Use of ICT in Online Teacher Education Program

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The Context

• Project: Enhancing access, quality and sustainability of teacher training/professional development of teachers using ICTs and distance delivery modes
• Partners: HiOA Norway, Tribhuvan University (TU) and Kathmandu University (KU)
• Project Period: 2013-2018
Purpose of the Partnership

- Resources Sharing
- Human Resource Development (PhD, Masters)
- Exposure in international communities
- Development of Teacher Education Program in Open and Distance Mode (ICT as a tool)
Online Teacher Education Program

- M Ed in Mathematics Education
- M Ed in English Language Teaching
- M Ed in Leadership and Management
MOODLE Based Practice @ KUSOED

• Started in 2011
• Developed each course in MOODLE platform
• Gaining popularity

Course categories

- VLE Workshop/Training 2014 (1)
- KUSOED Home (1)
- Thesis/Dissertation (3)
- Online DBMS (1)
- Open Access E-Resources (1)
- MPhil and PhD Courses (43)
- Master Courses (54)
Course Title: Information Communication Technology (ICT) in Mathematics Education
Course Credit: 3 Hours
Course Code: EDMT 540

Nature of the Course: Practical and Theory (80% +20%)
Course Overview: The significance of mathematics in other branches of science and its value in developing interdisciplinary individual capabilities needs no description. Connecting such valuable subject with computer technology can create a separate area of knowledge/study. Management of computer added mathematics teaching learning environment in today’s modern classroom is the demand of the time and change in technology. So, this course reflects the changes in information, exchange of technology and it will enable the students to provide the students the required level of skill for using computer in teaching-learning Mathematics. Students will acquire skills for using computer to process documents, develop teaching-learning materials (audio/visual) and organize collaborative learning of mathematics. Students will also undertake projects based studies on application of computer in Mathematics teaching throughout the course. The course focuses on developing the ability of designing audio/visual teaching aids and effective presentation with the help of some basic software and developing skills of using some software which are especially designed to help mathematics teaching and learning.
Module Learning Outcomes

MLO 1: Reflect your understanding on collaborative approaches; students' and teacher's roles in collaborative classroom, challenges and conflicts of collaborative practices.

MLO 2: Develop your understanding on various ways of problem solving including the psychological view of problem solving by John Dewey and George Polya's Heuristic Problems solving approaches

Resources

Self Learning Material (SLM) - Module One

This Self Learning Material (SLM) is prepared for module one as a basic reading material.

Collaborative Class

This is a power point slides discussed in the classroom.

Collaborative Classroom

This is a paper that gives a picture of what collaborative classroom is.

Problem Solving in Mathematics Teaching

This power point slides is about the various ways of problem solving strategies in mathematics teaching.

Problem Solving Strategies

This is a paper which deals with various ways of problem solving strategies in mathematics teaching.

Assignment 1
Good Practices in ODL mode

• Blended Approach (Face-to-face and Online)
• Rich materials
• Discussion forum
• Wiki
• Chat (invited/as usual)
• News
• Events
• Quiz
Benefits of the Collaboration

- Learning through Action Research
- ICT as a tool and as a process
- Access to in-service teachers who are working in remote parts of the country
- Changes in teachers’ practices
- Sustainable ODL program through the use of ICT
Impacts of the Collaboration

• ICT-friendly teachers/teacher educators
• Creating Discourse of Open and Distance Learning in the nation
• ICT-Lab in schools/colleges
• Formation of ICT groups/clubs in schools (such as Geogebra Group in Kathmandu)
• E-portfolio
Challenges

- Infrastructure and internet facilities
- Inadequate number of Skilled and dedicated human resources
- Misunderstanding within project partners (Differences of context and practices)
- Certification of the students (ODL mode)
- Drop-out rate in ODL mode
Lesson Learned

- Need to have lots of awareness program
- Need to contextualize the resources
- Need to be more flexible in process
- Collaboration modes should be discussed wisely/widely
धन्यवाद
Thank you!
ขอขอบคุณ
Salamat
谢谢
terima kasih
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