



Indira Gandhi
National Open University
Staff Training and Research
Institute of Distance Education

MDE-418

Educational Communication Technologies

Block

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LEARNING PORTFOLIO

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THE PEOPLE'S
UNIVERSITY

MDE-418: Educational Communication Technologies

(New Course in place of ES-318: Communication Technologies for Distance Education)

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MDE-418: Educational Communication Technologies

Course Outline

Block 1 : Communication Technology: Basics

- Unit 1 : Introduction to Communication Technology
- Unit 2 : Communication Networks
- Unit 3 : Pedagogical Designs for Communication Technology
- Unit 4 : Managing Technological Change
- Unit 5 : Student Assessment in Technology Enhanced Learning and Evaluation of Technology

Block 2 : Technology Primer

- Unit 6 : Radio and Audio
- Unit 7 : Television and Video
- Unit 8 : Satellite-based Education
- Unit 9 : E-Learning
- Unit 10 : M-Learning

Block 3 : Content Creation Tools

- Unit 11 : Communicating with Graphics
- Unit 12 : Digital Audio
- Unit 13 : Digital Video
- Unit 14 : Interactive Multimedia
- Unit 15 : Creating Materials for the Web

Block 4 : Interactive Delivery Methods

- Unit 16 : Email, Mailing Lists, Discussion Groups, RSS Feed
- Unit 17 : Web 2.0
- Unit 18 : Virtual Classroom and Virtual Reality
- Unit 19 : Reusable Learning Objects
- Unit 20 : Learning Management Systems

Block 5 : Learning Portfolio

INTRODUCTION TO THE COURSE

In the previous courses you have studied that distance education is primarily a technology mediated system of teaching and learning. Media (especially electronic media) plays a significant role in the delivery of educational opportunities to people who need education at their door-step, study at their own pace, time and place. Educator's trust with technology has been a story of evolution of the media itself. Starting from the use of blackboard and the printed textbook for mass education, educators have always experimented with the use of technologies to improve their teaching and learning at all levels. With the emergence of a variety of Computer and Communication Technologies, the process of adoption and adaptation of innovative technologies for the purposes of education and research has increased manifold. The use of technologies for teaching and learning has been broadly used as Educational Technology, which is the field concerned with the design, development, utilization, management, and evaluation of processes and resources for learning. The Association for Educational Communications and Technology (AECT) defined educational technology as "the study and ethical practice of facilitating learning and improving performance by creating, using, and managing appropriate technological processes and resources"¹. Historically the term educational technology has roots in audio-visual communication, systems approach, and educational technology as a process. In 1994, the AECT accepted 'educational technology' as synonymous with 'instructional technology'. We use the title of the course as Educational Communication Technologies to discuss the use of a variety of technologies for educational communication purpose. We would like you to have an overview of the field, and we are sure your engagements in the course would lead to your further exploration of the field through reading further literature given as references in the units throughout the course.

Course Objectives

At the end of the course, you are expected to be able to:

- Critically examine the process of educational communication to plan, design and use appropriate communication technologies in context;
- Identify the range of educational communication technologies, and their relative strengths and weaknesses;
- Use educational communication technologies confidently to create digital content and deliver these through new information technologies;
- Discuss and explain the general trends in the developments and use of educational communication technologies at national and international level; and
- Create engaging, collaborative, reflective and authentic learning environments for delivery of education and training.

Though the course is theoretical in nature, it has a lot of practical components, and we expect you to use this course to develop skills of using the technologies discussed in the course. We expect you to develop independent learning abilities to use computers and other technical hardware to create learning resources and environments that are interesting, motivating and engaging to the learners. So, you may need access to

¹ Januszewski, Alan & Molenda, Michael (2008) *Educational technology: A definition with commentary*, New York: Lawrence Erlbaum Associates, p.1

computer and Internet at home, office or a in a cybercafé to practice the ideas and skill related inputs given in the course.

