互動式牙醫助理多媒體教學系統之建置

An Interactive Multimedia E-learning System for Dental Clinic Assistants

中文摘要

本研究旨在探討牙醫助理使用媒體輔助教學對牙醫助理學習成效的影響本篇論文主要是以牙醫助理電腦教學系統之建置搭配觸控式螢幕來提升牙醫助理的專業知識、減少診所訓練助理的時間、標準化診所應徵助理時的試用及錄取流程，進而讓此教學系統成爲診所在選擇及錄取助理的輔助工具，將各家牙材作爲媒體的教學內容。其中內容包括牙科材料與器械的認識，包含中文名、稱英文名稱。牙科材料與器械的功能說明，包含材料特性說明、器械使用部位的認識。牙科材料與器械的英文名稱包含英文發音、英文聽力。牙科材料與器械的消毒保養，包含消毒步驟、機器啓動流程。牙科齒列模型的取得與灌製，包含印模材料調拌、石膏模型灌製方式。研究樣本爲牙醫助理，分爲實驗組與對照組各 25 位，樣本合計共 50 人，分別進行兩週的實驗教學。兩組的學習成就評量均以系統編製的隨堂測驗施測，此外並編製使用評估滿意度問卷調查。對象爲牙醫師及牙醫助理各 50 位進行評估。研究結果顯示：實驗組學員在未使用本系統情況下測驗後測上得分略高於對照組，但並未達到顯著水準；而在使用系統後，實驗組和對照組比較中，使用系統後的實驗組後測成績高於對照組，並且顯著高於對照組。此外，由使用評估滿意度問卷的結果來看，牙醫助理及牙醫師對於媒體輔助教學普遍認爲滿意，多數期望此教學系統可以取代傳統教育訓練方式，此外由問卷調查中，也發現一些學習上的不便之處。經本研究所得之經驗，將提出一些媒體教學上的建議及改善的地方。

英文摘要

The dental assistants had already taken an important role in the dental clinic since several years ago because of the four-handed dentistry. In America, there are lots of training courses for dental assistants. However, the education and formal trainings are very insufficient in Taiwan. Furthermore, the dental assistants maybe engaged as many different kinds of occupations before the dental clinics employ them. So there could be some troubles for dentists to communicate with new assistants. In order to solve these problems, we have developed an interactive multimedia e-learning system for dental clinic assistants. They can learn the basic knowledge from the system such as the Chinese and English names of the instruments, the pronunciation of English name of the instruments, the appearance of the instruments, and the brief introduction of the instruments. After a short time training, the new dental clinic assistants will have the ability to communicate with the dentists very easily.