

E-LEARNING

E-LEARNING LEC NO.1

Introduction to E-learning:-

- Technology is having a major impact on the delivery of training programs
- Using technology for training requires collaboration among the areas of:
 - training
 - information technology
 - top management

What is E-learning:-

Definition of E-learning:-

- *“The convergence of the Internet and learning, or Internet-enabled learning.”
- *“The use of network technologies to create, foster, deliver, and facilitate learning, anytime and anywhere.”
- *“The use of Internet technologies to deliver a broad array of solutions that enhance knowledge and performance.”

Types of E-learning

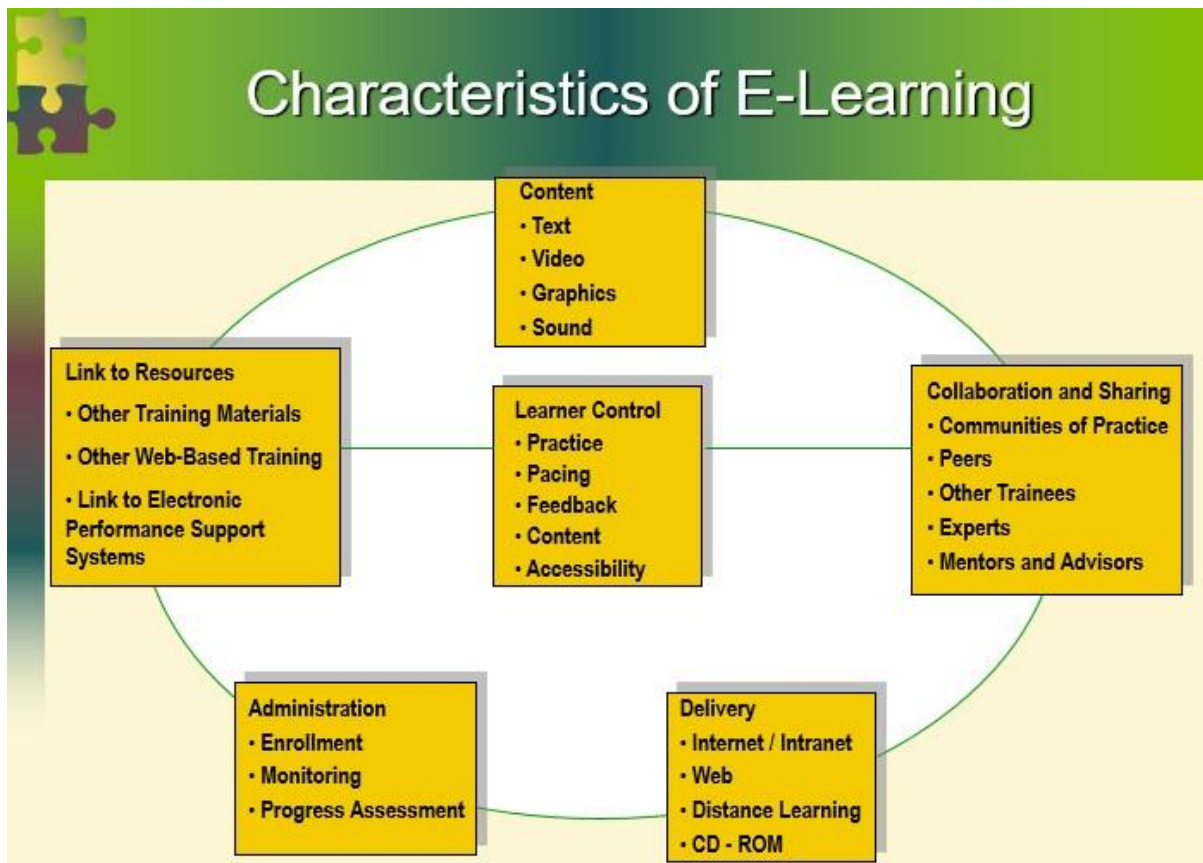
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| <ul style="list-style-type: none"> • Synchronous <ul style="list-style-type: none"> — Time frame restriction — Real-time involvement — Chat — Web conference | <ul style="list-style-type: none"> • Asynchronous <ul style="list-style-type: none"> — No time frame — No real-time involvement — Discussion forum — Email |
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E-LEARNING

Benefits & Advantages

- Learner Centered
 - student has access to many resources and tools
- Convenient and portable
 - Not bound by place or time
 - Study at own pace
- Flexible
 - Skip material already learned
 - Variety of tools to fit the learner's own style



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Disadvantages of E-learning:-

