DOI: https://doi.org/10.37547/mesmj-V4-I2-34 Pages: 238-245

MENTAL ENLIGHTENMENT SCIENTIFIC – METHODOLOGICAL JOURNAL

DESIGNING, FACILITATING, AND PARTICIPATING IN TEAM-BASED LEARNING

Djuraeva Madina Baxromovna
Senior Teacher of Foreign Languages Department
Jizzakh State Pedagogical University
Djuraeva_mb@mail.ru

ABOUT ARTICLE

Key words: Team-based learning, Problem based learning, Clinical problem-solving, Medicine and health curriculum

Received: 20.04.23
Accepted: 30.04.23
Published: 01.05.23

Abstract: The phrase team-based learning (TBL), which offers an engaging, structured method of small group learning that can be used in large classes, is discussed in the article. Through the unique TBL procedures, such as pre-class preparation, readiness assurance testing, problem-solving exercises, and timely feedback, student accountability is attained. TBL has been embraced by an increasing number of healthcare faculties worldwide in a variety of configurations, across various contexts and subject areas. This document offers a brief explanation of TBL as well as suggestions for teachers on how to successfully plan and implement TBL in health professional education. Additionally, it provides advice for students taking part in TBL.

INTRODUCTION

Team-based learning (TBL) is described as "an active learning and small group instructional strategy that provides students with opportunities to apply conceptual knowledge through a sequence of activities that includes individual work, team work, and immediate feedback". In the 1980s, Professor Larry Michaelsen created TBL in the United States of America with the intention of using it in business schools. In reaction to growing class sizes and his concerns about the efficacy of learning through lectures to big groups, Michaelsen created TBL. TBL gave teachers the chance to carry on with engaging instruction that catered for huge numbers of

students, gave quick feedback, included students in decision-making, and encouraged active small-group and class debates.

TBL goes beyond the straightforward transmission of information to include the application of knowledge through the solution of conceptual and practical problems. In recent years, TBL has become more well-liked in medical and healthcare education as a student-centered, resource-effective teaching technique that is occasionally used in place of problem-based learning (PBL). TBL maintains the benefits of small group instruction and learning over PBL, but crucially does so without the requirement of numerous tutors. TBL has been embraced by an increasing number of healthcare faculties worldwide in a variety of configurations, across various contexts and subject areas.

Haidet and colleagues (2012) created a standardized framework due to the numerous differences in TBL delivery throughout health professional education.[1]

MATERIALS AND METHODS

The flipped classroom model of healthcare education is supported by TBL's creative approach to student-centered learning. The in-class TBL exercises provide an engaging, expert-led learning experience that enables a sizable number of students to collaborate in little teams to apply content to particular issues.

The main goal of TBL is to ensure that students have the chance to practice applying course principles to solve issues. It goes beyond merely covering content. TBL is supported by research, and there is evidence that it benefits students. Recent systematic reviews show excellent results in terms of the academic performance and student experience, especially when compared to traditional lectures. Healthcare students are encouraged to strengthen their communication and teamwork skills by the participatory aspect of TBL, which offers a worthwhile learning opportunity.

[1] Haidet P, Levine RE, Parmelee DX, Crow S, Kennedy F, Kelly PA, Perkowski L, Michaelsen L, Richards BF. Perspective: guidelines for reporting team-based learning activities in the medical and health sciences education literature. Acad Med. 2012; 87:292–9.

[2]TBL's effective design tackles the resource issues that many higher education institutions encounter. Allowing a lot of students to participate in small group learning with a limited number of knowledgeable facilitators is one of the main advantages of TBL. The readiness assurance testing component of this strategy holds students accountable for completing the pre-reading assignments, which motivates them to do so and allows for less content to be delivered in class (a practice known as the "flipped classroom").[3]

Additionally, more time is spent in class on problem-solving and critical thinking, which encourages better comprehension and knowledge retention. To avoid creating teams based on pre-existing friendship groupings and to ensure that each team contains a diverse mix of students (e.g., background knowledge, gender mix, education, and training), students should be assigned to teams using a transparent method. Although random allocation techniques are likely to stop buddies from forming their own groups, they can fall short of achieving the necessary diversity of learner traits within each team. According to guidelines, student teams should "stay together for as long as possible" to improve team dynamics, trust, and the diversity of resources available to them, as well as the team's cohesiveness and continuity of learning.

