

ITL-811 Role of Technology in Education

Course Objectives

1. To develop an understanding of the different theories of learning and how they form the basis of designing effective Media for teaching.
2. Introduce students to various technological innovations that enhance learning experience.
3. Discover the optimum or best methodologies that need to be adopted in order to integrate the said technologies into a classroom.
4. Make future teachers and educators aware of the role of technology in learning; and how they can design courses syllabi and modules that include the necessary technologies.

Course Outcomes

- a. Increased understanding of the principles of educational technology design.
 - b. Appreciation of the role of technology in education and learning.
 - c. Recognize that problems of learning in traditional classrooms can be solved by utilizing a combination of pedagogy and technology.
6. **Pre-requisite(s): None**
 7. **Credit Hours: 3+0**
 8. **Detailed contents**

Week	Topic
1	The Case for technology in Education
2	Mobile Phones and literacy in rural developing regions
3	Primary schooling for the poor
4	Survey of education technologies in the developing world
5	Memory and Learning
6	Literacy, Acquisition and the biology of Learning
7	Learning and how experts differ from Novices

8	Learning and Transfer
9 & 10	Instructional Design
11	STEM
12	Bilingualism
13	Dual Channel Theory and Multimedia Learning
14, 15, 16	Project

9. **Textbooks/Reference books:** A set of research papers and essays will be selected from latest conferences and workshops on education and technology. The following textbooks will also be used during the course:

- a. From Digital Natives to Digital Wisdom: Hopeful Essays for 21st Century Learning. Marc R. Prensky.
- b. Rethinking Education in the Age of Technology: The Digital Revolution and Schooling in America. Allan Collins and Richard Halverson.
- c. Inevitable: Mass Customized Learning: Learning in the Age of Empowerment. Charles Schwahn and Beatrice Mc Garvey.
- d. Disrupting Class, Expanded Edition: How Disruptive Innovation Will Change the Way the World Learns. Clayton Christensen, Curtis W. Johnson and Michael B. Horn.
- e. Stratosphere: Integrating Technology, Pedagogy, and Change Knowledge. Michael Fullan.