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# Development of eContent for Online Course



# Introduction

- ❖ eContent is any form of learning material available digitally that can be used by a learner to achieve related learning objectives.
- ❖ eContent are e-text, video, audio/voice narration, music, sound effects, images and graphics; singly or in combination.

# Need of eContent in Online Courses

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- ❖ helps engage different parts of the learners' brain, thus reducing the cognitive load and making students more attentive.
- ❖ makes the complex concepts easy to understand and makes learning fun
- ❖ ignites the curiosity of learners and encourages them to explore the concept further

# Forms of eContent in Online Courses

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- ❖ eText,
- ❖ images and graphics
- ❖ video,
- ❖ audio/voice narration
- ❖ Interactive Resources

# eText

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- ❖ eText is one of the primary means by which we communicate in academia or for pleasure.
- ❖ eText is a general term for any document that is read in digital form, and especially a document that is mainly text.

# eText

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01

An e-mail message.

02

A student case study that is stored on a computer.

03

Website pages that contain a significant amount of text so that, to be understood, they have to be read.

04

A hypertext manual.

# Images

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- ❖ In contrast to text, images—still and moving—are a powerful tool for communication.
- ❖ They are concise—several pages of text can be encapsulated by one image



# Images

## Types of Images and visuals

- ❖ Photos – both custom photos and stock photos
- ❖ Graphics and diagrams
- ❖ Infographics
- ❖ Charts and graphs
- ❖ Maps and plans
- ❖ GIFs – short animated images without sound

# Benefits of Images

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- To make a page more visually attractive.
- To make the content more relevant.
- Graphs or charts to make it easier for learners to digest statistics and figures.
- To explain a complex idea or to present a range of different facts and figures
- Diagrams or graphics to show how a product, piece of equipment, component, or machine works.

# Infographics

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Infographics are graphic visual representations of information, data, or knowledge intended to present information quickly and clearly.

“a good infographic is worth a thousand words“



# Types of Infographics

- ❖ Timeline infographic
- ❖ Process infographic
- ❖ Informational infographic
- ❖ Map infographic
- ❖ List infographic
- ❖ Comparison infographic
- ❖ Flowchart infographic

# Benefits of Infographics

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- ❖ Draw attention to a specific element in your educational content.
- ❖ It can also help weed out irrelevant information.
- ❖ Support understanding of difficult concepts.
- ❖ Simulate real-life situations.

# Benefits of Infographics

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- ❖ Make lessons more interesting.
- ❖ Enable learners to focus on only one object at a time.
- ❖ Help steer attention to selected details by adjusting the direction of motion in the infographic.
- ❖ Allow learners to access lessons at their own pace.

# List Infographics

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List infographic can be used to:

- ❖ Share a collection of tips
- ❖ Support an idea or topic with major points
- ❖ Summarise your presentation

## Forms of eContent

1

Conventional

2

Federal Housing Administration (FHA)

3

United States Department of Veterans Affairs (VA)

4

United States Department of Agriculture (USDA-RHS)

# List Infographics

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Timeline infographic can be used to:

- ❖ Show historical development
- ❖ Plan for an event
- ❖ Highlight a sequence of events
- ❖ Share a story in chronological order
- ❖ Share milestones across different social media platforms



# Map Infographics

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## Map infographic can be used to:

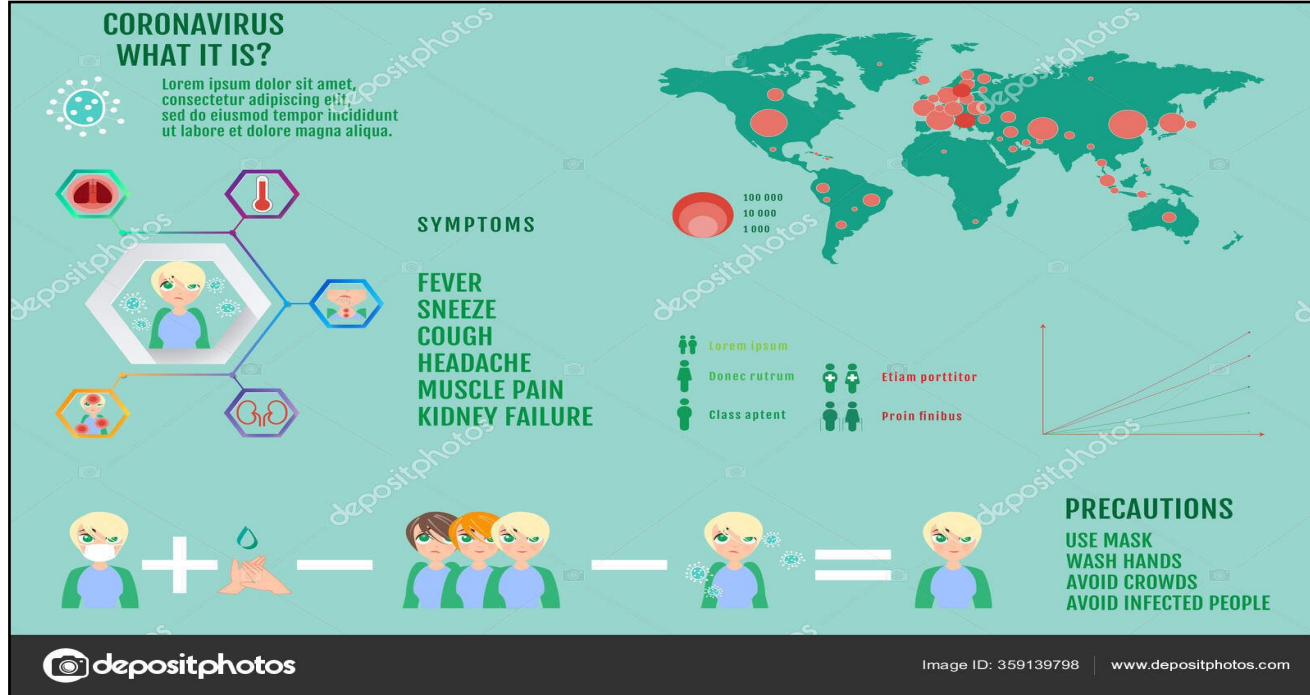
- ❖ Illustrate trends on a specific location – global, national, state, cities, towns, and even your neighbourhood
- ❖ Share visual stories of a particular place
- ❖ Communicate regional and global statistics based on locations

