

E-learning in Physical Education

Introduction

- e-learning is a computer based educational tool or system that enables you to learn anywhere and at any time.
- Today e-learning is mostly delivered through the internet, although in the past it was delivered using a blend of computer-based methods like CD-ROM.
- Technology has advanced so much that the geographical gap is bridged with the use of tools that make you feel as if you are inside the classroom.
- It offers the ability to share material in all kinds of formats such as videos, slideshows, word documents and PDFs.

- Some of the most important developments in education have happened since the launch of the internet.
- These days learners are well versed in the use of smartphones, text messaging and using the internet.
- Message boards, social media and various other means of online communication allow learners to keep in touch and discuss course related matters, whilst providing for a sense of community.
- The term “e-learning” has only been in existence since 1999, when the word was first utilized at a Computer Based Training (CBT) systems seminar.

History of e-learning

- In the 1840's Isaac Pitman taught his pupils shorthand via correspondence.
- In 1924, the first testing machine was invented which helped in testing themselves.
- In 1954, BF Skinner, a Harvard Professor, invented the “teaching machine”, which enabled schools to administer programmed instruction to their students.
- The first computer based training program was introduced to the world in 1960. This computer based training program (or CBT program) was known as PLATO-Programmed Logic for Automated Teaching Operations. Originally designed for students attending the University of Illinois, but ended up being used in schools throughout the area.

- The first e-learning systems were really only set up to deliver information to students but as we entered the 70s e-learning started to become more interactive.
- In Britain the Open University was keen to take advantage of e-learning. Their system of education has always been primarily focused on learning at a distance.
- With the introduction of the computer and internet in the late 20th century, e-learning tools and delivery methods expanded.
- By the early 90s several schools had been set up that delivered courses online only, making the most of the internet and bringing education to people who wouldn't previously have been able to attend a college due to geographical or time constraints.
- In the 2000's, businesses began using e-learning to train their employees.

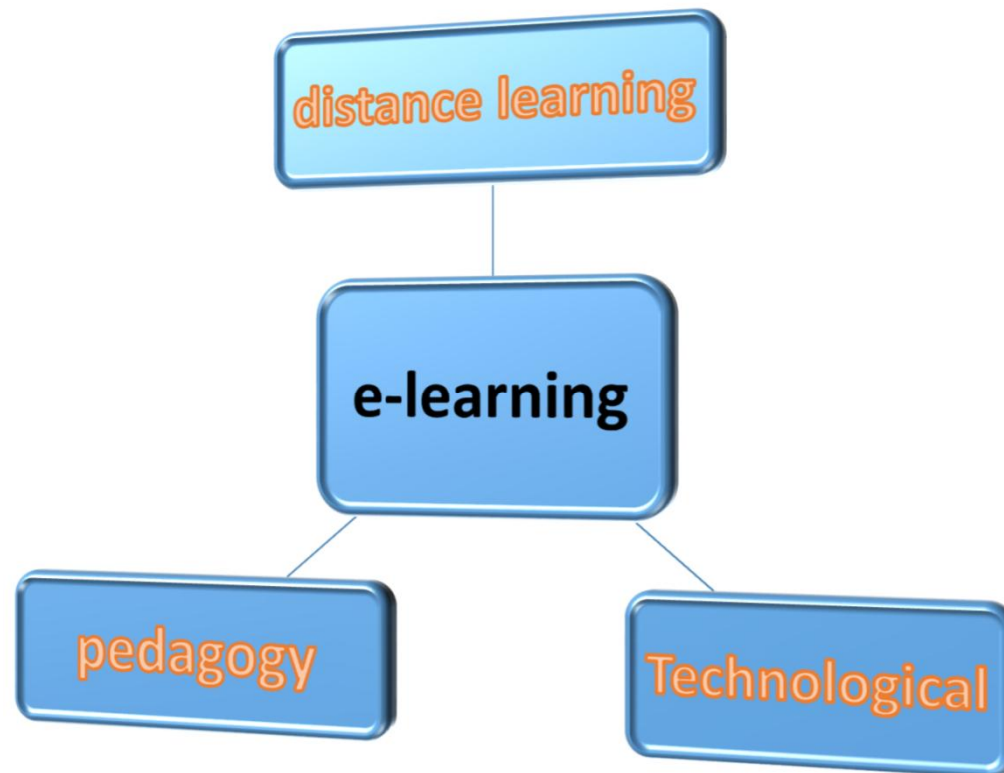
Meaning

- E-learning can be defined as the use of computer and Internet technologies to deliver a broad array of solutions to enable learning and improve performance.
- E-learning refers to the use of information and communication technologies to enable the access to online learning/teaching resources.
- European Commission (2001) describes, e-Learning as the use of new multimedia technologies and the Internet to increase learning quality by easing access to facilities and services as well as distant exchanges and collaboration.

