

1. Introduction

IIT Bombay has conducted many large-scale teacher training workshops under the Train 10,000 Teachers (T10KT) programme, sponsored by the National Mission on Education through ICT (NMEICT), MHRD, Govt. of India, and trained over 2,00,000 teachers.

Another successful technology developed at IIT Bombay is Spoken Tutorial, using which about 50 lakh students have been trained on various ICT topics. The effectiveness of this method can be seen from the testimonials available here:

<https://spoken-tutorial.org/testimonials/media/?foss=70>

and the [TEDx talk](#). This project is funded by NMEICT, MHRD.

The Teaching Learning Centre (TLC) at IIT Bombay, funded by the *Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT)*, MHRD, Govt. of India, has conducted many blended workshops combining the above two technologies, namely, T10KT and Spoken Tutorials.

In the next blended workshop, we will continue in the same mode as the earlier workshop: BodhiTree with pre-recorded videos and Google meet for live interactions. Using this combination, we now plan to conduct the workshop “**The BodhiTree and SAFE Tools for Effective Online Teaching: A Hands-On Workshop**” on **Sat/Sun, 20-21 June 2020**.

BodhiTree can be thought of as a video book, and SAFE is a platform for e-exams, both developed at IIT Bombay by Prof. Kameswari Chebrolu and her team. They have been extensively used at IIT Bombay in various courses.

2. Methodology of the Workshop

After the online registration, the online study material will be shared with the registered participants. If there are any

queries then they may either post the query on the BodhiTree discussion forum or they may ask their query during the online interaction with IIT Bombay course instructors.

The interaction session of 2-hours will be scheduled for participants who complete the online quizzes on BodhiTree, after watching relevant pre-recorded videos with side-by-side learning. The BodhiTree platform supports *interactive learning*: there will be questions within each video, as well as questions outside the video. These questions will help in the learning process. Those selected for the interaction session will also be provided with a temporary instructor account on BodhiTree as well as SAFE, to learn the instructor interface of these tools. The participants who successfully completed the earlier workshop on online teaching will be given preference.

3. Syllabus for the workshop

1. Flipped classes for online teaching, their relevance in the current situation, and how to conduct them
2. BodhiTree LMS usage:
 - a. Creating a course
 - b. Enrolling students
 - c. Uploading content: in-video quizzes, out-of-video quizzes, documents
 - d. Communicating with students: discussion forum, email
 - e. Managing marks in the course
 - f. Handling lab reports using BodhiTree
 - g. Auto-graded programming assignments in BodhiTree
3. Introduction to SAFE: cheating-free e-exams for proctored venues, Uses of SAFE:
 - a. Quick, proxy-free attendance marking
 - b. Continuous assessment: quizzes

- c. On the spot quiz in-class (clicker, KBC-like audience poll)
 - d. Longer duration objective exams
 - e. Handling subjective exams: **contact-free** e-correction of student’s papers
4. Hands-on activities using SAFE:
 - a. Creating a course, configuring it
 - b. Enrolling students
 - c. Taking classroom attendance
 - d. Creating an objective quiz, configuration
 - e. Creating subjective questions
 - f. Running a quiz
 - g. Contact and paper-free e-correction of subjective answers
 - h. Post-exam features in SAFE

4. Teaching faculty

- **Prof. Kameswari Chebrolu**, Department of Computer Science & Engineering, IIT Bombay
- **Prof. Bhaskaran Raman**, Department of Computer Science & Engineering, IIT Bombay
- **Prof. Varsha Apte**, Department of Computer Science & Engineering, IIT Bombay

5. Workshop Fee

All our earlier blended workshops that did not involve any hardware charged Rs. 100 per participant. Because of COVID-19, however, **there will be no fee** for this workshop.

6. Who should attend?

As this workshop is not subject-specific, teaching faculty from all colleges (engineering, sciences, arts, commerce, management, law, medicine, etc.), polytechnic colleges, ITIs, and schools, can attend. Teachers registered in any

