Introduction

An extremely promising technological and pedagogical model that has received a lot of attention during the last few years and is adopted by Stanford, Harvard, Duke and almost 100 of the world's top ranking Universities to teach millions of learners is that of MOOC. MOOC is considered on one hand as a panacea for education and on the other as a defilement of the sanctity of the higher education tradition. For effective Teaching Learning process, Learning Management Systems (LMS) like Moodle / Google Classroom are used to create interactive learning-oriented courses. LMS is commonly used by teachers, trainers, and course creators to produce effective courses that achieve learning goals and outcomes. Following the best practices in LMS will help users optimize the learning experience, incorporate strategies to aim for students' success, choose appropriate activities at various cognitive levels and content delivery methods, and create appropriate assessments to test what the students have learnt.

This virtual workshop is designed to build capacity of the faculty members to develop E-Content, to conduct interactive online teaching, and to engage learners through impressive assessment methods. The general objective of the workshop is to raise the ability of the faculty to use various free / open source tools for developing E-Content in higher education as part of blended and online mode of teaching. This workshop is a great starting point for effective teaching in the 21st century learning environment. Moreover, it helps the faculty to understand the characteristics of 21st century learners, design online course materials, plan for an interactive activity to be conducted during synchronous mode of teaching, customize the tools and conduct assessments effectively.

This workshop aims to sensitize the use of free / open source tools to develop unique E-Content for their courses suitable to their students. The workshop also leverages the participants to create dynamic activities and interactive teaching learning experience. Following the standards and best practices to be discussed in this program for the design of online course, the participants will become proficient in incorporating strategies to accommodate multiple learning styles. In addition, they will be motivated to implement the emerging instructional technologies and provide a strategy for a wide variety of course modalities, including self-paced independent study, cohort-based courses with student-instructor interaction, and highly collaborative student-centered courses.

Objectives of the Workshop

The workshop would help the participants to

- Understand the available E-Content Standards and licensing;
- Create concept map for better understanding of the course;
- Develop different forms of E-Content with free / open source tools;
- Apply interactive and collaborative tools for effective teaching learning process;
- Design assessment and evaluation methods.

Teaching and Learning Activities

Online lectures and other learning resources are designed to achieve the objectives of the workshop. The participants should read the shared learning resources before the session to actively participate in discussions. For other necessary infrastructure to house the assessments, the participants will be encouraged to use their personal Google Drive/OneDrive.

Assessment Methods

As this course is supposed to be highly hands on intensive, performance of the participants will be monitored during the practice sessions continuously and creativity exhibited in the submitted assignments.

Programme Methodology

This online workshop is designed to facilitate E-Content development using various tools. The workshop emphasizes participatory and interactive mode of learning. Besides the lecture discussion, nearly 75 percent of time will be devoted for practice sessions on various tools in the e- presence of a Resource Person.

Instructions for Participants

The participants can join the LIVE Orientation along with Resource Person, using the following hardware and enabling environment:

1. Laptop or Desktop
2. Functioning Webcam, Microphone and Headphones
3. Internet connectivity with suitable bandwidth during the Workshop timings
4. Functioning Gmail Account
5. GoogleMeet/CodeTantra - Video, Web Conferencing Tool is used for LIVE Orientation. The workshop "link" will be shared to the participants' registered mail.
6. There will be 60 Minutes of 3 sessions in a day. Each session will be comprising of Lecture, Discussion, Demonstration and Hands on Activities.
7. The Workshop will commence at 10 A.M. on all days and close by 1.00 P.M.
8. A focused Workshop WhatsApp group will be created for better coordination among the learners and facilitators and will be maintained till 35 days from the start of the workshop.
9. For evaluation and assessment of performance of the participant, a PowerPoint presentation inserting all the features explained during the workshop is to be submitted.

E-Content Development

Programme Outline

Session	Objectives	Contents
Day 1		
SI	**Introduction to online learning**	• Understanding learners • Writing course outcomes
SII	**Concept map**	• Creating concept map using Freemind • Developing graphical content using Drawio
SIII	**Preparation of E-Content**	• E-Content Standards • General format for preparing E-Content
Day 2		
SI	**Attribution for E-Content**	• Understanding attribution • Licensing our own E-Content
SII	**Content delivery**	• Recording audio in PPT • Practical Session using Audacity
SIII	**Interactive tool**	• Gaining attention during online teaching • Practical Session using Mentimeter, Kahoot
Day 3		
SI	**Video editing**	• Customizing existing video • Practical session using Edpuzzle, EDTED Apowersoft
SII	**Virtual laboratory**	• Conducting lab experiments virtually in Phet • Practical session in Vlab
SIII	**Discussion forum / Feedback**	• Creating impressive and interactive discussion forum • Practical session using Padlet & Flipgrid
Day 4		
SI	**Assessment tools**	• Practical session using Google Form Add-ons
SII	**Creating quiz**	• Practical session using Hot Potatoes
SIII	**Creating rubrics**	• Practical session using RubiStar