We have also developed a short but interesting **Learning Portfolio** that will give you instruction on how to practice the skill component, and record the outcomes. The portfolio shall be considered as the assignment component of the course and it would be evaluated at your study centre. You will submit the Portfolio at the study centre for evaluation after completing the activities mentioned there. You may like to discuss these activities in the counselling sessions with the available counsellor, who is trained to guide you to accomplish the tasks of the course. He/she will evaluate your engagements in the course through what you present in the portfolio. *This block is all about the Learning Portfolio.*

There are **Check Your Progress** questions spread over in the course, and we expect you to do these before you actually check for the feedback given at the end of the units. These are opportunity for you to assess your own progress. These are places where you take pause in reading, and think, do, write, discuss and compare your answer with that of the one given at the end. If you check the response before you actually do the task, it would be cheating yourself, and we are sure you will not prefer to do so. If your response is different than the one given in the feedback, we advise you to re-check your own conceptions and thinking about the question/issue and read the topic again.

You may also like to highlight such areas for discussion in the **Counselling** sessions. Your interaction in the counselling session would make it more meaningful and lively. Counselling sessions are also the time when you can meet other learners, and see the diverse nature of the learner profile. It is encouraging to meet people with diverse background reading same subject and discussing and sharing ideas discussed in the course. If your learning style is more towards discussion and interaction, I suggest you must attend the counselling session. Even if, you are shy and like to study on your own through the materials supplied, counselling sessions provide you information about further readings and appraise you of the latest developments in the field. There is so much to learn form others, who are also seriously engaged in learning the same subject. Personally, I have benefited a lot by attending the counselling sessions, when I studied through distance mode.

Beside the counselling sessions, there are other media materials, and services available in this course, and you may like to take advantages of these by attending the teleconference session/virtual class as and when conducted. You will receive information about special arrangements regarding this from time to time.

What is covered in this Block?

This is the last block of the course. It is practical oriented, and is intended to help you to practice and apply your reflective skills to develop deeper understanding of the concepts, tools and technologies discussed in the previous four blocks. The tasks described in this block are to be performed individually at home or using computer services at a Cyber Café. The Learning Portfolio shall be treated as **Assignment** in this course, unlike the other courses having assignment. So, you have to submit results of the tasks described in this block in a CD-RW as assignment submission at your study

Learning Portfolio

centre. This will be evaluated by counselor, who would give feedback to you in the re-writable CD and assign grade as per the rules of the University. The assignment carries 25% in overall grade of the course, and you have to submit it to successfully complete the course. It is not a practical supported activity by the Study Centre. However, depending on the available facilities the Academic Counsellor will provide appropriate tutoring support on the previous four blocks of the course to help you complete the Portfolio successfully. *You must remember that the Portfolio is a personal activity, and copying from other learners would show your performance poorly.*



STRUCTURE OF THE LEARNING PORTFOLIO

A Learning Portfolio is a set of activity carried within the context of the 4 Blocks of learning materials in MDE-418: Educational Communication Technologies. We have a set of Learning Assessment Tasks (LAT) categorized in to compulsory and optional. As a learner, you have to complete all the *compulsory* LATs and work on *any six* (6) of the *optional* LATs. The submission of the portfolio shall have to be in a CD-RW, with each task in separate file showing the LAT number as the filename. The top of the CD-RW must include the Enrollment No of the learner, full name, and the Course Code. The CD-RW has to be submitted at the Study Centre for evaluation and feedback. Your CD-RW should consist of 8 LATs.

All the LAT are presented in a structured form to help you undertake the tasks correctly, and report the learning from the portfolio in a systematic way.

LEARNING ASSESSMENT TASK (LAT-1)

LAT: Design a learning environment of a course of your choice.

LAT Category: Compulsory

Learning Objectives: At the end of the task, you should be able to demonstrate ability to analyze, plan, and design the features and media of a course to be delivered in distance and/or online environment.

Tools and Technologies Required: No specific tools and technologies required, except word processing.

Your Role: As a learner, you need to define the context, where you are going to develop the course. You may like to assume the level of the educational institution, and proceed to do the analysis of the learner profile and the organizational context to apply the Bates' ACTION criteria to develop a suggested blueprint for a course of your choice. You must give the reasoning for each choice to justify.

Output to be assessed: A short report of about 1000 words.

Assessment indicators: The assessment shall be based on your understanding of the course, and how you present the design in a logical manner using multiple media and technologies contextually.

