

E-Learning: An Overview

by

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1. Definition of E-Learning

- E-Learning is the acquisition and use of knowledge distributed and facilitated primarily by electronic means. This form of learning currently depends on networks and computers but will likely evolve into systems consisting of a variety of channels (e.g., cellular phones, PDA's) as they are developed and adopted. E-Learning can take the form of courses as well as modules and smaller learning objects. E-learning may incorporate synchronous or asynchronous access and may be distributed geographically with varied limits of time.

(Wentling, T.L. et al. (2000) E-Learning – A Review of Literature

E-Learning makes use of recent technological developments and media such as:

- **Video conferencing**
- **Facebook**
- **You Tube**
- **i-Tunes**
- **i-Tunes 4**
- **i-Pods**
- **Podcasting**
- **Web- 2.0**
- **Web 3.0**

2. Spread of E-Learning

- **In the United States:**
- **1987 fewer than 10 states promoting distance E-Learning Education**
- **1989 all states were involved in distance learning programs**
- **Open universities in India, Pakistan, China and Turkey enroll more than three million students.**
- **Around 3 million students enrolled on-line in the USA**
- **More than 300,000 students are enrolled in the British Open University.**

3. Advantages of E-Learning

- No geographical and/or state boundaries.
- Uniformity of content.
- Low cost for stakeholders.
- Time saving/time flexibility.
- State of the art content.

Overall, the literature reviewed showed that significant savings are associated with the use of technology-based instruction when compared to traditional instruction. However, cost savings alone is not a good measure of effective training. Organizations must consider the learning that actually transpires as a result of training delivered. “...evaluation of cost-effectiveness should not focus on costs alone, but rather on costs in relation to educational value” (Thompson, 2000).

Thomson, M. (200)

<http://www.lucent.com./ced/learningworks/facinf1/htm1>

- **A study by Schutte revealed that virtual learners scored an average of 20 points higher on the 100-point mid-term and final exams [and] ... communicated with other learners more than did face-to-face learners”.**
- **Schutte, J.G. 1996, available at:**
- **<http://www.csum,ed4.sociology/virexp.htr>**

4. The British Open University

- Started 1969
- Accepted students 1971
- By 1980, 70,000 students enrolled
- 1998 graduated its 200,000-th student.
- 2004 ranked # 5 among all British Universities according to the Sunday Times Universities Guide. In the British Government's teaching quality assessment it outperformed Oxford, Cambridge and Imperial college
- Its key to success was its emphasis on excellence in:
 - scholarship
 - research
 - teaching
 - the systems and methods that help people to learn and succeed
- (<http://www.openc.ac.nh/about/ou/p3.shtm1>)

5. The Philadelphia Experience: Stage I (2003-2004)

- **Philadelphia University was accredited by UNESCO as the home of the UNESCO Avicenna Virtual University in Jordan in December, 2003.**
- **Philadelphia University's task was to prepare (10) courses in 2005**
- **Some Philadelphia University staff attended training workshops in Paris, France.**
- **A course entitled "Online Training Course for Avicenna Course Developers" was prepared by Professor al-Battaz, the Dean of the Faculty of Distance Learning to help faculty members at Philadelphia University develop E-Learning course material.**

6. The Philadelphia Experience: Stage II (2004-2005)

- **The following four courses were developed ,
and are available at:**

<http://pleiad.unesco.org>

- **Fundamentals of Telecommunications and
computer networks**
- **Software Analysis and Design**
- **Fundamentals of Artificial intelligence**
- **Introduction to Information Systems**

- **Philadelphia University participated in a workshop dedicated to formulating an educational framework together with quality assurance standards for Avicenna University. The workshop was held in Lebanon in July, 2004.**

7. The Philadelphia Experience: Stage III (2005-2006)

- **In March, 2005, PU in cooperation with UNESCO held a workshop that was attended by the developers of the above four courses. The workshop aimed at introducing advanced educational material production technologies and methodologies.**
- **PU developed the following four E-Learning courses:**
 - **General Biology**
 - **Introduction to Probability and Statistics.**
 - **Computer Architecture**
 - **Instrumentation and Measurements**

- **PU technical staff attended a workshop on LimSee authoring tools held in Tunisia in February, 2006.**
- **A team from UNESCO and the European Union visited PU (27-29 September, 2007) and reviewed the course material produced by the Avicenna Center.**
- **A detailed academic, technical, and financial report was submitted to UNESCO in December 2006.**

8. The Philadelphia Experience: Stage IV (2007- ...)

- **PU academic and technical staff produced the E-Learning material for the following seven courses:**
 - **Distributed Information Systems**
 - **Analysis and Design of Management Information Systems**
 - **E-Management and Information Technology**
 - **Cell Biology**
 - **Biostatistics**
 - **Mechatronics Systems**
 - **Signal Analysis and Processing**

9. PU Future Strategy

- **Continue its commitment to quality and excellence.**
- **Increase its delivery of E-Learning Courses**
- **Explore the use of blended learning in respect of meeting both academic and economic challenges**

- **Acquire the most recent E-Learning educational technologies**
- **Keep its highly qualified and competent E-Learning specialists**
- **Attract additional experts in both blended and E-Learning .**