Electronic Content Design

syllabus

- **UNIT I: [12 Hours]**
- **Introduction to E-learning- Definition, history, benefits and drawbacks of online learning,**
- **best practices of online learning, future of e learning. Overview of LMS. Technologies used**
- **in e -learning, Online course, tools to create an online course, need of the millennial learners,**
- **21st century skills and E-learning trends.**

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- **UNIT 2: [12 Hours]**
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- **E-content. Designing and Development of E-content. Standards of E-content. Learning**
- **Objects and Re-usability of E-content. Phases of e-content development, various instructional**
- **models-ADDIE and ASSURE instructional model. An overview of Content Authoring Tools.**

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- **UNIT 3: [12 Hours]**
- **Principles of Visual Design- Visual hierarchy, typography, and colour theory, User**
- **Experience (UX) Design-UX principles, wireframing, and prototyping, Graphic Design for**
- **Digital Media-Image editing, resolution, and file formats.**

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- **UNIT 4: [12 Hours]**
- **HTML and CSS basics, designing for different screen sizes and devices, Multimedia Content**
- **Creation- Creating multimedia elements (images, audio, video), Social media platforms and**
- **content planning, Develop a social media content calendar, Content Management Systems**
- **(CMS),introduction to CMS platforms (e.g., WordPress), search Engine Optimization (SEO),**
- **SEO basics and best practices, Copyright and Ethics in Digital Content, Copyright laws, fair**
- **use, and ethical considerations, Content Evaluation and Feedback, Usability testing and**
- **feedback collection**

E-LEARNING DEFINITION

- A learning system based on formalized teaching but with the help of electronic resources is known as E-learning. While teaching can be based in or out of the classrooms, the use of computers and the Internet forms the major component of E-learning.
- Any Knowledge Which is Learnt from Online Platform / any electronic source is called e-learning / electronic learning

Types Of E- learning

- E learning can be divided into three major types.
- Synchronous learning
- Asynchronous Learning
- Cohort learning

