E-learning to Support Acquiring Nursing Practice Ability -CanGo Project-

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Background

- As medical treatment levels are becoming more advanced and patients' requirements become increasingly diverse, what is requested now by every organization that is taking part of nursing education is the need to better cultivate human resources to work in nursing positions.
- They can gain proper proficiency in nursing practice, which means the ability to assess a patient's situation correctly, then understand and provide the most appropriate nursing care to that patient.
- To respond to that social need for human resources, we believe that it is necessary to improve the education and instruction of nursing more qualitatively, and to provide students with a new environment [1] in which they can study efficiently.

CanGo Project Summary

- Our University was selected to work with “Development of e-Learning Program to help enhance human resource ability based on needs,” which is a government-supported program of fiscal year 2005 to address modern educational needs (Modern GP).
- The program began activities as the “CanGo” project. “CanGo” stands for “Communication”, “Art”, “Nursing”, “Good practice”, “Osaka prefecture university”.

e-Learning for Nursing
CanGo
Communication Art Nursing Good Practice
Osaka Prefecture University

Purpose of CanGo

- The CanGo project objective is to fill the gaps that are readily noticeable from one study method to another, to improve the efficiency and usefulness of every study activity on-campus or off-campus, and to improve students' attitudes toward study more aggressively.
- This objective must be achieved so that students can acquire the ability to solve study-related problems that might often occur in lectures, or during practice sessions made on-campus or on-site, all of which are conducted in the regular curriculum of nursing education.

Backbones of CanGo

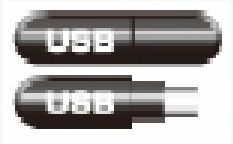
I. To produce e-Learning materials for the study of nursing practice and examples for use by students to acquire problem-solving ability.

II. To construct a ubiquitous on-demand study-supporting environment in which students can study independently through e-Learning at any time, anywhere, and without any difficulty whatsoever.

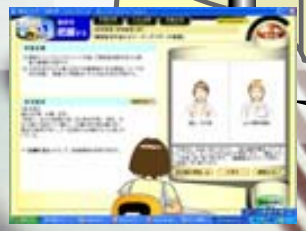
Overall structure of CanGo project

e-Learning Supports Acquiring Practical Nursing Ability

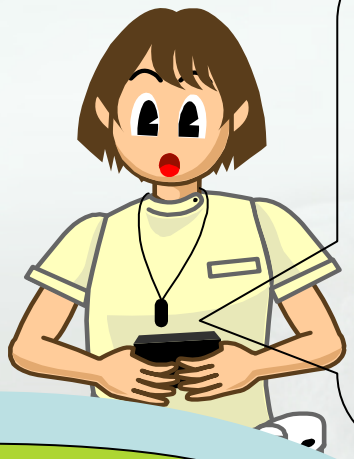
USB Notebook
(Personal LMS)



※For storing Study History, ID (key) to training server, and Download control on knowledge of digital nursing dictionary



e-Learning Training Materials for Nursing Practice



Digital Nursing Dictionary
(Portable Multimedia Terminal)

