Ministry of Higher Education and Scientific Research
University of Relizane
Faculty of Letters and Languages
Department of English

Academic year : 2022 / 2023.

Instructor: BENADDA Abdelouahid
Level: Master 1 / Language and Communication
Module: E-Leaning
Course 4 : Fundamentals of E-learning

➢ **Course Scope**: An introduction to the general topic of e- learning "how people learn at distance" (this course is an overview of the types and current practices of e-learning,)

➢ **Course Learning Objectives**
At the conclusion of this course, you should be able to:

- Identify the theoretical constructs and philosophical orientations that support e-learning in networked environments.
- Go through the basic types of e-learning courses and their components.
- Discover the opportunities and affordances of e-learning.
- Describe how the internet is changing how and where learning is occurring.

Guiding Thoughts to the Course

1. Do you have an idea of the opportunities and affordances of e-learning?
2. Have you ever thought of the basic types of e-learning courses and their components?
3. These are all examples of e-learning, how is it applied to education and can you benefit from it?

Types of e-learning

Some educational scientists have distinguished between *computer-based e-learning* and *internet-based e-learning*. This method of classification is more accurate as it singles out e-learning from online learning. Figure 5 displays the different types of e-learning:
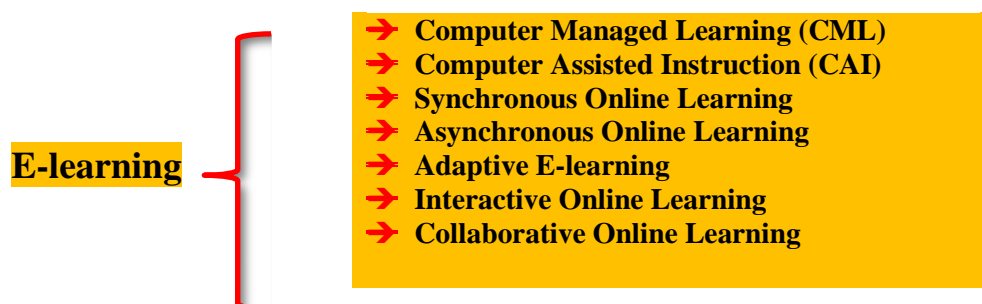
E-learning
➡ **Computer Managed Learning (CML)**
➡ **Computer Assisted Instruction (CAI)**
➡ **Synchronous Online Learning**
➡ **Asynchronous Online Learning**
➡ **Adaptive E-learning**
➡ **Interactive Online Learning**
➡ **Collaborative Online Learning**

Figure 5: Types of E-learning

❖ **Computer Managed Learning (CML)**
In this type of e-learning, computers are used to manage and assess learning

Ministry of Higher Education and Scientific Research
University of Relizane
Faculty of Letters and Languages
Department of English

Academic year : 2021 / 2022.

processes. Students have to learn through information databases that contain bits of information. Educational institutions use computer-managed learning systems for storing and retrieving information which assists in educational management such as lecture information, training materials, grades, curriculum information, and enrolment information among others.

❖ Computer Assisted Instruction (CAI)

Computer Assisted Instruction (CAI) is another type of e-learning which associates computers with traditional teaching. Computer-assisted training methods use a combination of multimedia such as text, graphics, sound, and video in order to enhance learning.

❖ Synchronous Online Learning

Synchronous online learning enables groups of students to participate in a learning activity together at the same time, from any place in the world. It involves online chats and videoconferencing. This kind of online learning has been made possible with the rapid development of communication technologies. Synchronous e-learning is currently one of the most popular and quickest growing types of e-learning.

❖ Asynchronous Online Learning

In the case of asynchronous online learning, groups of students study without real-time communication taking place. Asynchronous e-learning methods are often considered to be more student-centred as it gives students more flexibility.

❖ Adaptive E-learning

Adaptive e-learning makes possible for individual learners to adapt and redesign learning materials according to their own preferences. It takes into consideration a number of parameters which relate to students such as their individual goals, abilities, skills, and characteristics.

