

Students Qualitative Feedback on a Team Based Learning at Widad University College

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Abstract

Students' feedback especially qualitative feedback has a great role in educational development as it helps teachers to assess their teaching effectiveness and adjust the teaching plan based on students' needs. Team based learning (TBL) is a new way of small group teaching in a large group class setting to make it more collaborative, interactive, interesting and more learners directed with lecturers' guidance. TBL is a teaching method where students undergo pre-class preparation on an assigned topic, and on the actual class day they participate in 'individual readiness assurance test (IRAT)' followed by team formation and same test in teams as 'team readiness assurance test (TRAT)'. Students have the opportunity to rectify their answer options of IRTA after discussion with team members in TRAT. The assigned lecturer provides immediate feedback and clarification on any burning issues posed by the students. In Widad University College (WUC), a TBL session was initiated by a discipline at faculty of medicine in June 2023 to replace their traditional lecture among all 21 semester-2 undergraduate medical students. At the end of session, students feedback in the form of open comments about their liking, disliking and suggestions for improvement was taken. Evaluation of the feedback showed a positive perception of the students about TBL with the suggestion of having more TBL. Leaders in educational management should give due importance on implementation of TBL in all other disciplines and faculties at WUC by replacing their traditional large group lectures aimed to develop higher order cognitive skills of students.

Keywords: *Students, Qualitative feedback, Team based learning*

1.0 Introduction

Feedback serves as a powerful tool in the domain of education worldwide (Husain and Khan, 2016). Though there are several sources or methods of feedback on teaching, the most common source of input is feedback from the students (Husain and Khan, 2016). Students' feedback help teachers to assess their teaching effectiveness and adjust their lesson plan based on students' needs. In higher education, the students are considered as the client to develop their competencies that enable them to meet the challenges in their careers and as members of society. Higher institutes provide educational services and job credentialing to their clients. Therefore, focusing the understanding and needs of the students by getting student input/feedback is important to evaluate the current curricula and developing new curricula. For example, seeking student feedback on teaching techniques if it helped them to learn or not could be valuable (McCuddy et al., 2008). Student feedback helps the teacher to make them understand about the students learning whether accomplished or have any scarcity in grasping the course concept. This in turn can help the teachers to prepare courses that provide to the student's academic needs (Chaudhry, 2022). Overall, students' feedback can improve the learning environment of the school and student achievement (Aldridge and Bianchet, 2022).

Didactic lectures are the most common traditional method of teaching practiced widely where the students take only passive role by listening (Salam et al., 2022). Medical schools around the globe now embraces different teaching-learning methods which facilitates students learning active with the development of their analytical skills. Example of some of the different active teaching-learning methods are: Problem based learning (PBL), Evidence based medicine (EBM), Case based learning (CBL), Simulation based learning (SBL), Social media and Video lectures (e-learning), Peer assisted learning, Observational learning, Flipped classroom and Team-based learning (Challa et al., 2021).

Team-based learning (TBL) is a learner-centered educational strategy that uses small group instructional methods for the learning of the professional competencies critical in the field of medicine. It has been practicing in the US and in several other international medical schools with good academic outcomes and considerable potential (Parmelee and Hudes, 2012). TBL is based on constructivist learning theory where students arranged in small groups participated in active

learning by solving relevant problems. However, here, students need to be prepared before actual class using pre-class teaching materials, and on the actual class follow its sequences individually and through team activities under the expert guidance (Rajalingam et al., 2018). Here the role of teacher is to act as an expert facilitator to provide students with opportunities to interpret contradictions between their present understandings and new experiences and thus built new knowledge upon previous knowledge. Students active learning is accomplished using relevant problems by group discussion in the team and it also enhances their ability to use critical thinking skills and team work skills (Hrynychak and Batty, 2012).

