

醫學生電腦使用能力之調查.

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摘要

醫學資訊學乃是應用電腦科技以有效解決生物醫學資訊的儲存、擷取與共享等問題，也是研究醫學問題解決及決策分析的科學。台大醫學院自 1994 年起在醫學系二年級開設醫學資訊學兩學分必修課程，是國內第一個醫學資訊學的正式課程。本研究以修習醫學資訊學的 134 位醫學系學生為對象，在課前課後實問卷調查。其目的在於評估學生之電腦程度及電腦學習使用的前後差異，且進一步探討教學內容。結果發現雖然有近九成的醫學生使用過電腦，但有一半醫學生沒有自己的電腦，一半的醫學生沒有上過任何電腦課；有三分之一醫學生缺乏電腦使用能力，能夠獨立使用電腦的只有三成，但是仍有一成是專家級。軟體使用種類，以日常生活相關的電腦遊戲多媒體、文書處理、中文系統為最多，上課後增加最多的是學術網路使用及文獻檢索。在軟體介面方面，醫學生普遍偏好圖形環境軟體，并希望增加此類課程內容。課前課後的比較發現，在電腦軟硬體使用、學習動機與對圖形使用者介面的偏好均有顯著的改變。本結果提示，在醫學資訊授課方面應加強電腦基礎訓練並考慮學生的個別差異性，未來醫學資訊課程的規劃，將朝向多元化的發展，不只是單一的課程，也要將適合的教學演講與實習，漸漸地整合至基礎醫學及臨床醫學課程中。

Abstract

Medical informatics is the science of applying computer technology to solve the problems of storage and retrieval and the sharing of biomedical information. It is also used to solve medical problem and in decision analysis. Since the 1980s, computer technology has progressed rapidly while medical information has greatly increased. In foreign countries medical informatics becomes an important discipline in medicine, but in Taiwan it is just in its beginning and is extremely lacking in curriculum and qualified faculty. The Department of Medical Informatics, National Taiwan University College of Medicine, began a compulsory course of medical informatics for second-year medical students in 1994 which was the first formal course of medical informatics in Taiwan. The purpose of this study was to evaluate the computer literacy of medical students and to compare the differences of computer usage before and after the course. We also wanted to evaluate the content and quality of the software taught.

This study surveyed 134 second-year medical students before and after taking this course. A formatted questionnaire included computer knowledge and the style of using computers was used.

About 90% of students had experience using computers, but only 50% owned computers and 50% had taken computer courses. About two thirds of the medical students were computer illiterate, however, 10% of the medical students were

considered experts. The most common software used by students included game/multimedia, word processor and Chinese operation system. The frequency of using the Internet and the literature searching programs increased significantly after the course. Students also preferred graphic user interface programs and suggested increasing their use in this course. The comparison between before and after the course revealed significant increases of computer usage, learning motivation and the students' preference of graphic user interface.

This study revealed medical students generally lack computer knowledge and capabilities. However, this finding varied greatly between individual students. In the future, medical informatics should enhance basic computer training and also consider individual differences. The design of curriculum should focus on both mono-component and multidiscipline courses. It should integrate lectures with actual computer use in basic and clinical science to further advance medical education in Taiwan. (Full Text in Chinese)