RESULT AND DISCUSSION

Students receive feedback via the IRAT (Individual Readiness Assurance Test) and TRAT (Team Readiness Assurance Test) processes when answers are discussed right after following the TRAT, with clarification offered by the facilitators. The TBL approach is built around providing students with instant feedback so they may gauge their degree of topic knowledge. By challenging students with follow-up questions rather than by lecturing, facilitators find gaps in students' understanding and promote

[2] Ofstad W, Pharm D, Brunner LJ. Team-based learning in pharmacy education. Am J Pharm Educ. 2013;77(4):70.

[3] Burgess A, Mellis C. Team-based learning in health care education: maintaining key design elements. J Nurse Care. 2015; S1:007.

critical thinking. The importance of feedback in knowledge acquisition, retention, and team building.

Teams are needed to employ their aggregate knowledge, clinical reasoning, ethical perspectives, abilities, and values to solve complicated clinical problems that relate to actual life circumstances during the clinical problem-solving exercises. Through the utilization of hard situations, participation in the problem-solving activities promotes learning and team growth. The "four S's" of issue solving in TBL, which are major problem, similar problem, specific decision, and simultaneous reporting, should always be used, according to Haidet et al. The use of "specific choice" (i.e., Single Best Answer) in TBLs for health professionals may limit students' ability to engage in conversation and engage in critical thought, according to recent studies.

It has been suggested that as part of the peer evaluation process in TBL, students contribute to the grades of other students by giving their particular team members both quantitative and qualitative input. Peer review may not always offer a useful or accurate indicator of students' professional conduct, it should be highlighted. As a result, it might not be appropriate for use as a summative assessment method, but it might offer students helpful formative feedback. Peer evaluation encourages students to actively participate in group learning and problem-solving while also promoting student accountability. Additionally, individuals studying to become health professionals should learn how to give and receive constructive criticism.

Giving feedback regularly enables students to build professional skills and better prepares them for careers as clinicians who must perform peer evaluations. Receiving consistent, useful feedback has the power to support positive behavior, encourage self-reflection, and foster insight.

The success of TBL is thought to depend on a well-established peer evaluation procedure that includes offering and receiving peer comments. Numerous methods to the "Peer evaluation" procedure are reported in TBL literature. Instead of assessing student knowledge, these methods are typically intended to assess students'

contributions to team cohesion and productivity as seen by their peers. While there are various ways for performing peer evaluation in TBL, typically students are expected to give and receive written criticism that is professional, constructive, and relates to the contributions of team members. The "Koles method," which incorporates both quantitative and qualitative input, is one instance.

The facilitator grades the input that is given. The ultimate peer feedback score is influenced by both this score and the feedback score that is received. This method has the advantage that the peer evaluation score is determined by the caliber of the students' performance as determined by their peers as well as the caliber of one's own input. As a result, both professional skills for providing and receiving feedback are improved.

Team-teaching advantages are beneficial for both students and facilitators. They are as folllows:

- Multiple explanations of complex cases are given to students.
- encourages peer-teacher observation and reflection on their teaching and learning, which helps to grow teachers.
- exposure to various educational techniques and subject matter for both teachers and students debates and lively discussions
- Interprofessional cooperation is modeled by examples creates humor in the classroom

Feedback acts as a continuing part of the instructional process that supports and enhances learning. Feedback is part of an on-going unit of instruction and assessment, rather than a separate educational entity.

- Feedback promotes learning in three ways
- Informs the student of their progress
- Informs the student regarding observed learning needs for improvement
- Motivates the student to engage in appropriate learning activities

TBL has a lot of advantages, but it also has a lot of design, organizational, and implementation issues.

The five main steps of the TBL design process are described in depth. Identifying learning objectives, establishing problem-solving exercises, writing readiness assurance questions, locating and/or constructing preparatory resources, obtaining feedback, and making adjustments are the first five steps. In our own experience, this was a labor-intensive job that required input from numerous academics with a range of specialties. To ensure academic engagement, comprehension of the new teaching approach and content, and standardization in delivery, faculty development in TBL design and facilitation was also required.

TBL class implementation presents various difficulties. Despite being student-centered, TBL has an instructional style with logical processes, and each class's successful completion of all activities necessitates a disciplined, well-prepared facilitator. Student involvement, comprehension, and "buy-in" to the TBL process are crucial. The introduction of TBL may cause students to feel as though they have more work to do, especially given the flipped classroom model.

