

FDP101x Foundation Program in ICT for Education

CONSOLIDATED COURSE JOURNAL

(Week – 1, Week-2 and Week-3)

Duration: 13/09/2018 to 18/10/2018

Prepared by Ms.N.R.Sankpal

Electronics and Telecommunication Department

PES Modern College of Engineering Pune- 411005

Week 1: Moving from Physical to Online Classroom

(Date of Submission: 25/09/2018)

Introduction

IIT Bombay is conducting Foundation Program on ICT in Education (FDP 101x) to enable faculties to integrate ICT in their Teaching-Learning Process, approved by AICTE as Two Weeks Course. This is required to have effective teaching and learning process.

Course Objective

1. To provide Exposure to online ICT applications for Teaching –Learning.
2. To effectively use ICT in our own domain for preparation of materials.
3. To become facilitator.
4. To facilitate hybrid learning.

Broad Topics Covered:

1. From Physical Classroom to Online Classrooms
2. Pedagogic Adaptations
 - a. Learning Dialogues or LeDs
 - b. Learning by doing activities or LbDs
 - c. Learning Extension Resources or LxTs
 - d. Learning Experience Interaction or LxIs
3. Information and Communication Technology

From Physical Classroom to Online Classrooms

In physical classroom there are 3 basic elements,

1. The Learner
2. The Content
3. The Teacher

Various tools and strategies are available to facilitate interaction between these elements.

Types of Interaction:

1. Learner –Teacher Interaction
Eg. Question Answer Session
2. Learner –Content Interaction
Eg. Students reading contents of PPT or solving the problem
3. Learner-Learner Interaction
Eg. Students discussing among them selves

When we are providing to new edge technologies for learning role of teacher changes to facilitator.

Pedagogic Adaptations

a. Learning Dialogues or LeDs:

Q1. You are now watching a video of me explaining a content .What is the equivalent of such a video in a regular teaching –learning interaction within your classroom?

Reflection:

Equivalent to video in regular teaching learning process is Teacher explaining the contents to the students in physical classroom.

Q2. What additional features does the video provide you apart from the regular information transmission of the content?

Reflection:

Features of the video are as follows,

1. We can pause the video whenever required.
2. We can revisit the required content at any point of time.
3. We can increase the volume.
4. Can get the transcripts of the video.

Additional advantages explained by facilitator of video are,

- Use of Seek Bar.
- Increase the screen size by clicking on the full-screen button.
- In case, you are not able to follow the cube transcript, there is also this quote button by click on this you can see the transcript coming on the side,

So when instructor is speaking about something that portion will get highlighted.

- "Reflection Activity".

Advantages of Reflection Activity:

- Video can become interactive as learner will be involved in dialogue along with the facilitator.

b. Learning by doing activities or LbDs:

Q1. Now, take a moment to reflect on this concept of doing practice problems immediately after watching the video. What advantage do you see in answering these questions immediately after watching LeDs?

Reflection:

Advantages are as follows,

1. Session becomes interactive.
2. As questions are based on video contents, learner will listen to the videos with
3. 100% concentration.
4. It helps to identify understanding.

c. Learning Extension Resources or LxTs:

'Learning Extension', means these resources are meant for extending learning on what we have already learnt. That is, they are advanced resources that help us in going deep in a particular content.

Eg. It can be videos, weblinks or documents that are already available or it can be research paper written about particular technology.

Q1. Now that you have heard about learning extension resources and its purpose, can you think about the function of assimilation quizzes?

Reflection:

It helps to identify how clearly learner understood the concepts.

d. Learning Experience Interaction or LxIs:

Eg. let us consider the case of a physical classroom scenario

Where the teacher inquires about the learners experiences on the content that was elaborated by the teacher and then initiates a structured discussion in the classroom. Structured discussion is carried out by asking a very focus question to all the learners and also by suggesting specific points to be discussed. The teacher also provides specific instructions on how to conduct this discussion.