- Abbad et al (2009), defined Elearning to mean any learning that is enabled electronically.
- According to Maltz et al (2005), the term 'e-learning' is applied in different perspectives, including distributed learning, online-distance learning, as well as hybrid learning.
- according to Wentling et al (2000) the term e-learning refers to the attainment and use of knowledge that are predominantly facilitated and distributed by electronic means.
- Other researchers also defined e-learning as a revolutionary approach (Jennex, 2005; Twigg, 2002) to enable a workforce with the and skills needed to turn change into benefit (Jennex, 2005).

- Twigg (2002) described the e-learning approach as centered on the learner as well as its design as involving a system that is interactive, repetitious, self-paced, and customizable.
- Welsh et al. (2003) also referred to the term as the use of computer network technology, principally through the internet, to provide information and instruction to individuals.
- According to Tao et al (2006), this new environment for learning that is centered on electronic networks has allowed learners in universities to receive individualized support and also to have learning schedules that is more suitable to them as well as separate from other learners.

Perspectives of e-learning Algahtani (2011)



Types of e-learning

- Algahtani (2011) divided e-learning into two basic types, consisting of **computer-based** and the **internet based** e-learning.

The computer-based learning

- Uses of a full range of hardware and software generally that are available for the use of ICT.
- each component can be used in either of two ways: **computer managed** instruction and **computer-assisted**-learning.
- In computer assisted- learning, to him, computers are used instead of the traditional methods by providing interactive software as a support tool within the class or as a tool for self-learning outside the class.
- In the computer-managed instruction, however, computers are employed for the purpose of storing and retrieving information to aid in the management of education.

The internet-based learning

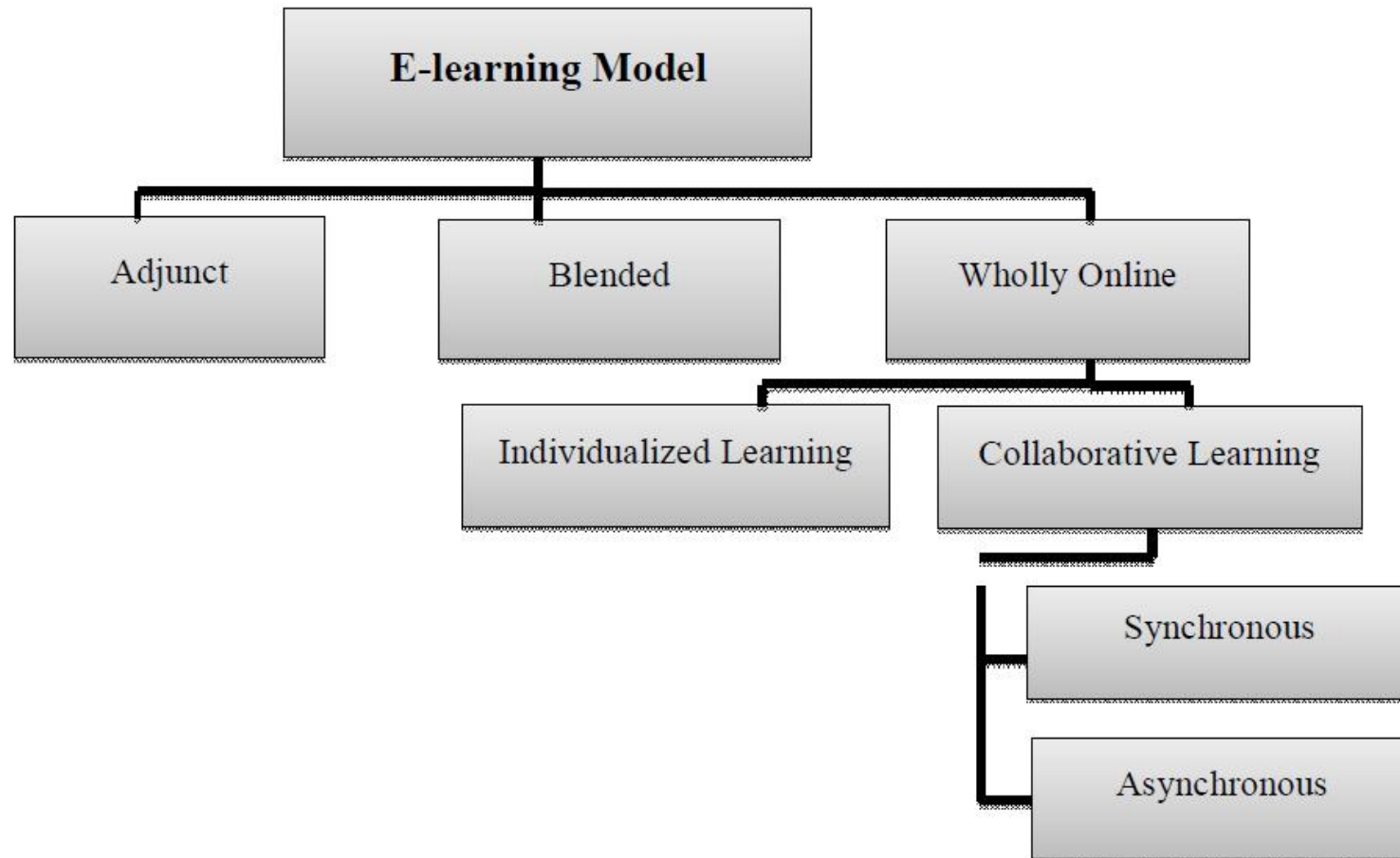
- The internet-based learning according to Almosa (2001) is a further improvement of the computer-based learning,
- it makes the content available on the internet, with the readiness of links to related knowledge sources, for examples e-mail services and references which could be used by learners at any time and place as well as the availability or absence of teachers or instructors.

