Introduction

Online educational methodology, and flippedclassrooms with associated pedagogy of active learning, have quickly emerged as the mainstay of effective education in this century. However, most of our teachers lack skills and competencies for proper and effective use of ICT in education. It is thus an urgent national requirement that all our teachers, at least those teaching in our professional colleges, are empowered to use technology effectively, to enhance the quality of education.

To meet this requirement, IIT Bombay has specially designed the FDP with a focus on technology, which is titled as "Pedagogy for Online and Blended Teaching-Learning Process - FDP201x" and it will be conducted in a Blended MOOC (Massive Open Online Course). There will be two weekend face-to-face sessions at the Remote Centres. The course will be offered from 30 Oct. 2018 till 13 Dec. 2018.

Learning Objectives for the Course

After successful completion of the course, participants will be able to:

- Integrate active learning in their regular teaching-learning practice
- ii. Create an Open Educational Resource to be used in their classrooms
- iii. Justify the blending of online instruction in their regular teaching-learning practice
- iv. Participate in Collaborative Community involved in Open Education Resource creation and dissemination

Teaching Faculty

Dr. Jayakrishnan M, NPTEL, IIT Madras Prof. Sridhar Iyer, IDP in ET, IIT Bombay Prof. Sahana Murthy, IDP in ET, IIT Bombay Dr. Sameer S S, Dept of CSE, IIT Bombay Prof. (Retired) Deepak B. Phatak, Dept of CSE, IIT Bombay

Course Content

1. Effective Blended/Hybrid Education

- Using available online resources in regular classroom
- Pedagogy of Active Learning
 - o Think-Pair-Share
 - Peer Instruction
 - Collaborative Problem Solving
- Flipped Classroom

2. Online Courses

- Designing and Developing a MOOC
- Conducting a MOOC
- Effective Use of Discussion Forum
- Methods of Online Assessment
- Exposure to various MOOC platforms

3. Adopting Online/Blended Education in Teaching-Learning Process

- Using available autonomy
 - Implementing Flipped Classrooms
 - Recognition of Grades and Credits through MOOCs
 - Factoring in marks of online assessment in regular courses
- Using "Assessment for Learning" while blending instruction
 - Rubrics: Facilitating Local Assessments, Evaluation Reports and Presentations
 - What, why and How of Peer Assessment

4. Building and Nurturing Collaborative Communities

- Open Educational Resources (OERs)
- Lessons from Open Source Community Evolving Leaders and Mentors
- Creating and using an OER
 - Crowdsourcing methods
 - o Quality Assurance
 - o Implementing OER in your classroom
- Participation in Sectoral Communities

Criteria for Certification

IIT Bombay will award certificates only to those participants who: successfully complete prescribed online tests with minimum 50% aggregate score, meaningfully participate in face-to-face sessions, and submitted the team assignment. AICTE has recognized this as a Two-week FDP.

Note 1: This FDP is conducted under the PMMMNMTT of IIT Bombay. Live recording of the course and other created content will be released under Open Source, through a portal. All participants are required to sign a No Objection Certificate for such release of content contributed by them during and after the FDP. All contributors will be acknowledged.

Note 2: Since the contents are being released under Creative Commons, participants have to ensure that they provide accurate citations. All the content generated will undergo check for plagiarism and plagiarism detected will lead to cancellation of registration and serious disciplinary actions.

Who Should Attend

As this FDP is not subject-specific, teaching faculty from any domain, including faculty from management institutes and polytechnics, can participate. Teachers registered in a Masters or a PhD program, during their employment as a teacher, can also participate.

Duration and Venue

This two week FDP consists of three components as follows:

- 1. Online work by individual participants: Each participant is expected to access the online platform, using a PC at home or office, on any convenient day and time during the week, with an online test every week. Each participant has to spend 6 to 8 hours of efforts per week during this component of the FDP. This is equivalent to one day of work in a regular FDP. This activity will be spread over 5 calendar weeks: From Tuesday from 30 Oct. 2018 till 13 Dec. 2018.
- **2. Face-to-Face interaction:** Participants will have to physically attend these sessions at their chosen or designated Remote Centres (RCs), established across the country by IIT Bombay. Focused interactive sessions with the participating teachers, will be conducted by the faculty from IIT Bombay. The discussions and local tutorial sessions will be moderated by the Workshop Coordinators appointed at each RC. This activity will be conducted on the weekends of: 17 & 18 Nov. 2018 and 24 & 25 Nov. 2018.
- **3. Team Assignment:** The participants have to form a team of 2-3 members and prepare an Open Educational Resource based on their learning in the FDPs. This would be submitted for peer review. Submission of Team Assignment is mandatory for certification.

Course Fee

Since the course fee for both the FDPs are already paid, the registered participants need not pay any course fee to IIT Bombay and no participation fees of Rs. 1000/- to be paid to the remote centre for the FDP201x course.

Registered participants have to go to the remote centres for the synchronous interactions through A-VIEW.

For food and stay, the participant will have to bear extra charges as per the rates advertised by the center. This is optional for the participants; only if they wish to avail the facility.

The course fee and participation fee will not be refunded, in case of discontinuation from the FDP201x.

How to Apply

The registration for FDP201x - "Pedagogy for Online and Blended Teaching-Learning Process" will be limited to the participants, who successfully enrolled for the FDP101x.

Address for communication:

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Two-Week AICTE approved FDP

Under the aegis of Pandit Madan Mohan Malaviya National Mission for Teachers and Teaching (PMMMNMTT) on

"Pedagogy for Online and Blended Teaching-Learning Process"

(This MOOC based FDP will be conducted in a blended mode over a longer period as explained in "Duration and Venue")

30 Oct. to 13 Dec. 2018

Conducted by

IIT Bombay



Course Coordinator

Prof. Sridhar Iyer Interdisciplinary Programme in Educational Technology

Indian Institute of Technology Bombay

Mumbai – 400076