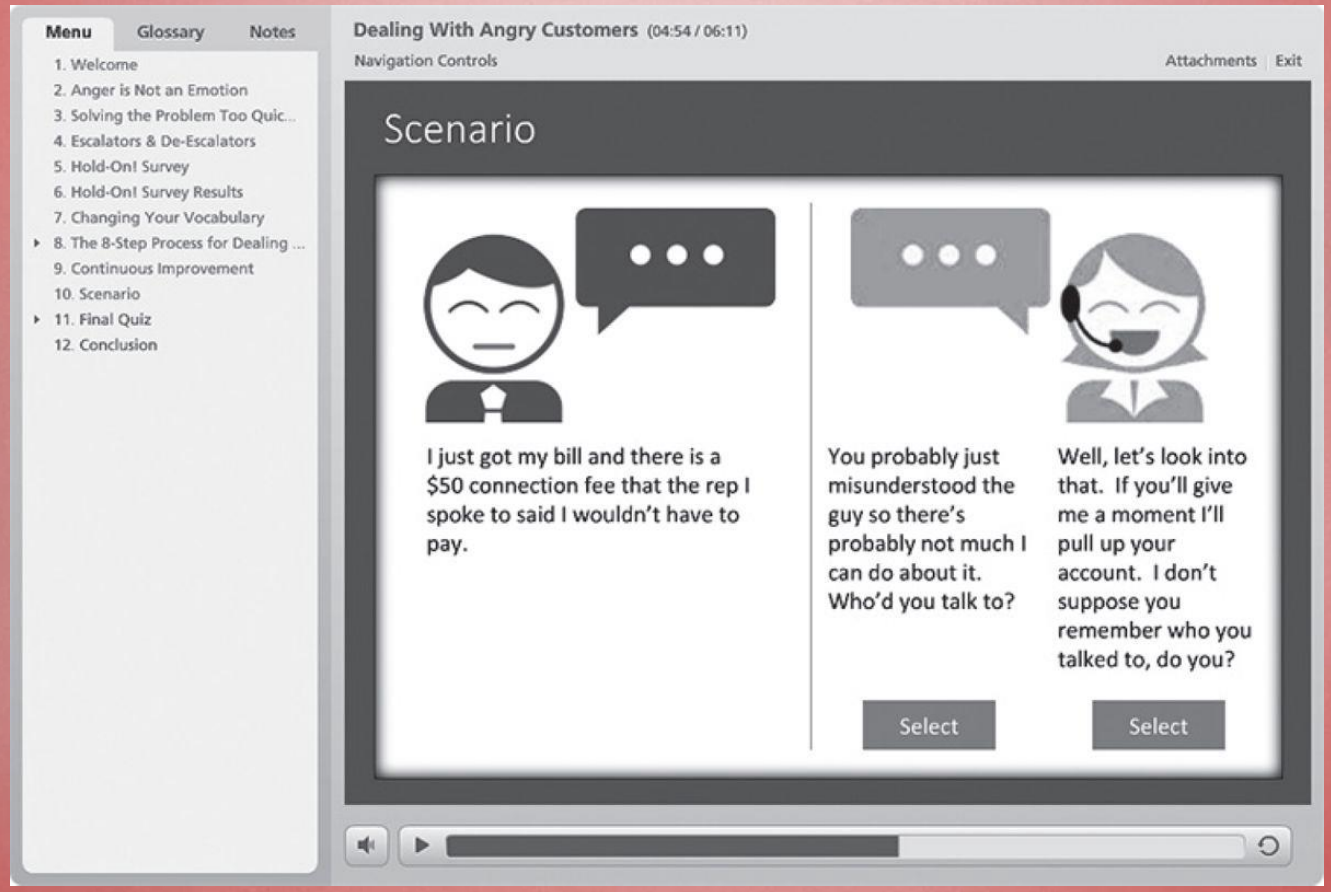
Synchronous learning

- Synchronous learning occurs when an instructor and learners are together at the same time—but not necessarily in the same physical place.
- Traditional classroom learning is a great example of synchronous learning.
- During a traditional classroom session, learners meet at a set time, have discussions, and are tested together.
- A synchronous e-learning course uses the same concept. At a set period of time, an instructor and one or more learners participate in an electronic learning event using a platform such as Adobe Connect or GoToMeeting. This format can be called a webcast, webinar, or virtual classroom.
- This type of training may include the instructor speaking, visuals such as PowerPoint slides or desktop sharing, discussion via chat

Asynchronous Learning

- Asynchronous learning, or self-paced learning, is the opposite of synchronous learning. It occurs when the instructor and learners do not participate at the same time. Often there is no instructor at all, as in the self paced branching scenario

EXAMPLE OF AN ASYNCHRONOUS LEARNING COURSE



Asynchronous Learning

- In the world of traditional education, think of homework as asynchronous Learning. If learners are given an activity to complete on their own time by themselves, the learning is asynchronous.
- In the world of e-learning, a self-paced course that can be accessed at anytime and does not require the involvement of an instructor or peers is considered asynchronous.

Cohort Learning

- Cohort learning has an instructor, and learners complete activities such as readings, videos, discussions, assignments, and projects.
- There is a specified beginning and end date, but within the course timeframes, participants learn and communicate on their own time.

Cohort Learning

For example, in a synchronous leadership webinar, all participants log on to their computers at 2 p.m. on Tuesday and participate in the presentation until it is over at 4 p.m. With the cohort model, the learners typically log on at the beginning of the week and could then read the materials, complete the activities, and discuss issues with other classmates at any time during the week.

EXAMPLE OF THE COHORT MODEL

HISTORY OF E-LEARNING

- **1950-1960** : BF SKINNER INTRODUCES CONCEPT OF PROGRAMMED INSTRUCTION, SELF BASED LEARNING
- **1960**- THE FIRST COMPUTER ASSISTED INSTRUCTION (**CAI**) SYSTEM , **PLATO**(PROGRAMMED LOGIC FOR AUTOMATED TEACHING OPERATIONS)
- **1970-1980**: MINI COMPUTERS AND COMPUTER TERMINAL WAS INTRODUCED. **1980** – **CBT** COMPUTER BASED TRAINING IS COINED

HISTORY OF E-LEARNING

- **1994**: WWW IS COMMERCIALIZED, PROVIDING PLATFORM FOR THE DEVLOPMENT OF ONLINE CONTENT AND COURSES
- **1997**: THE TERM E-LEARNING WAS COINED
- **2001**: FIRST LEARNING MANAGEMENT SYSTEM (LMS), BLACK BOARD, INTRODUCED ENABLING EDUCATORS TO MANAGE AND DELIVER ONLINE COURSE
- **2006**: THE RISE OF WEB 2.0 TECHNOLOGIES LEADS TO THE INCORPORATION OF SOCIAL LEARNING
- **2012**: THE CONCEPT OF FILPPED CLASSROM GAINS POPULARITY
- **2015**: VIRTUAL REALITY (VR) AND AUGUMENTED REALITY IMPLEMENTED IN E-LEARNING
- **2019** : THE COVID – 19 PANDEMIC ACCELERATES THE ADOPTION OF ONLINE LEARNING GLOBALLY
- **2020** : AI IMPLEMENTED SELF LEARNING TOOLS

BENEFITS OF E-LEARNING

- **FLEXIBLITY AND ACCESSBILITY** : E- learning allows learners to access educational materials at their convenience, breaking the barriers of time and location.
- Easy to use ,
- Requirement : android / smartphone/ tablet, desktop, laptop, etc, internet .
- Outcome : own pace , own time , own location

BENEFITS OF E-LEARNING

- **Cost Effectiveness**: e- learning often reduces the cost of the course compared to traditional classroom course.
- Students can access their classroom remotely
- Ex: travel expenses, school / college fees, etc.
- E- learning platform can accommodate huge number of students compared to traditional learning platform.
- It also allows users to record the session and replay at their convenience

BENEFITS OF E-LEARNING

- **Personalisation and Customization**:
- One can adjust the difficulty level / learning pace based of students progress and performance
- Learners can access diverse resources related to the topic
- E-learning platforms often integrate analytics enabling instructors to track progress and adjust content accordingly.

