Teacher Enrichment

COURSE 015.2

Enriching Learning through ICT

MAX MARKS – 40

INTERNAL – 20

EXTERNAL – 20

OBJECTIVES:

At the end of the course, the student-teachers will be able to:

1. Acquire knowledge of computers, its accessories and software.
2. Understand the basics (fundamental) of preparing a computer.
3. Acquire the skills of operating a computer in multifarious activities pertaining to teaching.
4. Understand features of MS-Office and their operations
5. Develop skill in using MS-Word, Power-Points and Spread sheets.
6. Apply the knowledge gained in respect of to process various data of students as well as simple library financial transaction of the school.
7. Appreciate the value of CAI/CML packages on internet and global accessing of information.
8. Acquire skill in accessing World Wide Web and internet and global accessing of information.
9. Integrate technology in to classroom teaching learning strategies.

Unit1: Relevance of ICT in education (Radio, Television, Computers etc)

* Role of information technology in ‘construction of knowledge’
* Possible uses of audio-visual media and computers.

Unit 2: Visualizing learning situations using audio-visual and other media

* Use of radio and media: script writing, story-telling, songs etc
* Use of television and video in education: script writing
* Use of newspaper in education

Unit3: Use of computers in schools

* Functional knowledge of operating computers and related electronic devices
* Uses of: CD, Flash Drive, Scanner, Printer, etc.
* Use of MS-office for classroom: word processing, use of power point, Excel.
* Computer application in educational institutions academic, administrative and research activities.
* Computer as a learning tool.
* Effective browsing of the internet for discerning and selecting relevant information.
* Survey of educational sites based in India.
* Downloading relevant material.
* Competencies in developing original software related to classroom.

Unit4: visualizing Technology supported learning situations

* Preparation of learning schemes
* Interactive use of audio-visual programme
* Use of available software or CDs with LCD projection for subject learning interactions
* Generating subject-related demonstrations using computer software
* Enabling student to plan and execute projects
* Engaging in professional self development
* Collaborative learning tasks: wiki’s
* Interactive use of ICT: participation in different search engine, creation of blogs, groups, social networking, mobile groups, etc.
* ICTs for importing Educational Management.

Unit5: Indian and international Experience in ICT aided learning

* Innovative usage of technology: some case studies
* Use of technology integration in resource-plenty as well as resource-scarce situations
* Critical issues in ‘internet usage’- authenticity of information, addiction, plagiarism, downsides of social networking groups

Practicum

This course should be dealt with essentially as a competence development component with conceptual understanding of the technology dimensions and their educational usability; it is best conducted in ‘workshop’ mode, with plenty of practical assignments.

A significant point is that the student teachers have different levels of familiarity with ICT and use of computers, and students can be made to work in supportive groups. Modes of learning engagement could include:

* Demonstrations of use of audio-visual computer-based media
* Evolving learning tasks involving web based data
* Developing/listing suggestive directions for web based self learning
* Students’ web based learning
* Exercises in dovetailing ICT based learning experiences with face to face classroom interactions
* Group discussions on learning potentials as well as ‘dangers’ of using ICT

Modes of Assessment

These could include:

* Level of participation in group activities
* Demonstrable proficiency in the utilization of various ICT tools
* Quality of assignment for integration ICT with classroom learning
* Range of awareness of ICT’s learning potential, with specific examples
* Critical understanding of ‘downsides’ of ICT usage
* Participation of student teacher are set of objectives indicated above.

References

In view of the fact that some of the student-teachers may be new to computers, the following may be made available:

The DVD prepared by the NCTE, New Delhi for initiating one to the use of computers;

Learning modules by Intel Teach to the Future (ITTF) 1-14: these are helpful in learning some ways of use of ICT for visualizing teaching-learning situations;

List of education web sites and digital resources available.

References:

Goyal, Hemant : Computer Vigyan Shikshan R.Lal Book depot, Meerut

Desai, B. : Data management System

Rajaraman, V. : Fundamental of computers, prentice hall of India, New

 Delhi

Adaon, D.M. : Computer and teacher trainings.

Shrivastava, S. : Fundamentals of Information, Technology, Kalyani

 Publication, Vinod Pustak Mandir, Agra.