

The Flipped-Classroom in Nutrition Intern Clinical Training

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OBJECTIVES

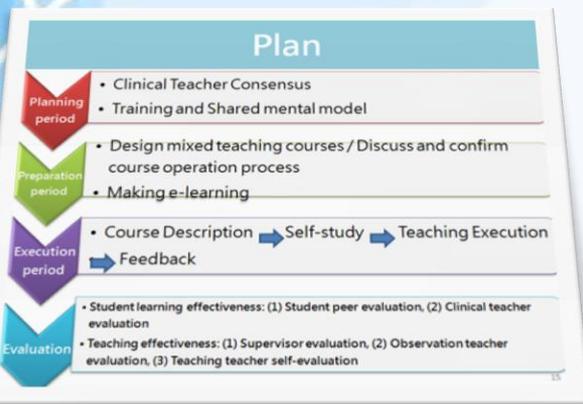
Flipped-classroom has been widely used in various teaching fields in recent years. It is a learner-centered teaching method. However, the application of the flipped-classroom model in nutrition intern clinical training is not universal. We implemented this teaching approach to the core training courses to evaluate its efficacy, benefits, and overall outcome.

METHODS

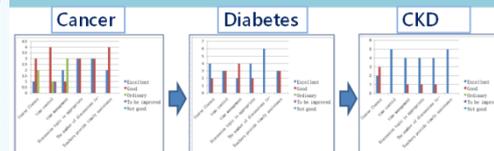
We designed 3 topics for the basic clinical course, including diabetes, chronic kidney disease, and cancer. The flipped-classroom consisted of e-learning outside of the classroom, followed by an in-class interactive session with problem based and case-based discussion. Preceptors assisted the discussion process, guiding it in the right direction. Trainees then presented their reports after discussion. Afterwards, preceptors gave feedback at the end of each lesson. Finally, trainees and preceptors finished evaluations of the course, trainees, and preceptors.

RESULTS

A total of 10 trainees attended the courses. The average score of knowledge, skill, and attitude was 9.01, 8.90, and 8.88 respectively from the trainees' evaluation. Preceptors also awarded high scores for knowledge, skills, and attitude. Meanwhile, the trainees had very high evaluations of the Flipped-classroom. They believed that Flipped-classroom is interesting, deepens their impression of relevant knowledge, and can provide more personal thinking as a result of the presentations from their peers. The preceptors found the Flipped-classroom to be an active learning tool, which allowed students to become the protagonists of teaching activities, with trainees preparing in advance and participating in discussions actively. Many other scenarios can be easily integrated into this process allowing the teaching to have more flexibility.



Clinical preceptors evaluation the courses



Each course has progressed and the evaluation is above the "Good"

Evaluation By Students

Through the ZUVIO system (instant response system)



CONCLUSIONS

Flipped-classroom is an active learning education that guides learners to have a sense of accomplishment at each stage and achieves superior clinical care advantages through excellent education.

Benefits from Implement the Flipped teaching

- **Students Feedback:**
 - Self-learning
 - Critical thinking and problem solving
 - Peer motivation
 - Teamwork
 - Think from different perspectives
- **Teachers Feedback:**
 - A better understanding of students' difficulties
 - Generalize the Core Problems
 - Arrange time more effectively and creatively
 - To be more active in teaching

