Paucity of teachers notwithstanding, the reach, content, quality and delivery of classroom lectures can be enhanced by utilising technology and online resources. From televised lectures, video-conferencing and virtual classes to video downloads from various websites on the internet, all can be used to make teaching engrossing and interactive.

Higher education today is beset with quality faculty crunch. A lot has been written about it, including a couple of articles in the previous issues of EDU, where the authors have argued that we have little option but to use technology to extend the reach of the limited faculty.

In the 80s and 90s, several attempts were made to record lectures. The recordings were initially distributed as video cassettes, but as technology progressed, we started providing the lectures in VCD and DVD formats. Now classroom lectures can be downloaded from the internet. Lectures have also been aired on dedicated television channels and the trend continues. However, the quality of such videos leaves much to be desired. When recorded in a studio setting, the absence of students makes the lectures appear artificial and lacklustre; and when actual classroom recordings are used, the lights and camera angles impact the visual quality adversely.

Make Lectures Interactive
Experts, however, have diagnosed the problem as lack of interaction between the teacher and the taught in such indirect mediums. As we all know, teaching is an interactive art. A good teacher, instead of standing at the podium and delivering a lecture, actively elicits students’ involvement and thus, sustains their interest. Without interaction in class, students soon lose interest. Experts suggest that a classroom lecture should be beamed live to distant locations with at least one online link — chat room, video conferencing, etc., — to enable students to ask questions and interact with the online teacher. Such attempts made earlier faced quality issues as the technology was not that advanced at the time as now. But with the strides that technology has taken in recent years, online students can become a part of the virtual
classroom. They can watch the lecturer, the board and the presentation material, as clearly as the students in the local lecture hall.

However, distance education based on video conferencing has its limitations. The cost of setting up audio-visual equipment at multiple locations is still prohibitive. The timetable of different institutions also needs to be synchronised, for lectures of one institute to be available for the students of other. This is not practical at all times. The curriculum of all the institutes involved in such a setting will have to be same as well. Again, this may not be possible. Also, a lecture with an audience of 1000 students, whether local or remote, cannot be truly interactive. Hence, video conferencing as an interactive classroom cannot be scaled up beyond a point. And, if interaction is going to be limited or non-existent, why spend a significant amount of resources on this model? Why not go back to what we were attempting in the 90s, video recorded lectures that can be played anytime, anywhere?

Innovate for Gen iPod

Recently, I visited an institute in New Zealand and watched an instructor taking a class. He would take short breaks to show videos on related topics. He had interwoven his lecture with these videos so seamlessly that the overall learning experience was excellent. The videos were mostly downloaded from Youtube. He told me that he searched for relevant videos that blended perfectly with his own lecture plan. Of course, he was there to answer any questions that the students had. So, it was not a passive session, but a very much interactive one. The video insertions effectively broke the monotonic delivery of the lecture, and therefore, the students were more attentive throughout the duration of the class. The instructor also made another interesting point, calling today’s youth the “iPod” generation, that is always listening to music. They listen to a different voice every few minutes on their iPods, and get bored if they have to hear the same voice for 50 minutes at a stretch, he explained. A lecture interspersed with video caters to their need to hear different sounds, the instructor said.

Enrich Teaching

After this experience, I visited the websites of the best universities in the world and found that all of them have video lectures available for downloading and viewing. I watched a number of them and realised that these were a great resource for learning.

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This brought me to the realisation that a new model for enhancing learning, using technology, seems to be emerging. The instructor is not dependent on only one source, and the differences in the curriculum are no longer important. There is no need to synchronise the timetable. The infrastructure needed in the lecture hall is only a projector. The instructor can download the videos on his laptop, or if the internet connection is good and reliable, show it directly in the class. The downloaded content or the links could be put up on the course website for reference. The videos can be short, 5-10 minutes, embedded into a longer lecture, or of 50-55 minutes and can be used as replacement for the lecture, but still be an interactive one.

Teacher is still the King

The real strength of this model is that a local instructor can strengthen and improve the quality of his teaching. But it is still the teacher’s responsibility to teach those parts of the course for which no good videos are available. Also, the lecturer has to manage interactions in the class, and assignments, projects, etc., are also his/her responsibilities. As such, the instructor continues to have the respect of the class and this aids learning.

The other major strength of this model is that it works to improve the quality of learning by both an average instructor and an excellent one. A good teacher, too, can use these resources to enrich the classroom experience of his/her students.