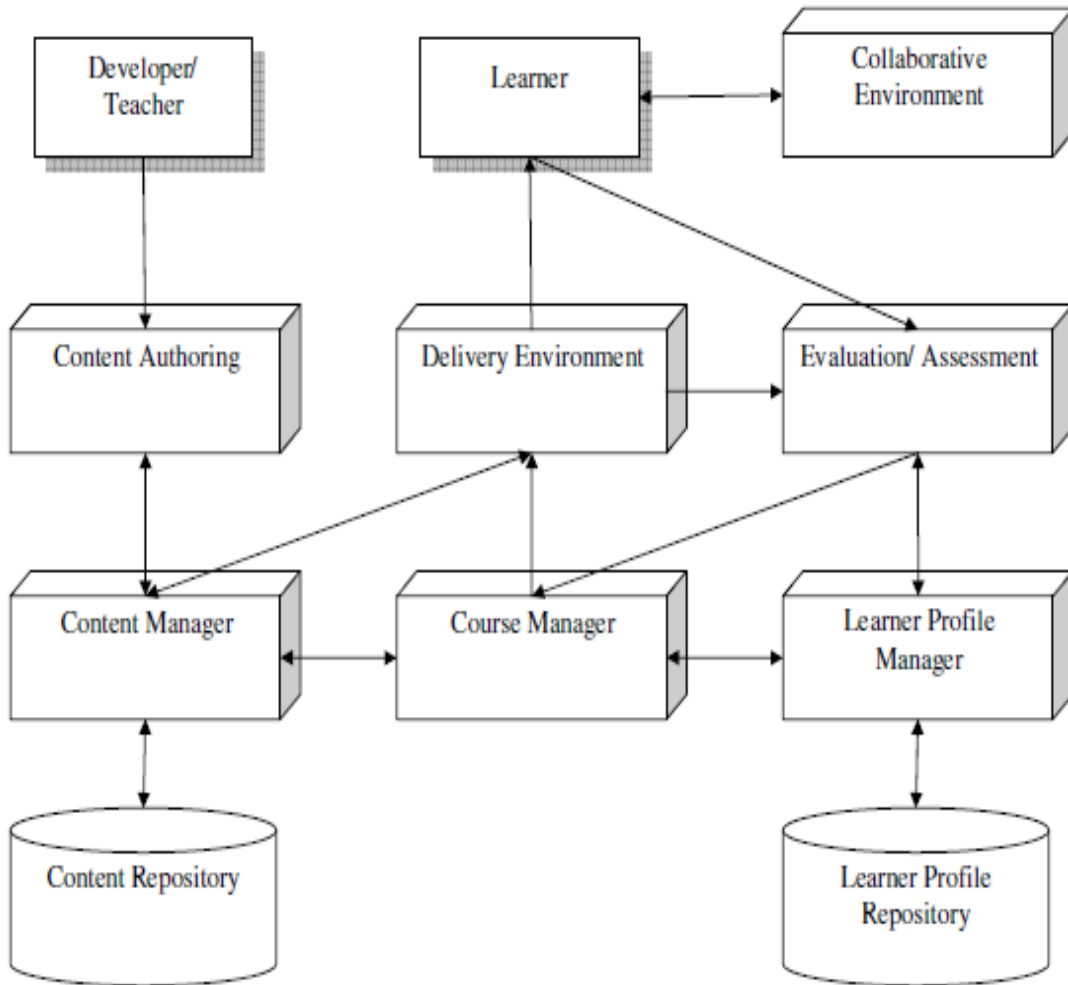
- **Technology dependent:** Delivery of eLearning courses depends on technology. Inadequacy of required infrastructure such as computers, high internet bandwidth, and also lack of relevant technical skills in learners would greatly hamper success of an eLearning course.
- **Lack of motivation:** Learners may not be motivated to take a course since they are in isolation and have the flexibility. It requires a high-level of self-discipline and self-motivation from learners.
- **Lack of help/training support:** due to absence of an instructor who can solve learners' queries, explain in detail topics that are not understood, analyze learners' performance and provide detailed feedback
- **Lack of human touch:** since there is no direct interaction with instructor or fellow learners during the learning process
- **Inflexible:** It's not possible to alter the course in real time based on learners' reactions and comfort
- **Start-up cost:** involved in designing, developing and deploying a course
Despite these, eLearning continues to grow in popularity and is considered as an effective training delivery method. Face-to-face training will certainly be more effective in certain types of training. To ensure balance, the blended approach could also work well.

Components of an E-learning system

- E-learning Life cycle
 - Skill Analysis
 - Material Development
 - Learning Activity
 - Evaluation
- There are different components that interact and collaborate during the e-learning life cycle.