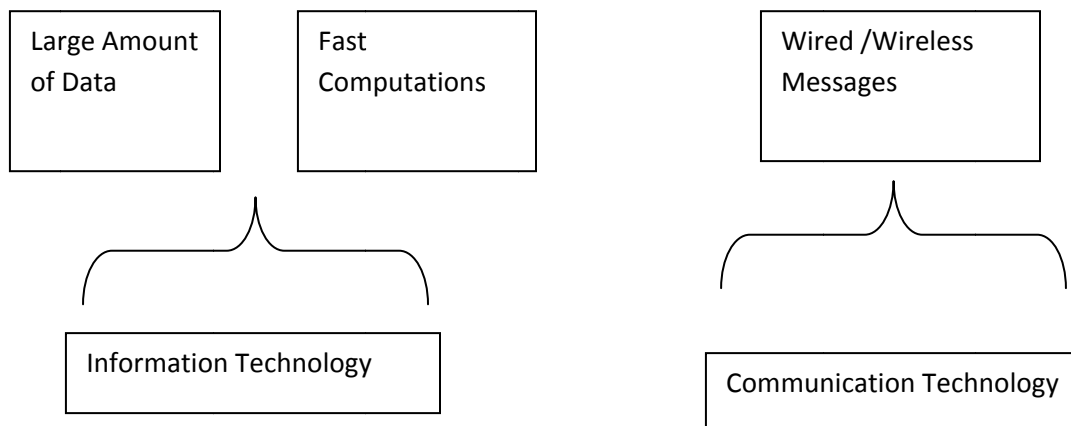
Q1. Can you think of advantages of having such a structured group discussion like the one which I explained right now?

Reflection:

The advantages are, the discussion revolves around the core concept and it also increase interest of the learner in that specific topic.

Information and Communication Technology

Large data is present at some place we can access it manipulate it and do interesting things with it.



Week 2: Web Presence for Teachers

(Date of Submission: 03/10/2018)

Broad Topics Covered:

1. The Internet
 - a. What is the Internet?
 - b. How the Internet Works?
 - c. Some Internet Protocols

2. WordPress for Website Creation
 - a. Tools for Website Creation
 - b. Basic Customisation in WordPress
 - c. Adding Content in WordPress
 - d. Managing Content in WordPress
 - e. Advanced Customisation in WordPress

The Internet

a. What is the Internet? :

Q1. Do you know what Internet is? Do you know how it works?

Reflection:

- What is Internet?

It is interconnected network of computers which is connected with TCP/IP protocol. Each connected device will have separate IP address.
- How the internet works?

Internet is made up of packets. These packets are sent from one computer through cables or wires to router and later to the destination. In the same way router sorts the packets as per their destinations. When there is less traffic the packets reach destination without congestion. But when traffic is more, they are resent via router few milliseconds later. For real time applications like video chatting or video gaming if the packets do not reach on time at right place then there may be problems like voice jitter, scrambled picture and many more. These problems are solved by scheduling the internet traffic. This is done by

labeling the packets to make router know which packet is to be sent where and when. Thus router sets priority for more important packets to be sent first and the remaining as space is available.

b. How the Internet Works? :

Q1. Do you know how information travels from your computer to other networks?

Reflection:

Information travels from one machine to the other in the form of packets. This one packet has data in the form of binary (1's and 0's). This binary data is converted to radio waves and transmitted and at receiver radio station they are converted back to binary numbers and delivered to the destination computer.

c. Some Internet Protocols :

Whenever information travels from one computer to another and from one network to the other, there are rules and procedures that manage the movement of data packets. These rules and procedures constitute network protocols.

Q1. Think of what happens when you write and send an email to your friend. What do you think are the activities/processes taking place from the time you send it to the time you receive a response?

Reflection:

Initially when an email is sent; to every email address there are two parts.

1. Name
2. Domain

Ex: abc@yahoo.com

Here abc is name and @yahoo.com is domain

So every mail initially goes to SMTP server (Simple Mail Transfer Protocol Server). This server will check where your mail is to be sent and if everything is ok then the mail goes to DNS (Domain Name System). The DNS will find the IP address to that particular domain and sent to MTA (Mail transfer Agent). The MTA in above example is yahoo. This MTA has many inboxes. It will locate the abc inbox and then drop the mail in that inbox.

WordPress for Website Creation

a. Tools for Website Creation:

Many tools available for website creation but in this FDP more emphasize was given on two tools as follows,

1. Wordpress
2. Drupal

Types of Website:

1. Simple
2. Multifunctional

Simple websites:

1. It has few pages and a very simple menu,
2. It could also have periodic pages (blogs)

Wordpress can be used to create simple website.

Multifunctional websites:

1. It has pages with deeper structured content.

For example, if you want to have list of publications, each publication has got multiple fields like the title, author, journal, year etc.

2. It has structure to content.
3. We could also have pages linked to each other.
4. It has independent pages but they are linked with each other.

Eg. Departmental websites, conference website

Use Drupal to create multifunctional website.

Drupal and Wordpress both the websites are freely available.

b. Basic Customisation in WordPress:

In this section it is nicely explained how to change appearance of the website.

