The art of teaching is the art of assisting discovery.

– Mark Van Doren

One of the important by-products of the coronavirus disease 2019 (COVID-19) pandemic, ravages notwithstanding, is online teaching. For many of us, teaching oral pathology online was not only challenging, but also made us explore new and innovative teaching/learning (T/L) methods. For those of us who were not technophiles, it was strenuous initially, but later one had to adapt to the new digital reality.

Oral and maxillofacial pathology is a conglomeration of theoretical knowledge, laboratory skills, histological observations and analytical thinking. In most dental schools in India, traditionally, the method of teaching this subject to the undergraduate students (pre-COVID times) was through didactic lectures, microscopic observation of slides, macroscopic view of specimens and casts and a few laboratory exercises. Lectures, even now in most colleges, often are in the standard textbook format. The practical classes comprise mainly identification of slides under the microscope and drawing diagrams in the record books. To add to the woes, most institutions do not have good-quality microscopic slides, and in those that do have, the slides remotely resemble the textbook pictures.

Is there a way we can circumvent this problem? One solution for this inherent problem in our education system is the reverse teaching methodology, which is becoming increasingly popular in teaching pathology.[1] The traditional method of teaching oral pathology in most institutions is taking a series of lectures on a topic, a practical class where the student sees the slides under the microscope, followed by assignments and finally assessments, formative and/or summative, on the topic [Figure 1].

Instead, we can follow flipped classroom method [Figure 2], a type of blended learning which is student-centric, unlike the traditional method where the teacher is at the centre of the T/L process.

A case scenario is presented to the students, where clinical pictures, radiographic images and laboratory findings can be made available online for pre-class study by the learner. The student engages in problem-solving and researches on the related topic before attending the (offline) class. In the classroom, there can be a small group discussion about the case, followed by a didactic lecture. As a next step, virtual (digital) pathology images can now be made available online to the students, where the student attempts to understand the features, from the recently gained knowledge on the topic. This can be followed by a practical class where the student can get first-hand
experience of viewing the same online slides actually under the microscope. An advantage of this method is that all these case scenarios, digital pathology images and lecture handouts can be made available to the student online after college hours, which would help in revision as well as 24 × 7 access. The present generation of students requires learning support after class hours, and providing digital content and new learning tools is the key. Such instructional scaffolding can stimulate a student’s deeper level of learning.

Moreover, this method can also be used to evaluate a student’s knowledge in the practical exam. A case history with digital pathology images (which can be explored in different magnifications) can be shown and students can be quizzed on various aspects of the case. This will assess a student’s analytical reasoning rather than his/her cognitive skills and ability to memorise.

The students expect us to deliver tomorrow’s technology today. Video broadcasting of our lectures, podcasts, use of digital microscopy, blended learning strategies, self-directed learning tactics and electronic feedback from students are some of the methods which we need to incorporate in the way we teach oral pathology. E-learning is no longer a temporary solution limited to a pandemic, and virtual teaching has virtually become a reality. It is time to change from these traditional methods and adopt a contemporary approach, based on digital platforms which we are now compelled to use. We need to change from the traditionally inclined teaching (TTT) approach to technology augmented teaching (TAT) methods. In other words, TAT for TTT.

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