E-LEARNING

Simplified E-learning system



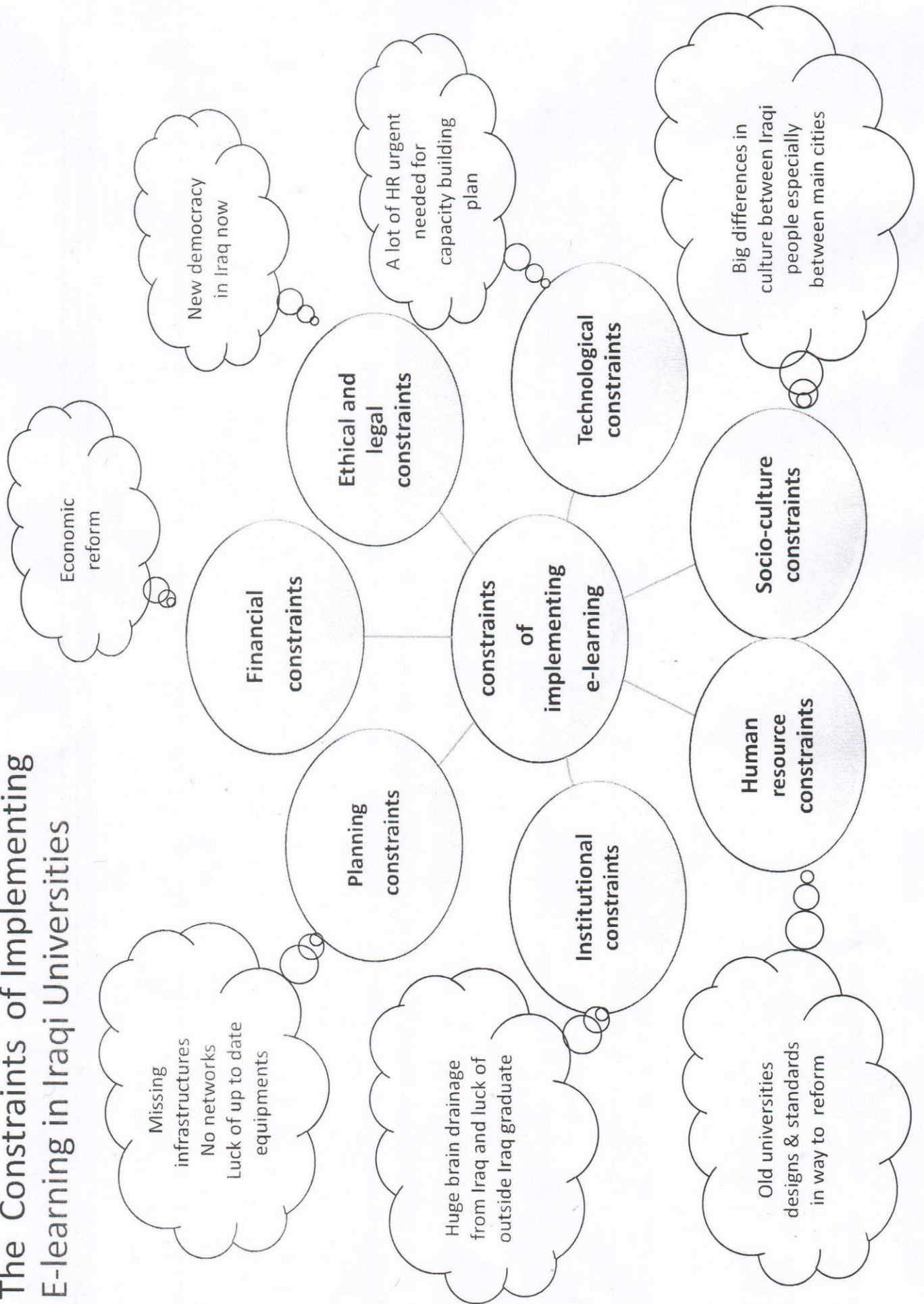
The history of e-learning

The term “e-learning” has only been in existence since 1999, when the word was first utilized at a CBT systems seminar. Other words also began to spring up in search of an accurate description such as “online learning” and “virtual learning”. However, the principles behind e-learning have been well documented throughout history, and there is even evidence which suggests that early forms of e- learning existed as far back as the 19th century.

Learning vs. Training

- It's important to understand the difference between learning and training. Of course they are inextricably linked, but they are unique aspects of any educational process.
- Training is the giving of information and knowledge, through speech, the written word or other methods of demonstration in a manner that instructs the trainee.
- Learning is the process of absorbing that information in order to increase skills and abilities and make use of it under a variety of contexts.
- Whatever the goals, the quality of the learning will rely largely on the quality of the training, and so the role of trainer is very important as it can have a huge effect on the outcome of a course for the learner.