Learner Support: This task covers all you understanding of the whole course. However, Block 1 shall be of specific help.

LEARNING ASSESSMENT TASK (LAT-2)

LAT: Critically analyze the role of at least *one* technology discussed in Block 2 in the context of your course (identified in LAT 1), your institution, and your country.

LAT Category: Optional

Learning Objectives: At the end of the task, you should be able to demonstrate ability to analyze and identify the features at least one technology used in distance education to make a case/critique for its effective use.

Tools and Technologies Required: No specific tools and technologies required, except word processing.

Your Role: As a learner, you need to pick one technology from that of Block 2, and relate the strengths and weaknesses of the same in the context of the course that you have designed in LAT-1.

Output to be assessed: A short report of about 600-800 words.

Assessment indicators: The assessment shall be based on your ability to contextualize and personalize the application of the technology chosen for the course concerned. Your response should be evaluative and practical in nature to show the strengths and weaknesses in real settings.

Learner Support: This task covers all your understanding of the Block 2.

LEARNING ASSESSMENT TASK (LAT-3)

LAT: Use of graphics creation tools to draw any one of the following:

- a) Concept map of the course chosen by you in Problem 1.
- b) One figure of a concept related to the course of your choice in Problem 1.

LAT Category: Optional

Learning Objectives: At the end of the task, you should be able to demonstrate the use of graphic creation tools, including FreeMind, CMap, OpenOffice Draw and Impress.

Tools and Technologies Required: Any one or more of the following:

- FreeMind (http://freemind.sourceforge.net/wiki/index.php/Main_Page)
- CMap (<http://cmap.ihmc.us/>)
- OpenOffice Draw (<http://download.openoffice.org/index.html>)
- OpenOffice Impress (<http://download.openoffice.org/index.html>)

Your Role: As a learner, you need to use one of the software suggested to prepare a concept map for option (a) or (b).

Output to be assessed: A file containing the concept map in the appropriate software.

Assessment indicators: The assessment shall be based on your ability to use the features of the tool to show your ability to draw the concept map, including its hierarchy, relationships etc.

Learner Support: This task covers all your understanding of the Block 3, Unit 11. You will get further support from the relevant website of the software. The software may also be downloaded from the web.

LEARNING ASSESSMENT TASK (LAT-4)

LAT: Creation and editing of a digital audio file of 10 minutes on a topic of your choice.

LAT Category: Optional

Learning Objectives: At the end of the task, you should be able to demonstrate the use of Audacity for recording and editing of audio file to create MP3 file.

Tools and Technologies Required: The following softwares are required:

- Audacity (<http://audacity.sourceforge.net/download/>)
- LAME Encoder for Mp3 (<http://lame.buanzo.com.ar/>)

Your Role: As a learner, you need to use Audacity to record an audio file. Ideally, you should select a topic, and decide the format of the audio programme. After this, you should work on preparation of audio script for recording. You must install the Audacity and LAME encoder for recording the audio programme.

Output to be assessed: A Mp3 file containing the a short audio programme prepared using Audacity. So, the audacity project file should also be given additionally as proof of working in the software.

Assessment indicators: The Audacity project file and Mp3 files shall be treated as demonstration of the skills for recording the audio programme. Additionally, the issues covered, the format of the programme, and quality of recording and editing shall also be considered, including the use of music and sound effects.

Learner Support: This task covers all your understanding of the Block 3, Unit 12 and Block 2, Unit 6. You will get further support from the relevant website of the software. The software may also be downloaded from the web.

LEARNING ASSESSMENT TASK (LAT-5)

LAT: Capturing digital video and editing to prepare a short film of about 2-3 minutes on a topic of your choice.

LAT Category: Optional

Learning Objectives: At the end of the task, you should be able to demonstrate the use of Moviemaker for editing of video file; and also use a converter to prepare video file of different formats.

Tools and Technologies Required: The following softwares are required:

- MovieMaker (<http://www.microsoft.com/windowsxp/downloads/updates/moviemaker2.msp>)
- AnyVideoConverter

(http://www.any-video-converter.com/products/for_video_free/)

Your Role: As a learner, you need to use a digital video camera to record different shots of varied duration, upload these into the Desktop computer having installed the MovieMaker and AnyVideoConverter. You may also need to record audio for supporting video. You will integrate these using the editing software, called MovieMaker, which is usually part of the Windows. You will then use the AnyVideoConverter to convert the file into a .flv file.