❖ Interactive Online Learning

Interactive e-learning allows a two-way communication channel involving instructor and students. Interactive e-learning is considerably more popular than linear as it allows teachers and students to communicate more freely with each other.

❖ Collaborative Online Learning

Collaborative e-learning is a modern type of learning method that enables multiple students to learn and achieve their learning objectives together as a group. Collaborative e-learning expands on the idea that knowledge is best developed inside a group of individuals where they can interact and learn from each other.

1.9 Models of Learning in Higher Educational Institutions

Conventional forms of study in higher education can be implemented in different models of learning:

- ➤ **Traditional model:** It uses a conventional model known from school and requiring face-to-face communication with the teacher during all training sessions.
- ➤ **Electronic model:** This model involves information technologies: Internet resources,

Ministry of Higher Education and Scientific Research
University of Relizane
Faculty of Letters and Languages
Department of English

Academic year : 2021 / 2022.

communication with the teacher on forums and web chats, watching learning materials online, computer testing,... This model is the basis for e-learning and has several varieties depending on the proportion of traditional and electronic learning in the total number of learning hours.

➢ *Open model:* What differentiates it from the models above is that teaching materials are freely available and any student can use them for self-study. Here, students are not bound to demonstrate the knowledge acquired by taking a summative assessment. Such a model is used in open universities and academic institutions that are providers of open educational resources.

1.10 E-learning Didactical Models (Learning Theory)

The quality of online learning depends on the proper use of digital technologies in accordance with modern educational theories. Miller and Miller (2000) suggested that developers of Web-based instruction choose a theoretical approach, with more emphasis placed on being consistent with the chosen theory than on picking the "correct" theory.

E-learning didactical models can find efficient practice in the following learning theories:

A. Behaviourism

Behaviourism examines how students behave while learning. It focuses on how learners respond to certain stimuli. When the stimuli are repeated, learners can observe, control, and modify their individual behaviour. Learners follow instructions and are only required to reproduce basic facts and automatically perform tasks. Behaviourism does not examine the mind or cognitive processes.

In virtual learning behaviourism can be applied through step-by-step video tutorials, game-based activities, regular and constructive feedback, quizzes, gamification …

B. Cognitivism

Cognitivism focuses on the role of the mind and cognitive processes in learning. It explains how the brain is functioning to form the foundation of learning. Studies of cognitivism help educators understand how people learn and how to teach more effectively. In virtual learning, cognitivism can be applied through adaptive and personalized learning applications. It is important to provide content that is tailored to learners' cognitive abilities, such as text, images, multimedia, in which the learners can choose how lessons are presented.

C. Constructivism

Learners construct new ideas, structures, models and concepts and connect them to their prior knowledge and mental models. These instructional experiences need to be structured so that learners can easily adapt the information. The learner plays an active role and learning is goal-oriented. In virtual learning, activities focus on experience sharing, teamwork, and collaborative learning, group discussions, brainstorming, problem-based learning, and small group activities.

Ministry of Higher Education and Scientific Research
University of Relizane
Faculty of Letters and Languages
Department of English

Academic year : 2021 / 2022.

D. Connectivism

Connectivism[1] is the view that "learning can reside outside of ourselves (within an organization or a database). It is focused on connecting specialized information sets, and the connections that enable students to learn more. In virtual learning, learners are no longer individualistic, but rely more on learning through participation within communities of practice, making connections between people and technology.

✦ Project Assignment: Classroom Presentation

1. Find out about computer-managed learning systems. Visit 'the Success Maker Enterprise system' at **http://www. rm.com** and 'Compass Learning's Odyssey system' at (**http://www.compasslearning.com/).** Compare the two type of learning approaches that these systems use.

2. Download the paper on "Learning Theories" at:
 http://www.usask.ca/education/coursework/802papers/mergel/brenda.html
   What learning theory suits your own conception of e-learning? Develop the topic using a power point presentation.

---

[1] https://www.learning-theories.com/connectivism-siemens-downes