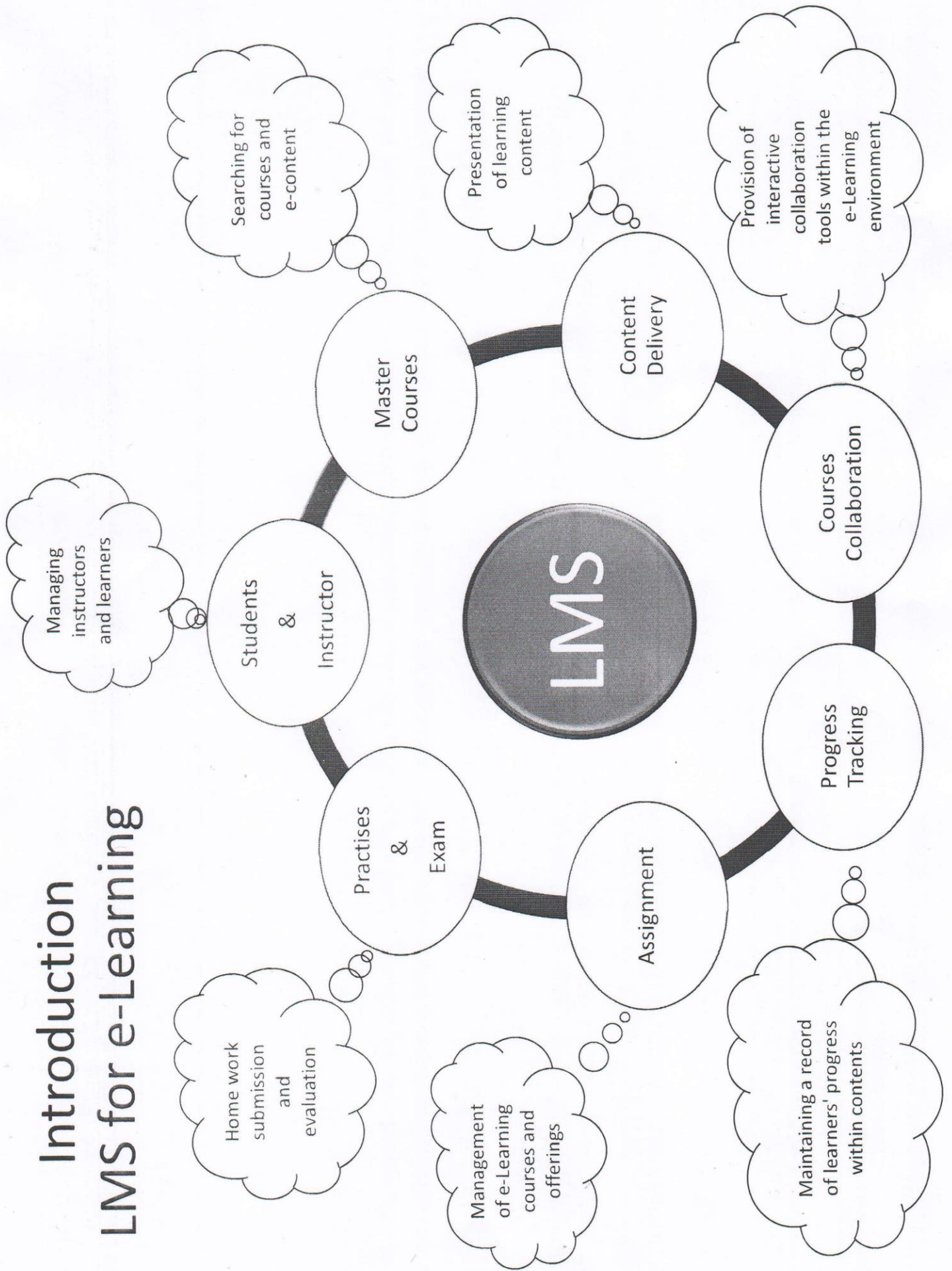
The Constraints of Implementing E-learning in Iraqi Universities



What is a LMS?

- LMS stands for Learning Management System and it's a global term for a computer system specifically developed for managing online courses, distributing course materials and allowing collaboration between students and teachers. A LMS will allow you to manage every aspect of a course, from the registration of students to the storing of test results, as well as allowing you to accept assignments digitally and keep in touch with your students. In essence, the LMS is the backbone of most e-learning activities.
- LMS is a type of software designed to deliver, track, and manage training and education.
- Through their development, these systems have been called Course Management Systems (CMS), Virtual Learning Environments, Collaborative Learning Environments

Introduction LMS for e-Learning



Tools to create an online course

- ❖ **The LMS** (ability of the system to automatically calculate exam results and generate reports which help both instructor and learner)
- ❖ **Website creation platform** (effective e-learning and a disappointing online learning experience for both teachers and students)
- ❖ **Multimedia production tools** (design software and high definition cameras to record informative courses for your audience)

E-LEARNING TRENDS

1. Blended Learning (is a combination of offline (face-to-face, traditional learning) and online learning in a way that the one compliments the other).
2. Collaborative Learning (is an e-learning approach where students are able to socially interact with other students, as well as instructors).
3. Gamification Learning (is the use of game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning and solve problems. Basically it's the use of gaming technology to solve problems outside of the games sector).
4. Micro-Learning (involves learning in smaller steps, and goes hand-in-hand with traditional e-learning. Activities that are micro-learning based usually feature short term lessons, projects, or coursework that is designed to provide the student with 'bits' of information. **For example, rather than trying to teach a student about a broad subject all at once, aspects of the topic will be broken down into smaller lesson plans or projects).**