Output to be assessed: A .flv file of a video programme so short duration.

Assessment indicators: The .flv video file submitted should demonstrate the ability of the learner to edit and present a small concept or process in the video format.

Learner Support: This task covers all your understanding of the Block 3, Unit 13 and Block 2, Unit 7. You will get further support from the relevant website of the software. The software may also be downloaded from the web.

LEARNING ASSESSMENT TASK (LAT-6)

LAT: Creation of a course home page with the use of a HTML editor and incorporate graphics, links, audio and video clips.

LAT Category: Optional

Learning Objectives: At the end of the task, you should be able to demonstrate the use of authoring software – NVU. The website/webpage created should include links to other webpages, insert graphics, audio and video clips.

Tools and Technologies Required: The following software is needed:

- NVU (<http://net2.com/nvu/>)

Your Role: As a learner, you need to install the NVU in a desktop computer, and use the same to create HTML pages, insert links, graphics, video and audio.

Output to be assessed: A folder containing the index file for the homepage, and all associated files to show the website prepared.

Assessment indicators: Overall design, aesthetics, and conceptual organization of the site, and completeness of the work shall be assessed.

Learner Support: This task covers all your understanding of the Block 3, Unit 15. You will get further support from the relevant website of the software. The software may also be downloaded from the web. You may also need to consult other units related to graphics, audio and video.

LEARNING ASSESSMENT TASK (LAT-7)

LAT: Hosting of a web page/ site on a free server.

LAT Category: Optional

Learning Objectives: At the end of the task, you should be able to upload and manage file in a remote web-server.

Tools and Technologies Required: You need to find a free web hosting service in the Internet through a search in Google.

Your Role: As a learner, you need to install upload the webpage created using NVU to a webserver.

Output to be assessed: You need to provide a screen shot of the website along with the link in a word processed file.

Assessment indicators: Ability to upload multiple file of different kind to create a real-site online in a free server.

Learner Support: This task covers all you understanding of the Block 3, Unit 15. You will get further support from the relevant website of the software.

LEARNING ASSESSMENT TASK (LAT-8)

LAT: Create a Blog of your own in a free blogosphere.

LAT Category: Optional

Learning Objectives: At the end of the task, you should be able to create and use a blog for teaching and learning.

Tools and Technologies Required: You may like to create blog using any of the following:

- Blogger (<http://www.blogger.com/>)
- WordPress (<http://wordpress.com/>)
- Any other

Your Role: As a learner, you need to create a blog of your own and use the same for personal reflection or teaching regularly.

Output to be assessed: A blog, and its link to be shared. The blog should be your own, and the profile there in should have your photograph that identifies you clearly.

Assessment indicators: Assessment of the task shall be based on the blog you create, postings you make, its regularity and quality of postings, the media you use and the links you provide there in. Essentially, the blog should reflect purpose and direction.

Learner Support: This task covers all you understanding of the Block 4, Unit 17. You will get further support from the relevant website of the software.

LEARNING ASSESSMENT TASK (LAT-9)

LAT: Create and edit a wiki on a free server or WikiEducator.

LAT Category: Optional

Learning Objectives: At the end of the task, you should be able to create and use a Wiki for teaching and learning.

Tools and Technologies Required: You may like to create blog using any of the following:

- WikiEducator (<http://www.wikieducator.org/>)
- Wikispaces <http://www.wikispaces.com/>)
- Any other

Your Role: As a learner, you need to create a Wiki of your own and use the same for personal reflection or teaching regularly.

Output to be assessed: A Wiki, and its link to be shared. The Wiki should be your own, and the profile there in should have your photograph that identifies you clearly.

Assessment indicators: Assessment of the task shall be based on the wiki you create, and how you make use of the same. At the minimum level, you should post a brief bio of yourself to showcase your ability to use the basic wiki skills. However, if you show its use by students and others in a group, it would be an added advantage.

