

M.Ed. –SEMESTER-II
Paper CC8: EDUCATIONAL TECHNOLOGY AND ICT

VANDANA
ASSISTANT PROFESSOR, DEPARTEMENT OF EDUCATION
N.A.S COLLEGE, MEERUT

Unit-III, Chapter-1

Dear Students,

We will start our chapter-1 of Unit –III, **Synchronous and Asynchronous media for formal and non formal educational settings.**

Synchronous and Asynchronous learning

New technology is taking over the traditional classroom. This new system is called e-learning. E-learning can be divided into two categories: synchronous and asynchronous learning.

Synchronous learning

Synchronous learning involves online studies that are conducted with the aid of chat rooms. This kind of learning can only happen online. Online communication helps learners stay in touch with their teacher and fellow students. It's called synchronous learning because the system allows students to ask their teacher or fellow student questions instantly through instant messaging.

The word synchronous means working together at the same time, and in the online learning world, chat rooms and online conferences are good examples of synchronous communication. In a chat room, people's comments to each other are relayed immediately, enabling a real-time discourse. Similarly, online conferencing with the benefit of voice over Internet protocol (VOIP) tools enable real-time conversations to take place online. Learning from synchronous communication is enhanced because real-time conversations allow people to explore, through writing or talking, the class concepts. The act of verbalizing helps students build bridges between different ideas and concepts, thus helping them retain information more effectively.

Asynchronous learning

On the other hand, we have asynchronous learning. This method can be carried out online and offline. Asynchronous learning involves coursework delivered by web, email, and message boards that are posted in online forums. Students do not have access to instant messaging through this online forum. A benefit of asynchronous learning is that you're able to be self-paced.

Asynchronous communication is the relay of information with a time lag. Discussion forums and email are two examples of how asynchronous communication is employed in online learning. It is very helpful to communicate in this way, because students have plenty of time to formulate thoughts. By communicating via email, students are able to respond in detail to a question or topic that they might have answered incompletely in a real-time conversation. This time lag in communication helps students internalize information by giving them time to research certain ideas or merely extra time for contemplation. The main disadvantage to asynchronous communication is time lost waiting for a response.

Synchronous & Asynchronous Classes

1 What is Asynchronous Learning?

Asynchronous learning allows you to take online courses on your own schedule.

Instructors provide materials, lectures, tests, and assignments that can be accessed at any time.

Students may be given a time frame – usually a one week window – during which they need to connect at least once or twice.

Overall, students are free to contribute whenever they choose.



E-mail

Virtual Libraries



Discussion Boards

Social Networking



Chat



Telephone

Podcasts



Video Conferencing

2 What is Synchronous Learning?

Synchronous online classes are those that require students and instructors to be online at the same time.

Lectures, discussions, and presentations occur at a specific hour.

All students must be online at that specific hour in order to participate.

Types of Communication

Asynchronous

Synchronous

MODES



Email



Google Drive



Yammer



Trello

MODES



In-person meetings



Online conferences



Phone calls

BENEFITS



Involve people across the organization



Time lag allows for more consideration



Draw insights from introverted members

BENEFITS



Discuss and argue ideas effectively



Team bonding and trust building



Efficiently define project needs

DOWNSIDES



Absence of nonverbal cues



Misunderstandings and assumptions

DOWNSIDES



Time costs and financial expenses

USES



Gathering input from different people

USES



Time-sensitive projects



Active feedback needed

What is the difference between synchronous and asynchronous learning

A significant difference between synchronous and asynchronous learning is instant messaging and immediate feedback. With synchronous learning, learners can receive immediate feedback from their fellow students or teacher through instant messaging.

Asynchronous learning doesn't enable that type of interaction. If someone has trouble answering the questions, they're not able to ask for help straight away. Then again, with asynchronous learning you can be self-paced, which is not possible with synchronous learning.

Synchronous learning

For example, as a student, you have to watch a lecture at a certain time. You are able to interact with other students about the answers. The teacher is also able to read your answers immediately and to interact with the students during this lecture. The type of lecture has to be given **online**.

Asynchronous learning

On the other hand, imagine you are able to watch the lecture at your own pace. You're unable to discuss your answers with your classmates in real time. This type of lecture can be given **offline**.

Synchronous



Students learn at the same time.

Communication happens in real time.

Possibly more engaging and effective.

Allows for instant feedback and clarification.



Examples

Video conferencing, live chat, live streamed videos.

Asynchronous



Students learn at different times.

Communication is not live.

Possibly more convenient and flexible.

Allows students to work at their own pace.



Examples

Email, screencasts, Flipgrid videos, blog posts/comments.

edublogs

Advantages of Synchronous & Asynchronous Learning

Synchronous

- Real- Time Discussion
- Real –Time Collaboration
- Immediate Feedback
- Cost effective
- Facilitator can gauge understanding of concepts
- Motivation to complete assignments course

Asynchronous

- Anytime- anywhere learning
- Access materials when convenient
- Opportunity to research answers
- Can express thoughts without any interruptions

www.xlprotraining.com



Synchronous and asynchronous are the commonly used media for the formal and non formal educational settings, but it is important to know when, why and how to use synchronous and asynchronous e-learning.

Table 3

When, Why, and How to Use Asynchronous vs. Synchronous E-Learning

	Asynchronous E-Learning	Synchronous E-Learning
When?	<ul style="list-style-type: none"> ■ Reflecting on complex issues ■ When synchronous meetings cannot be scheduled because of work, family, and other commitments 	<ul style="list-style-type: none"> ■ Discussing less complex issues ■ Getting acquainted ■ Planning tasks
Why?	<ul style="list-style-type: none"> ■ Students have more time to reflect because the sender does not expect an immediate answer. 	<ul style="list-style-type: none"> ■ Students become more committed and motivated because a quick response is expected.
How?	<ul style="list-style-type: none"> ■ Use asynchronous means such as e-mail, discussion boards, and blogs. 	<ul style="list-style-type: none"> ■ Use synchronous means such as videoconferencing, instant messaging and chat, and complement with face-to-face meetings.
Examples	<ul style="list-style-type: none"> ■ Students expected to reflect individually on course topics may be asked to maintain a blog. ■ Students expected to share reflections regarding course topics and critically assess their peers' ideas may be asked to participate in online discussions on a discussion board. 	<ul style="list-style-type: none"> ■ Students expected to work in groups may be advised to use instant messaging as support for getting to know each other, exchanging ideas, and planning tasks. ■ A teacher who wants to present concepts from the literature in a simplified way might give an online lecture by videoconferencing.

References

www.igi-giobal.com

www.worldwidelearn.com

www.enwikipedia.org

www.geeksforgeeks.com