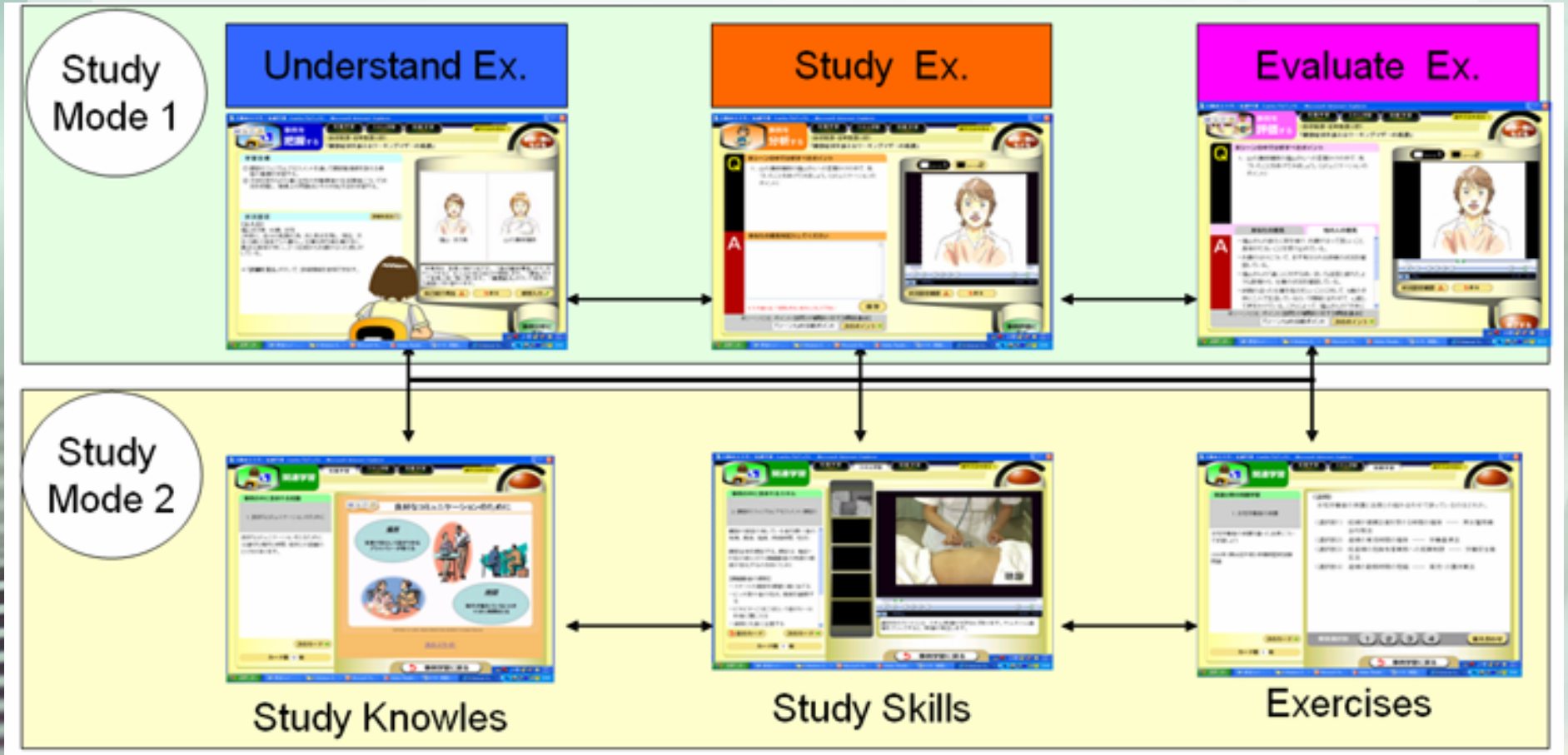
※Download necessary knowledge through Internet to use for training practice

Nursing
e-Learning
Training Server

Broad Band Internet

Bi-Directional Study Support using Cell Phone (PHS)
(Query to Instructor & Student communication.)

e-Learning Training Materials



Nursing Practice Examples (Nursing Process) of "Basic Nursing Knowledge", "Basic Nursing Techniques" and "National Examinations" are studied through e-Learning.

Practice and Evaluation(2006)

- We hosted a series of lectures using these training materials, and used portable multimedia terminals for on-site practice.

Lectures using training materials

Portable Multimedia Terminal (Digital Nursing Dictionary)

Lectures using nursing examples materials

- Method:
  - Instructors who joined in the creation of training materials actually used them in their classes.
  - We asked them to report about how they used the training materials in their classes in addition to the responses they received from their students.
  - The actual lectures were intended mainly for third-year nursing department students (about 120–140) studying for work in five different nursing fields.
- Some opinions and comments from the students
  - It was easy to grasp the images of the examples.
  - It was easy to read the patient's emotions shown in the examples.
  - It was realistic, so it was easy to understand.
  - It was realistic and practical.
  - It was good from a visual perspective with the image pictures provided.
  - It was easy to know the necessary information.
  - It was good to hear the information given by voice.
  - I was able to understand the priority of the nursing care problems.
  - Some students pointed out not only about how to collect information, but also about the methodology of how nursing-care assistants should recognize situations to move forward to create opportunities to educate patients.

On-site practice support

- Methods:
  - We prepared portable multimedia terminals loaded with training material contents prepared for the associated nursing practice areas, and lent them each to students who agreed to monitor them.
  - Subsequently, we requested that they use them during the entire practice period.
  - We requested them to give us opinions regarding the operability of the training materials and other information when they had to return the terminal.
- Some opinions and comments from the students
  - It was good to be able to find and view the necessary document without taking much time.
  - Because it is basically a game machine, its operability is good.
  - It was easy to use the training materials in this way.
  - The images in the training materials are useful, as if we were playing a game.
  - It was easy to carry because it is small and light.
  - They were helpful in the practice class.
  - It would have been nice if they had been available before.
  - It was very convenient to be able to see technically related pictures close at hand.
  - It was helpful to understand things using images.

Conclusion

- We introduced our CanGo project, and reported students' comments and opinions given when we had the nursing practice example materials and sub-materials contents used for the actual classes.
- We reported those comments and opinions given from the experiences we had when supporting the actual on-site practices.
- Future studies will further introduce e-Learning techniques based on the plan, along with regular and constructive review.

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References & Acknowledgments

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[3] Yukie M., Yoichiro S. and Kazuhisa S. Framework for Problem-Solving Based Learning in Nursing Domain -A Practical Study-, Learning by effective utilization of technologies: Facilitating intercultural understanding: IOS press 2006; pp.625-628.

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