“synchronous” and “asynchronous”

- Algahtani (2011) described the completely online mode as “synchronous” or “asynchronous” by the application of applying optional timing of interaction.
- The **synchronous** timing comprises alternate on-line access between teachers or instructors and learners, or between learners, and the asynchronous, to him allows all participants to post communications to any other participant over the internet (Algahtani, 2011; Almosa and Almubarak, 2005).
- The synchronous type allows learners to discuss with the instructors and also among themselves via the internet at the same time with the use of tools such as the videoconference and chat rooms.
- This type according to Almosa and Almubarak (2005) offers the advantage of instantaneous feedback.

- The **asynchronous** mode also allows learners to discuss with the instructors or teachers as well as among themselves over the internet at different times.
- It is therefore not interaction at the same moment but later, with the use of tools such as thread discussion and emails (Almosa and Almubarak, 2005; Algahtani, 2011),
- Advantage is that learners are able to learn at a time that suits them
- Disadvantage is that the learners will not be able to receive instant feedback from instructors as well as their colleague learners (Almosa and Almubarak, 2005).

A Model for Using E-learning in Education



Different ways of employing e-learning in education

- Algahtani, (2011), discovered three distinct models of using e-learning in education including the “adjunct, blended e-Learning and online”.
- The “adjunct e-Learning is the situation which e-Learning is employed as an assistant in the traditional classroom providing relative independence to the learners or students (Algahtani, 2011).
- In the blended e-Learning, the delivery of course materials and explanations is shared between traditional learning method and e-learning method in the classroom setting.
- The third one which is the online is devoid of the traditional learning participation or classroom participation.
- In this form of usage, the e-Learning is total so that there is maximum independence of the learners or students.
- The online model is divided into the individual and collaborative learning, where the collaborative learning also consist of the synchronous and asynchronous learning

Uses/ Advantages in Education and Physical Education

- It is flexible in terms of time and place.
- Ease of access to a huge amount of information.
- Opportunities for relations between learners (eliminate barriers like fear of talking).
- cost effective (travel, building etc.)
- considers the individual learners differences.
- Compensate for scarcities of academic staff.
- Allows self-pacing.

Disadvantages of E-learning

- Requires a very strong inspiration (contemplation, remoteness, lack of interaction).
- less effective during clarifications, explanations and interpretations.
- negative effect on communication skills.
- Difficult to control mal practice during assessment tests.
- Mislead to piracy and plagiarism (ease of copy and paste).
- deteriorate the role of institutions, socialization and instructors.
- Difficult in fields of practical skills.
- Congestion or heavy use of some websites.