The first step of TBL is the pre-class reading where the assigned lecturer sends the reading materials based on the topic to the students one week prior to the TBL session. This will provide the students the background knowledge necessary for successful participation in TBL session. (Burgess et al 2020). On the scheduled class day, it starts with participation of students in an 'individual readiness assurance test (IRAT)' on the assigned topic. After that, the class is divided into a number of small groups, consists of 5-6 students in each group and using the same questions of IRAT, 'team readiness assurance test (TRAT) is to be carried out. At this stage, they can discuss with the team members and can change the answers of IRAT after coming a consensus on each question. After the TRAT, timely feedback and clarification is given by teacher on the raised burning questions by the students to solve the difficulty or disputes experienced by the students. In the final step, each group work on same specific problem/case, and complete learning utilizing knowledge from the previous compulsory reading materials and other open resources with lecturers' support. Lecturer facilitate and provide expert solution throughout the session (Rajalingam et al., 2018; Burgess and Mellis., 2015). TBL method of learning helps student-to-student teaching and learning and enables them to understand through the teamwork with peers. TBL is a new way to teach medical students predominantly to make it more collaborative, interactive and interesting and more learners directed with lecturers' guidance aimed to develop higher order cognitive skills and thereby ensure the production competent and confident graduates (Abdelhalim and Salam, 2023).

Widad University College (WUC) in Malaysia is a private medical school modelled on an integrated curriculum with a pre-clinical phase of two years and a clinical phase comprised of three years. Students undergo training through lectures, skills lab, PBL, small group discussions,

seminars, workshops and exposure through the community and hospital environment to real patients (Salam et al., 2021). A TBL session was conducted in pharmacology discipline in pre-clinical phase with an aim to gradually replace traditional lecture classes to innovative TBL sessions. This paper describes the details of students qualitative feedbacks on TBL aimed at improving while implementing TBL regularly in future.

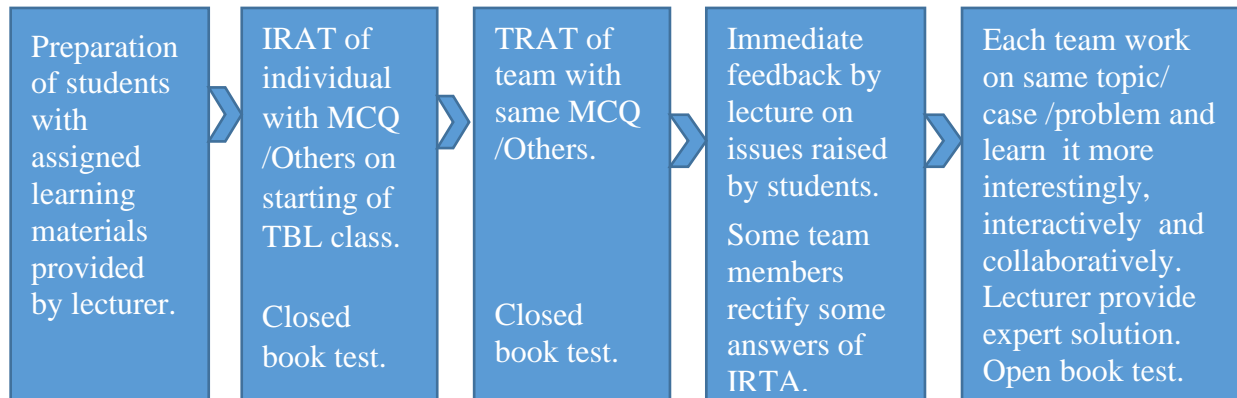


Figure -1: Overview of TBL method of teaching-learning.

2.0 Materials and Methods

This study was conducted in June 2023 among all 21-1st year, semester-2 undergraduate medical students of Widad University College (WUC), Malaysia who attended the TBL session. This TBL session was carried out with a motive to gradually replace the traditional lecture with the TBL.

The TBL session was performed on a pharmacology topic. The related pre-class reading materials were distributed to the students 3-4 days before the scheduled TBL class. Students were informed by the assigned lecturer to ensure to complete their reading to have an understanding of the topic. At the beginning of class, ‘individual readiness assurance test’ (IRAT) was carried to each student that consists of questions on different aspects of the topic using one-best answer questions (OBA) or others. Students were allocated about 10 minutes to complete the IRAT.

