

# **SUMMARY**

#### - INTRODUCTION:

The electronic learning provides appropriate educational services that keep up with the latest technological development. It supports the educational process and improves it from memorization to creativity, interactivity and skills development. In other words, it changes the traditional learning into information technology-based-electronic learning.

Although the mobile phones are relatively new, they are very effective because they changed the concept of communication among the individuals. The SMS is a new form of communication. Since the cost of mobile phones is cheap, most people use them frequently.

#### - STUDY PROBLEM:

The present study was carried out because of the low level of achievement of the object-oriented programming (OOP) principles among the prep third-grade pupils at Al-Azhar Institutes. In order to tackle this problem, the following questions were stated:

- 1) What are the principles of object-oriented programming which should be developed among Al-Azhar Institutes pupils using the mobile phones?
- 2) What are the suitable technologies of mobile learning for developing the object-oriented programming (OOP) principles among at Al-Azhar Institutes pupils?
- 3) What is the suggested vision for using these technologies to develop the object-oriented programming (OOP) principles among at Al-Azhar Institutes pupils?

4) What is the effect of using these technologies on the development of the object-oriented programming (OOP) principles among at Al-Azhar Institutes pupils?

#### STUDY OBJECTIVES:

- 1. Determining the object-oriented programming (OOP) principles among should be developed among Al-Azhar Institutes pupils using the mobile phone.
- 2. Identifying the suitable technologies of mobile learning for developing the object-oriented programming (OOP) principles among at Al-Azhar Institutes pupils.
- 3. Developing a suggested vision for using these technologies to develop the object-oriented programming (OOP) principles among at Al-Azhar Institutes pupils.
- 4. Measuring the effect of using these technologies on the development of the object-oriented programming (OOP) principles among at Al-Azhar Institutes pupils.

#### - STUDY LIMITATIONS:

- A group of prep third-grade female pupils at Al-Azhar Institutes pupils.
- Some object-oriented programming (OOP) principles and concepts.
- O Using some services such as direct contact SMS, and MMS.
- A sample of 80 of prep third-grade female pupils in Hasan Abou-Bakr Institute for Girls in Al-Qanater Al-Khayriya during the school year 2010-2011.

#### STUDY METHODS

The descriptive method was used for describing and analyzing the related literature and the theoretical framework. The quasi-experimental method was also used for measuring the effect of some services provided by the mobile phone on developing the object-oriented programming (OOP) principles among at Al-Azhar Institutes pupils.

#### - STUDY TOOL:

The study tool was an achievement test on the objectoriented programming (OOP) principles among at Al-Azhar Institutes pupils.

#### - STUDY PROCEDURES:

- 1) Reviewing literature.
- 2) Preparing a list of the object-oriented programming (OOP) principles appropriate to the prep third-grade female pupils.
- 3) Developing a list of concepts and principles in its final form.
- 4) Conducting a pilot study for teaching the content.
- 5) Developing the study tool (the achievement test) and judging its validity.
- 6) Developing the study tool in its final form.
- 7) Drawing the study sample and dividing them into four groups: one control and three experimental.
- 8) Administering the achievement test as a pre-application.

- 9) Experimenting the object-oriented programming (OOP) principles.
- 10) Administering the achievement test as a post-application..
- 11) Carrying out the statistical treatment of the findings.
- 12) Analyzing the study findings.
- 13) Suggesting the study recommendations and further research.

#### - STUDY FINDINGS AND RESULTS:

- There were statistically significant differences at ≥ 0.05 between the scores means of each experimental group and the control group on the pre-application and the post-application of the achievement test, using t-test, in favour of the post-application of the three experimental groups. Therefore, the first hypothesis was verified.
- ■There were statistically significant differences between the scores means of each experimental group and the control group on the pre-application and the post-application of the achievement test, using t-test. Consequently, the second hypothesis was refused.
- There were statistically significant differences at ≥ 0.05 between the scores means of each experimental group on the postapplication of the achievement test, using One Way Analysis of Variance and Scheffe Test. As a result, the third hypothesis was accepted.
- ■The use of some mobile phones services was effective in developing the object-oriented programming (OOP) principles among at Al-Azhar Institutes pupils.

#### STUDY RECOMMENDADTIONS:

- ✓ The mobile phones should be used in education. They are available with most of the pupils.
- ✓ The need to integrate learning techniques mobile in education in light of the new approach for the integration of ICT in education, through its contents of the techniques or their services can offer many benefits to the process of education and training, and given new opportunities to learn the traditional classroom as well as in the mode of learning life outside the classroom.
- ✓ The mobile learning technologies should be integrated in education by setting policies and plans in the pre-university level.
- ✓ The mobile learning projects and programs should be supported and adopted.
- ✓ Interactive services and programs should be developed to be used in mobile learning environment.
- ✓ Support and upgrade programs, management systems, e-learning systems to support mobile learning.
- ✓ nto account the cost of learning by mobile applications and attempt to provide a cost effective and inexpensive for students.
- ✓ The educators' awareness of mobile phones roles in education should be developed.
- ✓ The teachers should be trained on the use of computer courses and object-oriented programming courses in teaching.
- ✓ Some researches should be carried out on the feasibility of using mobile learning technology in teaching and learning process.

#### Suggested researches and studies

In Light of the results of the study, the researcher suggests conducting more researches and studies such as:

- Employment possibilities and mobile phone service provider to learn Decisions other than those covered in the current study.
- 2) The relationship between the mental abilities of students and mobile technology (direct telephone conversation, SMS, MMS, Bluetooth) and its relationship with the academic Achievement.
- 3) Study of employment services through WAP mobile phone on the academic achievement and its impact on students' preferences and trends.
- 4) Study the impact of the use of social networking sites on the outcomes of learning through mobile.
- 5) Study the impact of the use of websites and forums on the educational outcomes of learning through mobile.
- 6) Study the impact of the use of research sites on the outcomes of learning through mobile.
- 7) Study the `relationship between course management systems and their relation to mobile learning.

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## Effect of Some Mobile Learning Techniques to Development the Object-Oriented Programming Concepts for El Azhar Institutes Students

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