# Map Infographics

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# Process Infographics

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Process infographics are one of the best infographic formats if your goal is to:

- ❖ Break down a complex process into easy-to-digest pieces of information
- ❖ Provide a summary of steps in a process
- ❖ Visualise a procedure

# Process Infographics

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# Interactive Resources

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- ❖ Interactive Resources simply refers to the e-Resources which show content based on user input.
- ❖ To provide opportunities for active participation and learners can comment and generate discussion around the content.



# Types of Interactive Resources

- Quizzes
- Interactive graphics
- Interactive videos
- Interactive ebooks
- Interactive polls
- Interactive surveys
- Interactive Ebooks
- Interactive checklists
- Interactive timelines
- Interactive infographics
- Interactive presentations
- Interactive maps

# Stages of Development

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**Pre-Development stage** (*idea generation, research on needs of target groups, selection of content, and appropriate forms of eContent*)

**Development Stage** (*appropriate software/ website mobile applications for developing eContent*)

**Post-Development stage** (*adding visuals, music and sound effects. After editing, eContent obtains feedback from experts and target groups, and modified accordingly*)

# Pre-Development Stage

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## Selecting an appropriate form of eContent

- ❖ It needs identification of the nature of the content as facts, concepts, generalisations, principles, processes, etc.
- ❖ Start with thinking about the learning objectives and goals for which the content is needed.
- ❖ Consider the diverse needs of learners.
- ❖ Along with quality, the inclusiveness of content is an important criteria to select content to cater the needs of diverse learners.

# Development Stage

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Table 2 :Digital tools to create eContent

Form of eContent	Digital Tools
	FOSS
Text	LibreOffice Writer, OpenOffice Writer
Infographics	Canva, Visme, Piktochart
Audio	Audacity
Video	Openshot
Interactive Video	H5P
Animation	Scratch
Simulation	PhET

# Post-Development Stage

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## Quality Parameters of eContent





# Interaction in Online Course

- ❖ Interaction is central to any learning experience.
- ❖ Currently, MOOCs rely on discussion forums and real time chatting as a primary means of interaction among learners and instructors.
- ❖ Online discussion forums as asynchronous communication and chat in real time are widely used in LMS.



# Interaction in Online Course




- ❖ **Synchronous** is real-time teaching and learning that can happen collaboratively and at the same time with a group of online learners or even individually.
- ❖ examples of synchronous mode of communication are:
  - Phone calls
  - Live video meetings/discussions
  - Live doubt clearing sessions
  - Scheduled in-person meetings

# Video Conferencing Tools

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Video Conferencing Tool	Image
Skype	
Zoom	
Google Meet	

Below the table, three icons are displayed: a green speech bubble with a white video camera icon (Google Meet), a blue speech bubble with a white video camera icon (Zoom), and a blue speech bubble with a white 'S' icon (Skype).



# Real-Time Chat in Online Course

- ❖ Tools and platforms available for implementing real-time chat in online courses such as built-in chat in Learning Management Systems (LMS).
- ❖ Many LMS platforms, such as Moodle, Canvas, and Blackboard, offer built-in chat features or integrations with third-party chat applications.
- ❖ Video conferencing platforms like Zoom, Microsoft Teams, and Google Meet often include chat features that can be used for real-time communication during online classes.



# Asynchronous Communication in Online Course

- ❖ **Asynchronous** is any time, anywhere learning but not connected in real time.
- ❖ Examples
  - Emails
  - Direct messages on chat apps
  - Comments on shared documents/blogs



# Conclusion

- ❖ In the context of online courses, eText, images, infographics and interactives were discussed as main types of eContent.
- ❖ eContent fosters engagement, active learning, personalisation, problem-solving, and critical thinking.
- ❖ With immediate feedback, personalized learning experiences, interactive eContent enhances the educational experience of learners.



# Conclusion

- ❖ There are three stages in the development of eContent i.e. pre-development, development and post-development
- ❖ Online interaction may happen in two modes i.e. synchronous and asynchronous.
- ❖ In the context of education, synchronous is real-time teaching and learning.
- ❖ Asynchronous is any time, anywhere learning but not connected in real time.