Learner Support: This task covers all your understanding of the Block 4, Unit 17. You will get further support from the relevant website of the software.

LEARNING ASSESSMENT TASK (LAT-10)

LAT: Any one of the following:

- a) Some activity of your own related to this course to demonstrate your creativity, initiative and learning gains.
- b) A reflective essay on your learning in this course vis-à-vis the learning portfolio.

LAT Category: Compulsory

Learning Objectives: At the end of the task, you should be able to demonstrate your overall understanding of the course to use different kinds of media and technology for teaching and learning in different contexts.

Tools and Technologies Required: No specific tools and technologies required, except word processing. However, if you choose option (a) you may need the relevant software and technologies.

Your Role: Depending upon the option you choose, your role in the task would differ. In option (a), you demonstrate your creative ability to use a specific technology. In option (b), you write a reflective essay about your learning from the course and experience of working on the Learning Assessment Tasks. You should reflect on the skills developed, and how you can make use of these for teaching and learning. Your report should also include difficulties encountered, and how these can be reduced.

Output to be assessed: A short report of about 800-1000 words in option (b); and the output would depend on what you do in option (a).

Assessment indicators: The assessment shall be based on your understanding of the whole course and your action to show the achievement of the objectives.

Learner Support: This task covers all your understanding of the whole course.

SUBMISSION OF LEARNING PORTFOLIO

You must submit the Learning Portfolio for MDE-418 on or before the scheduled date (twice in a year for January and July batch) at your Study Centre.

The Learning Portfolio should be submitted in a CD-RW. This will help to provide written feedback by the evaluator. You may also like to supplement this with a printed report as documentation.

The CD-RW should include **Your Name, Enrollment No, Study Centre** (Name and Code) and the **Course Code** clearly written using permanent ink.

Kindly ensure proper receipt of the same from the Study Centre.

ASSESSMENT OF LEARNING PORTFOLIO

The assessment of the Learning Portfolio shall be done by approved Counsellors at the Study Centre. These Counsellors are given specialized training on the areas covered in the Course, and shall provide written feedback in the CD-RW.

However, the usual grading pattern of the University applicable for Master of Arts in Distance Education shall be applied for grading the portfolio. The evaluator/ counsellor will assess each Learning Assessment Tasks (LATs) individually, and then sum the scores of the LATs to divide it by eight (total number of LAT expected) to get the numerical score. Normally for grading and conversion of numerical and letter grade the following table is used.

Qualitative Descriptor	Letter Grade	Point Grade
Excellent	A	5
Very Good	B	4
Good	C	3
Satisfactory	D	2
Not satisfactory	E	1

CONTACT FOR MDE-418

For clarification, and further support, you may like to contact:

Course Coordinator (MDE-418)

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Maidan Garhi
New Delhi 110068



Indira Gandhi National Open University

STAFF TRAINING AND RESEARCH INSTITUTE OF DISTANCE EDUCATION

Dear Learner,

While studying the units of this block, you may have found certain portions of the text difficult to comprehend. We wish to know your difficulties and suggestions, in order to improve the course. Therefore, we request you to fill out and send us this from as soon as you complete reading this block. Kindly use a separate sheet, if you find the space provided insufficient.

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Course Coordinator (MDE-418)
STRIDE, IGNOU, Maidan Garhi
New Delhi – 110068, India

Questionnaire

Enrolment No.

1) How many hours did you need for studying the units?

Unit no.	1	2	3	4	5
No. of hours					

2) In the following table we have listed 4 kinds of difficulties that we thought you might have come across. Kindly tick (✓) the type of difficulty and give the relevant page number in appropriate columns.

Page Number and Line Number	Type of Difficulties			
	Presentation is not clear	Language is difficult	Diagram is not clear	Words/Terms are not explained

3) It is possible that you could not attempt some CYPs. In the following table some possible difficulties are listed. Kindly tick (✓) the type of difficulty and the relevant unit and question numbers in appropriate columns.

Unit No.	CYP No.	Question Not-clearly posed	Type of difficulty		
			Cannot answer on the basis of information	Answer given (at the end of unit) not clear	Answer given is not sufficient

4) Any other comment:-