



Introduction

Globalization and advances in information technology are some of the challenges that face higher educational institutions. The work environment is becoming more competitive, and this necessitates a focus on quality of education and innovations in delivery of information to learners. There is an urgent need for revising teaching and learning techniques in general. The challenges faced by academic institutions call for a change in how the teaching is delivered, how learning may be facilitated by teachers. A new set of strategies must be developed to transform the traditional didactic lecture-based styles into more dynamic approaches that encourage learning (*Shayya, 2009*).

Achieving learning outcomes in large undergraduate courses in any university is increasingly becoming challenging and more complex. Such courses are not only challenging in their development and delivery but also the efforts needed to ensure that the best learning outcomes are efficiently achieved (*Kehoe, Tennent, and Windeknecht, 2004*).

The traditional face-to-face teaching approaches are generally teacher-directed/centered. Instructors often follow pre-prepared set of activities and demonstrations. This approach may not engage the students in a way that helps students develop skills or acquire the knowledge that can be retrained beyond the end of the term. Lecturing at the students that often makes the teacher focuses on the presentation of content does not necessarily promote students' engagement and their active participation in class (*Udovic, et al., 2002*).

Therefore, to promote quality of teaching and learning in the classroom, non-traditional strategies need to be used. The use of



computers to guide learning and to create learning communities is referred to as “Computer-mediated learning, computer-based instruction, computer-assisted instruction, computer-assisted learning, and computer-based training (CBT)” (*Billings and Halstead, 2009*).

CBT is increasingly being used because of its low expense, the ease to use in the process of preparation learning material, delivery of training and its ease of use by the learners. *Somers (2004)* argued that CBT can “improve the efficiency and effectiveness of training”, it can result in “reductions in training time of 25 to 30 percent over other more conventional forms of training”. However, success in CBT requires active participation by the trainee. This participation can lead to a higher retention of the subject-matter and provide a foundation for additional retention of knowledge and skill over time.

According to *Thorbeck, (2000)* CBT, which is based on interactive courseware (ICW), allows an interaction between the student and the computer program. This interaction may begin with a mouse click, a key press, a screen touch, or any other input by the trainee. ICW may provide feedback visually, through audio, or through any other means that can be perceived by the student undertaking the training. CBT courseware may include multimedia elements, that simultaneously present on a one or more computers a variety of media types that may include text, □ still images, animations, graphics, audio and video.

The nurse internship program, as described by *Danner (2004)*, is an innovative means designed to orient new graduating nurses about hospital environment, and assist the nurses for integrating both professionally and socially. The program provides nurses with an



opportunity to apply the clinical nursing knowledge they learnt to the work. Additionally it provides the nurses with an opportunity to demonstrate understanding and competence in technical skills and procedures related to the specialty in which they are practicing. The internship program also allows for the application of sound clinical judgment and critical thinking throughout the nursing process in the management of patient problems. It assists them to develop time-management and delegation skills (*Casey et al. 2004 and Smith, 2008*). To enable nurses succeed in the work place, the nursing curriculum was designed using CBT to prepare them for the internship program.

Some studies were conducted about the use of computers in teaching and learning. *Jeffries, (2001)* compared lectures with multimedia CD-ROM methods for teaching administration of oral medications. He observed higher satisfaction and greater cognitive gains for the multimedia group. On the other hand, *Abutarbush, et. al., (2006)* concluded that computer-assisted learning was an acceptable and effective method of training students to pass a nasogastric tube with potential welfare, proficiency and knowledge advantages. Similarly, numerous studies have shown that the use of computers for training resulted in an increase in student's knowledge, and those gains in knowledge were comparable to those achieved by traditional face-to-face lectures (*Holt, et al. 2001, Pomplun, Frey, & Becker, 2002, DeLorenzo & Abbott, 2004 and Johnson, Dasgupta, 2005*). It would be interesting to see whether computer-based training can help nursing-interns learn important subjects and acquire skills that are crucial to their success in hospital environments.



Significance of the Study

Recent research findings have clearly demonstrated that computer-based training has increasingly become an integral part of modern learning environments, and a useful companion for any good training strategy. Use of computer-based training on a wide scale has been recommended for improving the quality of nursing education. So, this study was designed to allow nursing interns to work at their own pace to review the instructional content as often as needed, in order to get their attention and maintain their interest in the subject matter and the training process. The study was designed to explore nursing interns' attitude toward computer-based training. This study is expected to explain the value of CBT in training nurses in Egypt

Research Hypotheses

Computer-based training is more motivating and stimulating to the nursing interns to gain knowledge and skills than traditional method of interaction and there are significant differences in the mean scores of both the control and the experimental group's regarding the mastery of administrative knowledge and skills.