E-LEARNING TRENDS

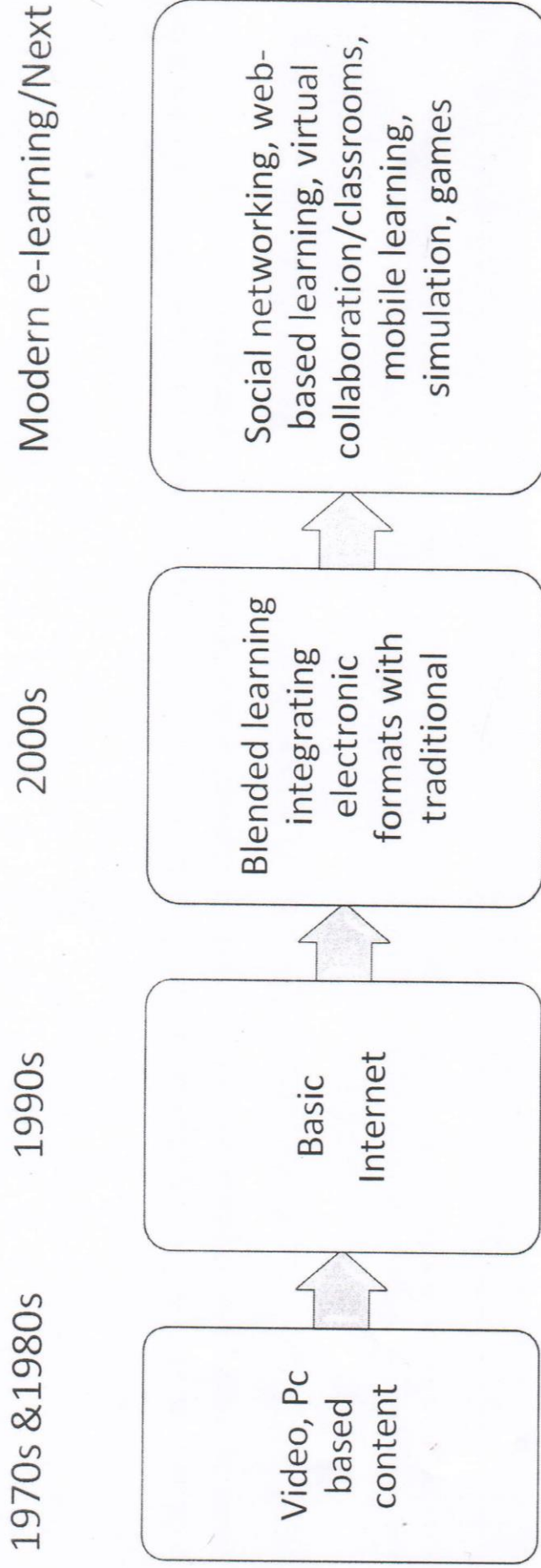
5. Video Learning (Faster internet connections and the increasing use of mobile phones and tablets with video capabilities means that using video in the e-learning process has become commonplace)
6. Rapid E-learning (is, essentially, a faster process of designing and developing online-based learning courses. Rather than spending months or even years developing a course, rapid e-learning allows creators to build lessons and content in a matter of days or weeks).
7. Social Learning (Individual Facebook/Twitter/LinkedIn news feeds and work-related groups play a major role in what we learn and how we communicate and share knowledge).

How to make e-learning effective?

- ❖ Know your subject material well (you need to take your time to research material before making it available to your learners).
- ❖ Online courses provided should appeal to all learning styles.
- ❖ Facilitate Contact (Students and teachers should be able to establish an open line of communication).
- ❖ Platform should be easy to navigate and fully functional.
- ❖ Course documents should be available to every student enrolled.
- ❖ Set and communicate clear goals.