Following customisation options are explained,

1. Add image
2. Add Logo
3. Add profile picture

4. Add pages
5. Add blogs
6. Add widgets
7. Change the theme
8. Rearranging widget

Example of creation of first blog is well elaborated.

c. Adding Contents to WordPress:

Steps for adding the contents in WordPress are as follows,

Adding blog or page:

1. Login to wordpress site
2. Go to admin dashboard
3. Click on top left corner
4. Menus will get displayed
5. Select add blog or add page
6. Give suitable title and note down the text.
7. Publish the blog or Page.

d. Managing Contents on WordPress:

For managing the contents on WordPress accessing the Control Panel is very much important.

Flow for managing the contents is as follows,

1. Go to control panel
2. Go to My Site and go to WP Admin
3. Go to administrative dashboard.
4. There we can see posts, media, links, pages, comments etc.
5. After Clicking on post it gives us list of all the posts which we have already created in this website.
6. Edit the post.
7. Publish it.

e. Advanced Customisation in WordPress:

Steps for advance customisation,

1. Go to admin dashboard
2. Go to the particular page where you want to add media/pdf or ppt
3. Click edit and add media
4. Drag and drop the file from media library.

Week 3: Creating Your Own Video Resources

(Date of Submission: 03/10/2018)

Broad Topics Covered:

1. Visual Presentation
 - a. Visual Presentation Skills 1
 - b. Visual Presentation Skills 2

2. Spoken Tutorial: Creating a Video Open Education Resource
 - a. Creative Commons Licensing
 - b. Spoken Tutorial Project
 - c. Creating Spoken Tutorial

3. Other Screencasting Softwares
4. Peer Review

Visual Presentation

a. Visual Presentation Skills 1:

Q1. Assume that you are planning to create a slide with your subject content and uploaded it to your WordPress website. You are creating this as an open educational resource (OER) so that everyone can access and use it. What visual parameters will you take care of during your slide design so that your website visitors find it easier to understand?

Reflection:

1. Slide must not be bulgy. It must contain minimum number of points in it.
2. Color combination for Slide must be subtle.
3. Important points must be highlighted with specific decent color.
4. Appropriate links must be provided to download the required contents.

b. Visual Presentation Skills 2:

Q1. Given that you know how to design visuals from the previous learning dialogue, what do you think are the considerations you have to make when using fonts and colors in slide design? How many font types, font sizes and colors will you use in the design of your slides?

Reflection:

Considerations regarding colors and fonts while making slide are as follows,

Font Type: maximum 2 font types should be used.

Font Size: maximum 2 font sizes should be used for title and contents.

Color: based upon background color maximum 3 colors can be used.

Q2. While communicating in a paragraph or in a presentation, we would like to give some emphasis to certain points. Now how do you lend emphasis?

Reflection:

Ways for emphasizing the important points,

1. I can use Bold letters
2. I can write it in inverted commas
3. I can highlight the text with different colors
4. I can underline the specific topic

Spoken Tutorial: Creating a Video Open Education Resource

a. Creative Commons Licensing:

Creative Commons (CC) is one way that offers public license which allows you to set the way you want other people to use your content (open educational resources) and how the already available content can be used by others.

To understand how creative commons licenses work, link of webpage is provided – <https://creativecommons.org/>

Different types of creative commons licenses are available.

b. Spoken Tutorial Project:

It is an initiative taken by IITB to create open educational resources under creative commons.

c. Creating Spoken Tutorial:

Spoken tutorial is created using CamStudio it is an open source software available for windows.

Other softwares available are

1. recordMyDesktop (Linux System)
2. Kazam (used to produce videos of slides with sound narration)
3. Movie Maker(Dubbing of spoken tutorial)
4. Openshot (editing in Linux)

What are the processes involved in creating a spoken tutorial?

1. Create check list.
2. Decide learning activity
3. Create outline for the whole series of spoken tutorials
4. Write the script.

Other Software Tools

Basically there are two types of software tools are available for video creation,

1. GPL (GNU General Public License)
2. Non GPL

Non GPL Softwares:

1. Screencast-O-Matic
2. Techsmith Jing (for Windows and OSX)
3. Techsmith Camtasia (for Windows)
4. Quicktime (for OSX)

Peer Review

Peer Review Process: What, Why and How?

Q1. Can you tell me one advantage of the process of peer review for both the reviewer and the reviewee?

Reflection:

Advantage for Reviewer:

After reviewing few submissions he/she may come across some new points which will enhance the learning experience of reviewer.

Advantages of Reviewee:

1. Can receive feedbacks which are helpful for improving the presentations in future.