# Editorial

## Team based learning approaches

Ghanshyam Panigrahi

Department of Pharmacology, Royal College of Pharmacy and Health Sciences, Berhampur-2, Odisha, India.

"You cannot teach a man anything; you can only help him find it within himself."

Galileo Galilei (1564-1642)

Italian physicist and astronomer

Teaching is a disciplined social process in which the teacher influences the behavior of the less experienced pupil and helps him develop according to the needs and ideas of the society. The objectives of teaching<sup>2</sup> are 1. Develop skills in students which would help them solve their real life problems, 2. Develop skills for the acquisition, use and evaluation of information, 3. Enable students to identify problems and ways of resolving them and provide opportunity for research, 4. Provide an opportunity to acquire detailed knowledge and awareness of its cultural context, 5. Impart subject-based skills essential for practice, 6. Develop oral, written, numerical and visual presentation skill, 7. Provide a broad understanding of an area of academic study, 8. Identify and support academic excellence, 9. Develop professional values and collaborative skills, 10. Assess students in respect of the above, 11. Ensure that all students,

whatever their level of competence, may avail themselves of these activities.

According to Dewey, teaching and learning are not separated process. According to Clarke, "teaching constitutes activities that are designed and performed to produce change in student behavior". Komisar has pointed out that various specific activities included in teaching areintroducing, demonstrating, citing, reporting, confirming, questioning, elaborating etc., which may be considered as constituent skills of teaching. According to Gage, "Teaching skills are specific instructional techniques and procedure that a teacher may use in the classroom." The Asian Institute For Teacher Educators has defined teaching skills as specifically those activities of teaching that are specially effective in bringing about desired changes in students.<sup>2</sup>

Some basic teaching skills are introducing a lesion, explaining, writing on

the blackboard, questioning, increasing students' participation, providing reinforcement and using teaching aids. To promote active learning by students a variety of new teaching strategies are used.<sup>3</sup> Team based learning (TBL) is an ideal approach for undergraduate students of pharmacy.

## Team based learning (TBL)

TBL was first introduced by Michaelsen for teaching large classes in business schools. It is a student centered but instructor-led method of learning. Working effectively within teams has been known as an important competency for learners. Teams are increasingly being used to enhance active learning and substitute for better interpersonal communication skills among the under graduate students.<sup>4</sup>

TBL allows a single instructor to manage multiple small groups simultaneously in one classroom and has the potential to promote small group, interactive learning without requiring large numbers of faculty facilitators.<sup>5</sup>

The important components of this strategy include advance preparation, team formation, readiness assurance testing, group application exercises and peer evaluation. The effective use of TBL requires redesigning a course from beginning to end, with the planning

starting well before the start of the term.<sup>6</sup> TBL has been described as bringing "together theoretically based and empirically grounded strategies for incorporating the effectiveness of small-group learning into large-group, lecture-oriented sessions. TBL sessions provides many active learning sessions in small group format.<sup>7</sup>

### Method:

TBL may be introduced to the higher semesters of undergraduate The students are randomly students. grouped into 6-8 teams of 5-6 students each. During formation of teams previous semester exam grades are used to form groups and ensure that the groups are equally balanced students with respect to above average grade, average grade and below average grade students. Students are oriented about TBL in advance and take verbal consent for participation in the study. Learning objectives are first defined by the faculty. One case for each team, are constructed for these learning objectives. The learning objectives, case and the logistics of TBL are conveyed to the students 2 weeks in advance. Students are clearly instructed to prepare for the cases (self-learning based) and report for the TBL sessions in their respective teams. The students of each team may give the presentation by using Power Point or other convenient methods for discussion of the case. The groups are discussed the cases among themselves and with other groups. All the relevant concepts related to the topic are discussed in an interactive manner. The facilitator intervened only in case of any clarification or some direct queries by the students. Following the case discussion, students may be subjected individually to post-tests comprising of some MCQs. The key to these MCQs are discussed by the facilitator after the conclusion of TBL.<sup>5</sup>

Team based learning employs strategies to incorporate the effectiveness of small group learning methods like problem based learning (PBL) into large-group lecture oriented sessions. The primary purpose of TBL is to maintain a high level of content learning, enhance application learning both at a quantitative and qualitative level, and support the development of interpersonal and team skills of the students. A main principle of TBL as an instructional strategy in higher education programs holds that students should learn more about the benefits of self-study and team work.

#### References

 Kumar TP. Advanced methods of teaching. 1<sup>st</sup> ed. Himalaya publishing house, Mumbai. 2012.

- Teaching aptitude and attitude.
   Arihant publications (India) Limited,
   New Delhi. 2014.
- 3. Wiener H, Plass H, Marz R. Teambased learning in intensive course format for first-year medical students. Croat Med J 2009; 50:69-76.
- 4. Thompson BM, Levine RE, Kennedy F, Naik AD, Foldes CA, Coverdale JH, et al. Evaluating the Quality of Learning-Team Processes in Medical Education: Development and Validation of a New Measure. Acad Med 2009; 84 (10 Suppl):S124-7.
- 5. Yeshwanth K. Rao, Ganesh K. Shenoy. Introducing team based learning in undergraduate pharmacology. Ind j Pharmacol. 2013; 45(1): 102-103
- Shankar N, Roopa R. Evaluation of a modified team based learning method for teaching general embryology to 1<sup>st</sup> year medical graduate students. Indian J Med Sci 2009; 63:1-9.
- Parmelee DX, DeStephen D, Borges NJ. Medical students' attitudes about team-based learning in a pre-clinical curriculum. Med Educ Online. 2009; 14:1.