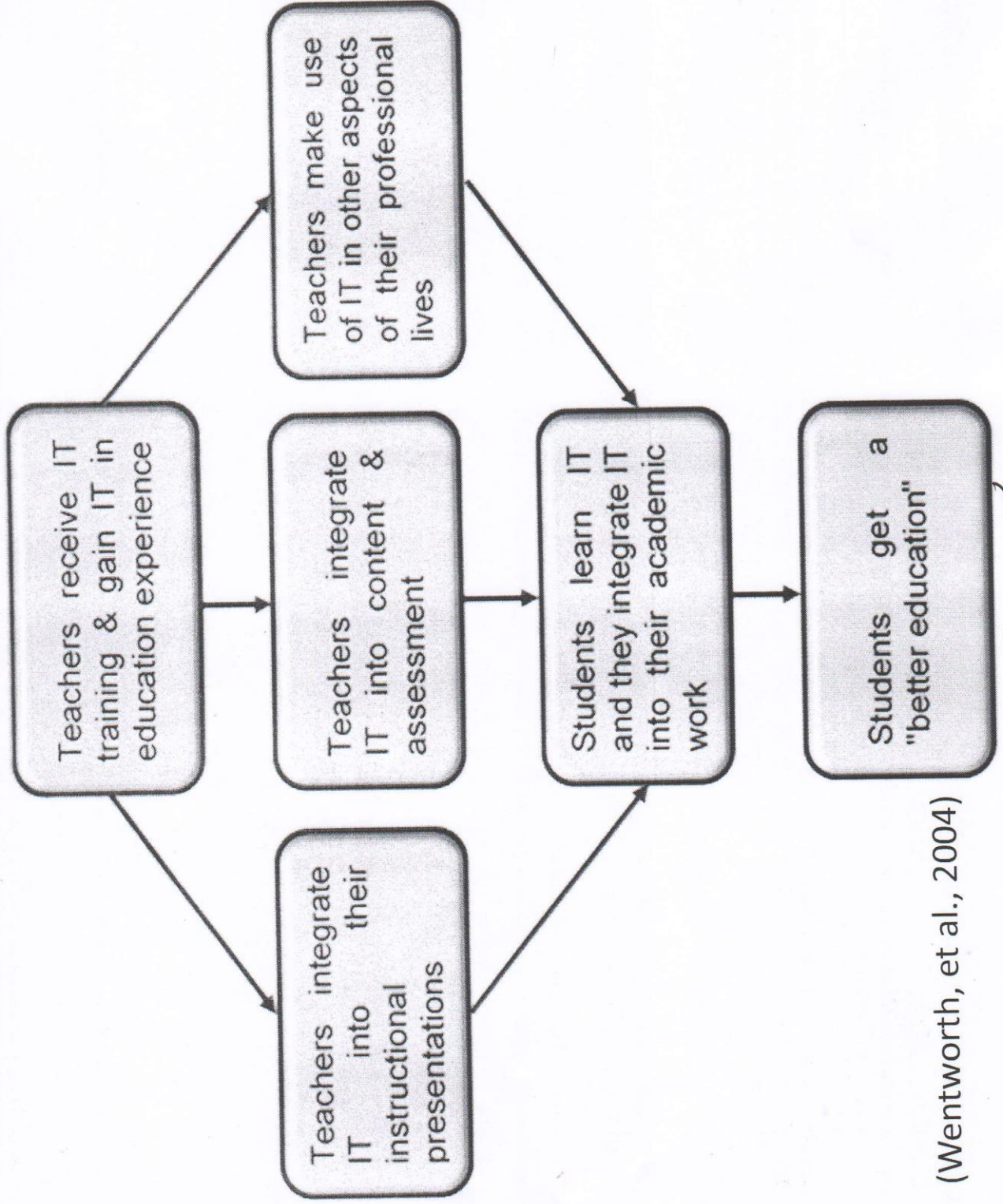
Moodle vs. Blackboard	E-LEARNING LEC. NO.3 *****Moodle*****	*****Blackboard*****
Payment model	Freemium (open source)	Proprietary
Course assignment	Activity list on a single page	Weekly activities tab
Managing content	Automatic content management.	Manual. You have to change settings every time.
Features/Plugins	Limited options, you have to create new plugins and develop them	Extra features are included in the price
Product/vendor model	Many supporting companies and vendors	Only one company to work with
Help options	Forums, Knowledge Base	Forms, Knowledge Base + Live Tech Support
Mobile friendly	MoodleZ iPad app for \$2.99 and/or free MyMoodle app	Free Blackboard Mobile app
Market share (2015)	22.98%	34.22%

The evolution of e-Learning



Source: Faherty (2003, p.14)

IT integration into traditional mode of teaching



(Wentworth, et al., 2004)

Welcome to Moodle!

Moodle is an open source web application used to create interactive online learning sites.

Why Moodle?

It runs on almost all platform, supporting a lot of useful function and customization, thanks to his

"Who" is Moodle?

Moodle that is the acronym for

**Modular
Object-
Oriented
Dynamic
Learning
Environment**

it's an online Learning Management System
(LMS).

moodle What teachers can do with Moodle...

