

## Master of Education (M. Ed.)

Title of the Course: S.Et. 2(b) Advanced Educational Technology  
(Semester: I, II, III & IV)

Credits: 4  
MM: 100 (External: 70, Internal: 30)  
Contact Week 15

### Introduction of the Course

In today's educational landscape, proficiency in advanced educational technology is crucial for anyone aspiring to be an expert in this field. A comprehensive understanding of educational technology encompasses key areas such as instructional strategies, communication methods, media utilization, instructional design, teacher behavior modification, and the latest trends in learning systems, policies, and priorities. It's essential for education professionals to be well-versed in these aspects to thrive in their careers. Considering that most teacher educators are likely to have at least a basic familiarity with computers, even if they lack extensive hands-on experience, this knowledge base is vital. The goal is to equip them with the skills to both recognize and effectively utilize Information and Communication Technology (ICT) as a powerful tool for learning and teaching. This course of study, focusing on developing competence with a strong conceptual grasp of technology and its educational applications, is ideally delivered in a blended format, combining theoretical knowledge with practical, hands-on assignments. A key consideration is the varying levels of familiarity with ICT and technology usage among teacher educators. To address this, the course should encourage collaborative learning, allowing learners to work in groups where they can support each other's learning and development. This approach not only fosters skill development but also promotes an inclusive and supportive learning environment.

### Learning Outcomes

After completion of the course student will be able to:

1. evolve learning tasks involving instruction, communication and media
2. explore instructional designs available for teaching
3. develop the critical understanding about appropriate instructional designs for teachers
4. exercise studying teacher behaviour modification based on experiences of face-to-face classroom interactions
5. hold group discussions and write articles on recent trends in learning systems, policies and priority areas

Number of Units: 4

Weeks 15 = 60 hours

### Unit 1: Instruction, Educational Communication and Media (4 weeks = 16 hours)

- Educational communication in the current scenario.
- Changing trends from face-to-face to virtual/online interaction, significance of virtual and mass media.

### Unit 2: Instructional Designs

(4 weeks = 16 hours)

- Programmed instruction, Keller's plan, mastery learning, collaborative instruction, cooperative instruction, large group instructions.

242

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- Recent development in instructional designs.

### Unit 3: Teacher Behaviour Modification

(4 weeks = 16 hours)

- Basic concepts and progressive nature.
- Continuum from microteaching, interaction analysis to competence-based teacher education.

### Unit 4: Recent Trends in Educational System

(3 weeks = 12 hours)

- Studying trends in education. Policies, priority areas and impact on educational system.
- Artificial intelligence, augmented reality and virtual reality.

### Practicum/ Suggested Projects / Assignments (Any Two)

1. Revisiting syllabi of Basic Educational Technology and ICT
2. Paper/article writing on media and instruction
3. Developing instructions for a course using any one design
4. Analysis of classroom interaction using Flander's interaction analysis category system
5. Paper/article writing based on recent trends viz. web tools, social networking, cyber-bullying, cyber security, AI, AR, VR, etc.
6. Paper/article writing based on contemporary policies and priority areas

**Note:** On the basis of the above, the teacher may design his/her own relevant projects/ assignments.

### Essential/ Recommended/ Suggested Readings

- Apple, M. (1991): The new technology: Is it part of the solution or part of the problem in education? Computers in the Schools, 8(2), 59-81.
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- Dale, E. (1969). Audiovisual methods in teaching, (ed 3). New York: Dryden Press.
- D'Antoni, S. & Savage, C. (Eds) (2009). Open educational resources: Conversations in cyberspace. New York: United Nations Educational, Scientific and Cultural Organization.
- Ehlers, U.D. & Schneckenberg, D. (Eds) (2010). Changing cultures in higher education: Moving ahead to future learning. London: Springer.
- Goswamy, B.P. (2006). Shaikshik takniki evam kaksha-kaksh prabandh. Delhi: Swati Publication.
- Jonassen, D.H. (Ed) (2003). Learning to solve problems with technology: A constructivist perspective, (ed 2). California: Merrill.
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- Mayer, R.E. (2009). Multimedia learning, (ed 2). New York: Cambridge University Press.
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- Solomon, G. & Schrum, L. (2007). Web 2.0: New tools, new schools. Washington: International Society for Technology in Education.
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- Timothy J.N., Donald A.S., James D.L., & James D.R. (2010). Educational technology for teaching and learning, (Ed 4). Noida: Pearson Education.

#### Teaching Learning Resources (Digital and others):

UNESCO Website, NCERT Website, MoE Website, UGC Website, NCTE Website and various other relevant websites

### **Teaching Learning Process**

The course will be taught through interactive pedagogic methods such as classroom discussion, debates, film discussions, critical media analysis, collaborative learning tasks which enhance reading comprehension of core writings in the area and innovative projects. Reflective expression and learning will be encouraged.

### **Assessment Method**

The assessment will be formative in nature and will factor in student participation. Individual and group tasks and assignments will be given. Summative evaluation will be done through end-semester examination.

**Key words:** Instruction, Educational Communication and Media, Instructional Designs, Teacher Behaviour Modification, Recent Trends in Educational System



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