in-class assessment (Word hunting game), animated videos, laboratory diagnostic videos, and DNA/RNA/Amino acids boardgame task with lecturers

04 Results

Student peer tutor programme substantially enhanced students' engagement in the class. Positive feedback were also received in the semi-structured interviews.

References:

Kember, D., & Leung, D. Y. (2009). Development of a questionnaire for assessing students' perceptions of the teaching and learning environment and its use in quality assurance. *Learning Environments Research*, 12, 15-29.

05 Analysis

Paired- T test was adopted to analyze the changes in the level of engagement after the introduction of student peer tutor programme.

	Pre-intervention (Mean ± SD)	Post-intervention (Mean ± SD)	Statistical Significance (p-value) (p<0.05)	Points Estimate (Cohen's d)
Critical thinking	8.19±1.276	9.19±0.981	0.008	0.760
Creative thinking	8.06±1.389	8.94±1.340	0.043	0.552
Self-managed learning	8.13±1.544	9.19±0.981	0.008	0.765
Problem solving	8.19±1.471	9.13±1.025	0.014	0.700
Interpersonal skills and groupwork	8.06±1.526	9±1.265	0.016	0.675
Active learning	8.19±1.515	9.5±0.894	0.010	0.738
Overall	48.81±7.952	54.94±5.904	0.007	0.772

Student A: 'Student peer tutors can deliver the message from students' perspectives and give timely feedback'

Student B: 'I do not feel embarrassed when I ask student peer tutors questions'

Student C: 'Genomic science class delivered via student peer tutor programme are enjoyable'

06 Conclusion

To conclude, the student peer tutor programme can significantly augment student's engagement in the class.