create online courses

upload files and lessons

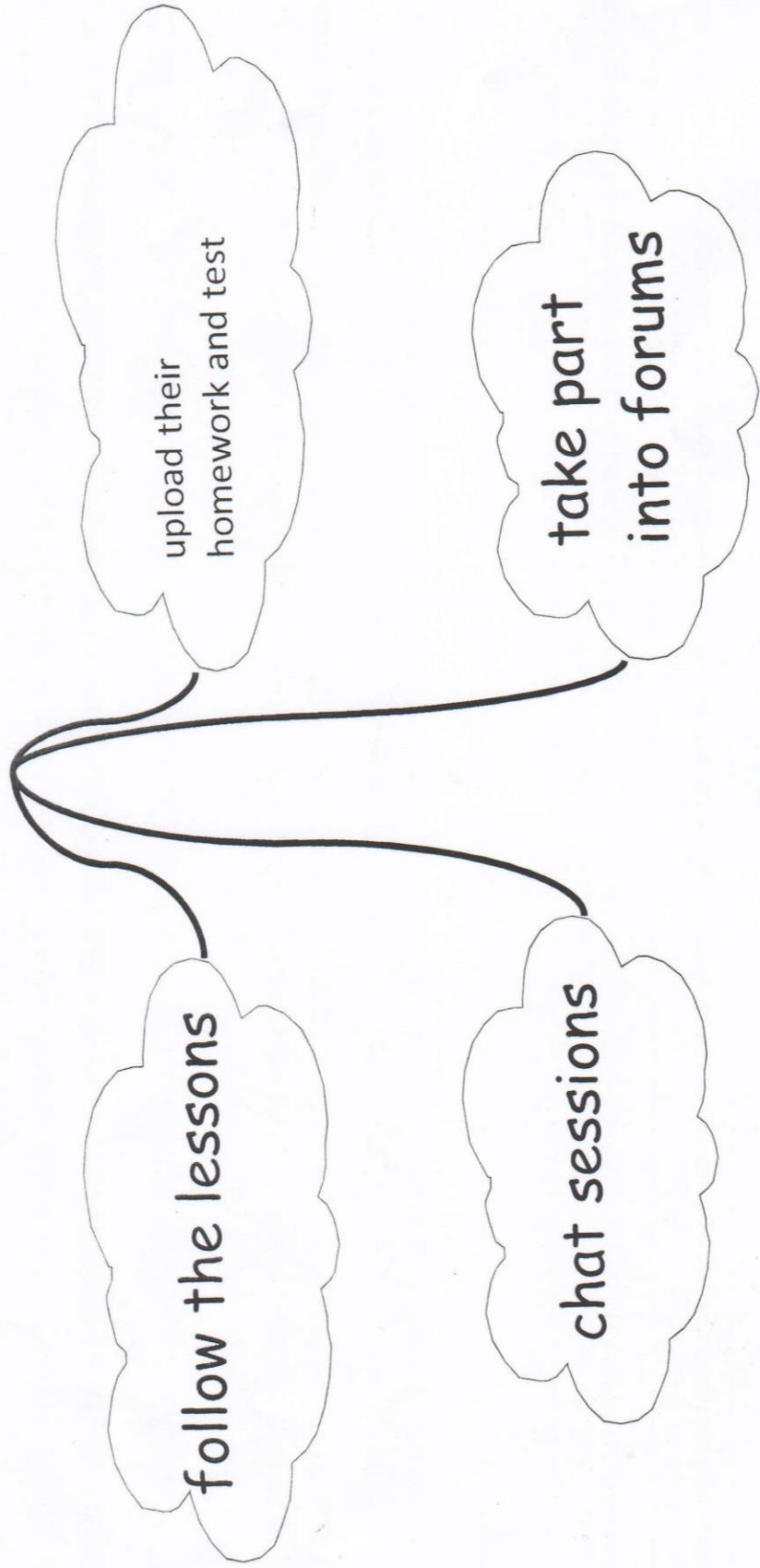
open forums

create online tests and examinations

divide students into classes

chat sessions

moodle What students can do with Moodle...





Features

1. **Forum:** you can discuss with all other registered user about many issues.
2. **Chat:** you can talk about what you want in real time with classmate and professor.
3. **Calendar:** if you're a professor, you can program lessons, tests and more. Students can consult this section as a reminder for future commitments.
4. **Lesson:** Moodle provides teacher many ways to set up their own lessons and courses and to keep them under control.
5. **Wiki and Glossary:** collaboration is the key word of Moodle, which has several functions to work in group.
6. **Quizzes and Tests:** there are many ways to evaluate the preparation of the students.. or to have fun with questions of any arguments!

Distance Education :-

Within a context of rapid technological change and shifting market conditions, distance education takes place when a teacher and student(s) are separated by physical distance, and technology (i.e., voice, video, data, and print), often in concert with face-to-face communication, is used to bridge the instructional gap. These types of programs can provide adults with a second chance at a college education, reach those disadvantaged by limited time, distance or physical disability, and update the knowledge base of workers at their places of employment.

• Is Distance Education Effective?

Many educators ask if distant students learn as much as students receiving traditional face-to-face instruction. Research comparing distance education to traditional face-to-face instruction indicates that teaching and studying at a distance can be as effective as traditional instruction, when the method and technologies used are appropriate to the instructional tasks, there is student-to-student interaction, and when there is timely teacher-to-student feedback.

• How is Distance Education Delivered?

A wide range of technological options are available to the distance educator. They fall into four major categories:

Voice – Instructional audio tools include the interactive technologies of telephone, audio conferencing, and short-wave radio. Passive (i.e., one-way) audio tools include tapes and radio.