BENEFITS OF E-LEARNING

- Scalability: E-learning allows for easy scaling of educational programs to reach larger audience
- Institutions can offer courses to thousand of students simultaneously without considering of physical classroom limitation.

BENEFITS OF E-LEARNING

- Real time updates and Accessibility for the resources: it enables real time updates and accessibility to resources ensuring most relevant and current information is readily available .
- Online libraries, data base and multimedia content are easily accessable

BENEFITS OF E-LEARNING

- Self paced learning:
- It allows the users to learn at their own pace , speed and convienence
- Users can set their study schedules , pause, rewind playback etc.

Drawbacks of E- Learning

- Technological Challenges : e- learning has some limitations where the technical challenge is the biggest issue .
- Not all learners have access to proper internet connection or suitable , fast and reliable devices
- It is challenging to get fast and reliable internet connection in the villages and town
- Software issue, device mal function, etc

Drawbacks of E- Learning

- Lack of personal interaction:
- There is less interaction with the students and teachers
- Collaborative learning is complicated
- Lack of face to face interaction

Drawbacks of E- Learning

- Self motivation and discipline:
- Staying focus and motivated fails
- Without direct supervision some lerners find it challenging to stay on track
- Distraction at home or different learing environments can hinder

Drawbacks of E- Learning

- Limited hand on traning :
- Certain subjects like science / technical skills may require physical interaction
- Labs and workshops opportunities become restricted
- Less practical knowledge

Drawbacks of E- Learning

- Quality of education:
- Many offer online resources and excellent study material, some lack depth, accuracy, interactivity and real time examples
- Engaging students complete time is complicated

Best practices for e-learning

- Set clear goals
- Accessible learning material
- Interactive content
- Establish a routine
- Engagement and interaction
- Feedback and assessment
- Support and resource
- Personalization
- Utilize different teaching methods

Future of e-learning

- Personalized learning with AI: e learning is benifitted by artificial intelligence and this impact is only anticipated to increase

Immersive technologies

Micro learning

Gamification and interactive learning

Collaborative learning

Learning through analytics

Focus on soft skill and future ready

Global accessibility

Learning management system(LMS)

- It is a software application of platform designed to fecilitate the management delivery and tracking of educational content.
- LMS is comnoly used for educational institution and organization to keep a track on students and teachers to verify the quality of education , attendance, study material , test ,etc to get monitored

Features of LMS

- Course management
- User management
- Content management
- Assessment and evaluation
- Communication and collaboration
- Reporting and analytics
- Mobile compatibility

Benefits of LMS

- Centralized learning
- Accessibility and flexibility
- Scalability
- Cost efficiency
- Tracking and reporting
- Learning on the go
- Customization and personalization
- Efficient administration
- Compliance and certification

Technologies used in E- Learning

- LMS
- CMS – Content Mangement System
- Video Conferrence tools
- Web Conference tools
- Mobile learning
- Interactive whiteboards
- Gamification
- Virtual reality
- Podcasting
- Social media
- Learning analytics
- Cloud computing
- AI

Online Course

- Steps to create online course
- Define objectives and audience
- Plan course
- Develop content
- Select LMS
- Assessment design
- Ensure accessibility

Tools to create online course

- LMS
- Canvas
- Moodle
- Blackboard
- Contnet creation table
- Camtasia
- Articulate storyline
- Canva
- Video hosting platforms – youtube
- Live webinar tools – zoom, Microsoft teams
- Quiz and assessment tools: google forms
- Collabaration and communication tools: slack, Microsoft 365 sharepoint
- E-commerce platform: thinkific
- Analytics tools: google analytics, LMS

Need of the millennials learners

- Born bw 1980-1990s
- This generation was born when the technology was on the rise
- They were the first generation to use the technology to the fullest at that particular era
- Technology integration
  - Engaging and interactive content
  - Collabaration and social learning
  - Real world relevencce

21st century skill and learning

- This is crucial in content of e learning
- Accumalation of knowledge , softskills
- Digital litracy, critical thinking, problem solving
- Creativity and innovation
- Communication skills
- Teamwork
- Enterpruner ship
- Cultural awareness