

AWARENESS ON E-LEARNING OF STUDENTS AND STAFF OF THE FACULTY OF DENTAL SCIENCES

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Introduction

E-Learning is the acquisition and use of knowledge distributed and facilitated primarily by electronic means. E-learning has been found to be useful for undergraduate medical and dental education (Gormley, 2009.; Grimes, 2002). These tools have been found to be useful in supplementing traditional methods of learning in the dental undergraduate programme (Gupta et al., 2004). A previous survey on computer literacy among dental students carried out in the Faculty of Dental Sciences has revealed the computer use to be lower than that in the developed countries (Wijekoon, 2009). Objectives of this study were to find out the awareness and pattern of the use of computers for E-learning among the undergraduate students, academic and non-academic staff of the Faculty of Dental Sciences.

Materials and Methods

Four groups of participants were included in this study as follows: group 1 (undergraduate students of the non-clinical –first and second year batches and clinical –third and fourth year batches), group 2 (new entrants), group 3 (academic staff) and group 4 (technical, nursing and clerical members). Self-administered questionnaires distributed carried questions on general computer use, E-learning methods and requesting comments on possibility of including

E-learning in the dental curriculum. Responses received were analyzed using Chi-square test to determine the relationships.

Results

In group 1, the majority of students in clinical (CL) and non-clinical (NCL) batches (88.3% and 88.8% respectively) have used computers before coming to University. After coming to University, majority in the CL (97.9%) have used computers compared to the NCL (91.5%) $p=0.03$. Desktop use was more common among CL (94.5%) while laptop use was commonly observed among NCL (29.1%) $p=0.04$

Regarding E-learning methods, more students in CL than NCL have mentioned usage of Computer Aided Learning CD (44.8%, 33.3%), web based tools (47.6%, 45.2) and downloading from internet (73.8%, 34.2%) as such methods while more students in NCL than CL have preferred bulletin boards (38.5%, 32.4%) and quizzes (42.7% 33.1%) as given in Figure 1. A separate test revealed that there is a statistically significant difference between student responses for CAL CD method and downloading from internet ($p=0.04$). In group 2 (new entrants) majority of computer usage was shown to be at home (67.2%), school (54.1%) or other places (19.7%). Their choice of

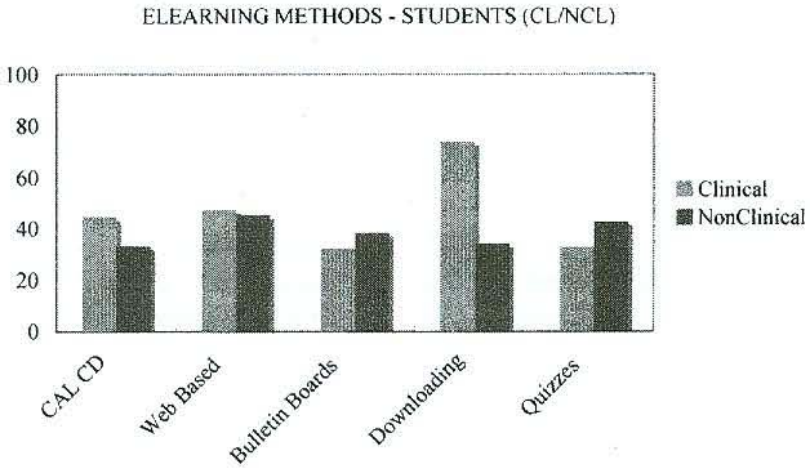


Figure 1

programmes have been learning and leisure activities. In group 3 (academic staff), all participants were using computers (desktops 95.5%, laptops 90.9%). Majority used computers at home (90.9%) and at office (90.9%). Majority accepts e-learning methods as CAL CD (81.8%), web based material (72.7%), bulletin boards (68.2%),

downloading (72.7%) and quizzes (59.2%). In group 4 (non academic staff), 63.3% used computers mostly desktops. Most stated that e-learning includes CAL CD (30%), web based (23.3%) and downloading (23.3%) while only few members selected bulletin boards (10%) and quizzes (13.3%) as given in Figure 2.

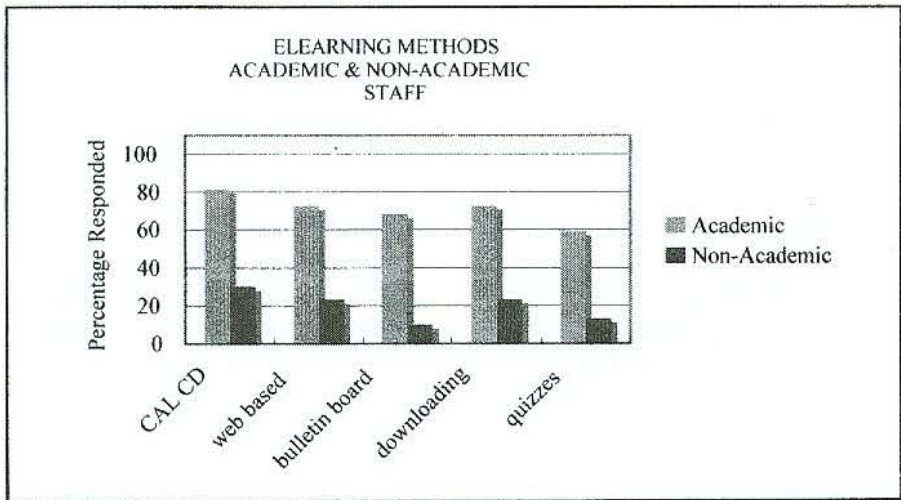


Figure 2

Discussion

In this survey, the significant differences in computer use observed between senior and junior students may be due to the heavy demand on such use for CL students. High use of laptop computer use among junior students may indicate the abundance of this type of equipment in the recent years. Regarding the methods of e-learning CL students appear to give priority to CAL CD and internet downloading. NCL students may not have been aware of usefulness of these methods for e-learning and hence the low response. Most of the academic staff have expressed their computer use in academic work and also gave higher consideration for all e-learning methods. Non academic staff has not expressed much involvement in the use of computers for academic work. Majority of participants from all groups studied have expressed that it is possible to carryout e-learning in Dental curriculum in our faculty.

Conclusions

This study shows that most of the senior students of the faculty use computers in their E-learning activities. It may be necessary to train academic and non academic staff on the design of E-learning material in the future. It may also be necessary to consider giving an opportunity to new entrants to improve their computer awareness during early university life.

References

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