The motivation of students to prepare and participate in group and class discussions should be boosted by regular feedback. There are numerous tools and programs that can be used to deliver the different components of TBL, including pre-readings/videos, IRAT, TRAT, and problem-solving activities, which are outside the focus of this paper's discussion. Resource distribution that satisfies institutional priorities should be carefully considered.

CONCLUSION

Evidence demonstrates that TBL contributes positively to the pedagogy of healthcare education and helps students get ready for the needs of ever-more complicated healthcare systems. Teachers are drawn to the integrated approach of TBL in developing students' professionalism skills, including leadership, communication, and teamwork, while students are drawn to the dynamic, collaborative character of TBL. TBL is a teaching method that enables huge student populations to engage in small-group learning activities with few teachers. The implementation of TBL may create difficulties, notwithstanding the possibility of resource savings for institutions in terms of necessary teaching staff. TBL "works

best when all of the components are included in the design elements," according to literature. Positive aspects of the TBL design include the flipped classroom approach, small groups, testing process, immediate feedback from experts, peer review, and provision of a clinical context by clinicians. The use of a standardized framework, and use of evidence-based practice in implementation and facilitation of TBL, will result in better outcomes for students, teachers and institutions.[4]

REFERENCES

[1]. Parmelee D, Michaelsen LK, Cook S, Hudes PD. Team-based learning: a practical guide: AMEE guide no 65. Med Teach. 2012;34: e275–87.

[2]. Burgess A, McGregor D, Mellis C. Applying established guidelines to team-based learning programs in medical schools: a systematic review. Acad Med. 2014; 89:678–88.

[3]. Michaelsen LK, Sweet M. The essential elements of team-based learning. New Dir Teach Learn. 2008; 116:7–27.

[4]. Haidet P, Levine RE, Parmelee DX, Crow S, Kennedy F, Kelly PA, Perkowski L, Michaelsen L, Richards BF. Perspective: guidelines for reporting team based learning activities in the medical and health sciences education literature. Acad Med. 2012; 87:292–9.

[5]. Burgess A, Mellis C. Team-based learning in health care education: maintaining key design elements. J Nurse Care. 2015; S1:007.

[6]. Huggett KN, Jeffries WB. SpringerLink. An introduction to medical teaching. 2nd ed: Dordrecht, Springer Netherlands; 2014. p. 69–71.

[7]. Burgess A, Ayton T, Mellis C. Implementation of team-based learning in year 1 of a PBL based medical program: a pilot study. BMC Med Educ. 2016; 16(1):1–7.

[8]. Burgess A, Bleasel J, Haq I, Roberts C, Garsia R, Robertson T, Mellis C. Team based learning (TBL) in the medical curriculum: better than PBL? BMC Med Educ. 2017; 17:243.

[4] Parmelee D, Michaelsen LK, Cook S, Hudes PD. Team-based learning: a practical guide: AMEE guide no 65. Med Teach. 2012;34: e275–87.

[9]. Burgess A, Ayton T, Mellis C. Implementation of team-based learning within a problem-based learning medical curriculum: a focus group study. BMC Med Educ. 2018; 18:74.
[10]. Ofstad W, Pharm D, Brunner LJ. Team-based learning in pharmacy education. Am J Pharm Educ. 2013;77(4):70.
[11]. Bleske BE, Remington TL, Wells TD, Klein KC, Guthrie SK, Tingen JM, Marshall VD, Dorsch MP. A randomised crossover comparison of Team-based learning and lecture format on learning outcomes. Am J Pharm Educ. 2016; 80(7): Article 120.
[12]. Fatmi M, Hartling L, Hillie T, Campbell S, Oswald AE. The effectiveness of team-based learning on learning outcomes in health professions education: BEME Guide No. 30. Med Teach. 2013; 35:12.
[13]. Reimschisel T, Herring AL, Huang J, Minor TJ. A systematic review of the published literature on team-based learning in health professions education. Med Teach. 2017; 39:1227–37.
[14]. Haidet P, Kubitz K, McCormack W. Analysis of the Team-Based Learning Literature: TBL Comes of Age. J Excell Coll Teach. 2014;25(3–4):303–33.
[15]. Koles PG, Stolfi A, Borges NJ, Nelson S, Parmelee DX. The impact of teambased learning on medical students' academic performance.