Video – Instructional video tools include still images such as slides, pre-produced moving images (e.g., film, videotape), and real-time moving images combined with audioconferencing (one-way or two-way)

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Data – Computers send and receive information electronically. For this reason, the term “data” is used to describe this broad category of instructional tools.

Computer applications for distance education are varied and include:

- Computer–assisted instruction (CAI) – uses the computer as a self–contained teaching machine to present individual lessons.
- Computer–managed instruction (CMI) – uses the computer to organize instruction and track student records and progress. The instruction itself need not be delivered via a computer, although CAI is often combined with CMI.
- Computer–mediated education (CME) – describes computer applications that facilitate the delivery of instruction. Examples include • electronic mail, fax, real–time computer conferencing, and World–Wide Web applications.

Print – is a foundational element of distance education programs and the basis from which all other delivery systems have evolved. Various print formats are available including: textbooks, study guides, workbooks, course syllabi, and case studies

Which Technology is Best?

Although technology plays a key role in the delivery of distance education, educators must remain focused on instructional outcomes, not the technology of delivery. The key to effective distance education is focusing on the needs of the learners, the requirements of the content, and the constraints faced by the teacher, before selecting a delivery system. Typically, this systematic approach will result in a mix of media, each serving aspecific purpose. For example:

- A strong print component can provide much of the basic instructional content in the form of a course text, as well as readings, the syllabus, and day–to–day schedule.
- Interactive audio or video conferencing can provide real time face–to–face (or

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voice-to-voice) interaction. This is also an excellent and cost-effective way to incorporate guest speakers and content experts.

- Computer conferencing or electronic mail can be used to send messages, assignment feedback, and other targeted communication to one or more class members. It can also be used to increase interaction among students.
- Pre-recorded video tapes can be used to present class lectures and visually oriented content.
- Fax can be used to distribute assignments, last minute announcements, to receive student assignments, and to provide timely feedback.

Using this integrated approach, the educator's task is to carefully select among the technological options. The goal is to build a mix of instructional media, meeting the needs of the learner in a manner that is instructionally effective and economically prudent

Effective Distance Education:-

Without exception, effective distance education programs begin with careful planning and a focused understanding of course requirements and student needs. Appropriate technology can only be selected once these elements are understood in detail. There is no mystery to the way effective distance education programs develop. They don't happen spontaneously; they evolve through the hard work and dedicated efforts of many individuals and organizations. In fact, successful distance education programs rely on the consistent and integrated efforts of students, faculty, facilitators, support staff, and administrators.

Key Players in Distance Education-

The following briefly describes the roles of these key players in the distance education enterprise and the challenges they face.

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Students – Meeting the instructional needs of students is the cornerstone of every effective distance education program, and the test by which all efforts in the field are judged. Regardless of the educational context, the primary role of the student is to learn. This is a daunting task under the best of circumstances, requiring motivation, planning, and an ability to analyze and apply the instructional content being taught. When instruction is delivered at a distance, additional challenges result because students are often separated from others sharing their backgrounds and interests, have few if any opportunities to interact with teachers outside of class, and must rely on technical linkages to bridge the gap separating class participants.

Faculty – The success of any distance education effort rests squarely on the shoulders of the faculty. In a traditional classroom setting, the instructor's responsibility includes assembling course content and developing an understanding of student needs. Special challenges confront those teaching at a distance. For example, the instructor must:

- Develop an understanding of the characteristics and needs of distant students with little first-hand experience and limited, if any, face-to-face contact.
- Adapt teaching styles taking into consideration the needs and expectations of multiple, often diverse, audiences.
- Develop a working understanding of delivery technology, while remaining focused on their teaching role.
- Function effectively as a skilled facilitator as well as content provider.

Facilitators – The instructor often finds it beneficial to rely on a site facilitator to act as a bridge between the students and the instructor. To be effective, a facilitator must understand the students being served and the instructor's expectations. Most importantly, the facilitator must be willing to follow the directive established by the teacher. Where budget and logistics permit, the role of on-site facilitators has increased even in classes in which they have little, if

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any, content expertise. At a minimum, they set up equipment, collect assignments, proctor tests, and act as the instructor's on-site eyes and ears.

Support Staff – These individuals are the silent heroes of the distance education enterprise and ensure that the myriad details required for program success are dealt with effectively. Most successful distance education programs consolidate support service functions to include student registration, materials duplication and distribution, textbook ordering, securing of copyright clearances, facilities scheduling, processing grade reports, managing technical resources, etc.. Support personnel are truly the glue that keeps the distance education effort together and on track.

Administrators – Although administrators are typically influential in planning an institution's distance education program, they often lose contact or relinquish control to technical managers once the program is operational. Effective distance education administrators are more than idea people. They are consensus builders, decision makers, and referees. They work closely with technical and support service personnel, ensuring that technological resources are effectively deployed to further the institution's academic mission.

Most importantly, they maintain an academic focus, realizing that meeting the instructional needs of distant students is their ultimate responsibility.