After completion of IRAT, the class of 21 students was divided into five teams comprising four to five students in each team. The same IRAT was then applied as ‘team readiness assurance test’ (TRAT) among the teams and around 15 minutes were allocated to complete the test. Some

students from different teams appealed and changed their answer options of the same test after discussion of the team members, where weaker students improved more from TRAT. All the teams were able to work on the same problem at the same time. After completion of the TRAT, immediate feedback was provided by the assigned lecturer to help them understand the points that were poorly understood by the students. Each team worked and learned on the topic /problem more collaboratively, more interactively, and more interestingly with students' direction and lecturers' guidance.

At the end of the TBL session, students were asked to provide their honest feedback by administering a simple open-ended questionnaire about their liking, disliking and suggestion for improvement. In this paper, the qualitative feedbacks /open-ended responses of students were evaluated and presented.

3.0 Results

Total twenty students responded out of 21 participants with a response rate of 95%. Students' open-ended feedback on their liking, disliking and suggestion in regard to improve future TBL are shown in tables 1, 2 and 3 respectively.

Table 1: Students' feedback on their likings in regards to TBL, n=20.

| SL No | Students' feedback on their likings in TBL |
|-------|--|
| 1 | I thought it was a good idea during the TBL session to answer to SBA questions using a specific chapter, since this would help us determine which areas of the chapter need more attention. |
| 2 | By doing this TBL, we can revise each other about certain subtopics that we forget it. So, we can help each other's to memorize it by doing this TBL. It also can affect us to be more interested in subject that we had learning especially in pharmacology topics. |
| 3 | TBL session made us learn from mistake and made us more understand about the topic with the help from teammate |
| 4 | I like the team works between members in discussing and solving question. Team member get to help each other in discussed and fixed any misunderstanding related to the questions. |
| 5 | I like TBL session because, I can refresh my memory regarding the topic that were asked. |
| 6 | During the TBL session, I can discuss with my group members about the question given and why this answer is right and the other is wrong. The TBL session helped me understand about the topic much better. |
| 7 | A very good program. Through this program i am able to identify my weakpoint and through group activity i am able review my answer |

| | |
|----|--|
| 8 | The session teach us as medical student to work in a team in order to solve the questions/problems. It gives us space to do discussion among us and share our own opinion regarding the question tested during TBL. |
| 9 | I have a chance to teach and recall the topics that were studied with my teammates. So this gives a better understanding of the topics with them. |
| 10 | Help to understand better the topics and know why each answer is right or wrong from the discussion |
| 11 | I like the concept of this program which we required to sit in group which help us to share our ideas and views about certain topic. It also helps to boost my understanding in some questions that I found a little bit confusing but thanks to my colleagues, I gain new knowledge. |
| 12 | One thing that I favour during this TBL session is when we got the chance to sit in groups and did group discussion, as during the discussion we can exchange every information and knowledge that we have with our group members. |
| 13 | The doctors allow us to stick to our group mates, it make us comfortable to discuss the question given |
| 14 | The thought of having such an immerse discussion on the topics of General Pharmacology is really good as we were able to exchange our opinions on the drugs that are needed for certain treatments or diseases. My group mates and I were also able to discuss why this drug was preferred that the other and was not. It was really nice to hear someone else's thoughts and be convinced of them. |
| 15 | The most interesting thing that I like during TBL session is the discussion we did among our teammates. We can share our own thoughts and learn a lot of new things from the questions given. |
| 16 | What I like about this TBL session is when we were discussing among ourselves mostly the questions that were provided in the class. It was splendid as we can try to understand more which is the weakest part of our studies, especially in pharmacology subject. |
| 17 | The TBL session I attended was great, where I thought that it was good for us to sit in groups and discuss the questions together. With this method, we are able to understand the subject better with the cooperation of teammates to share and teach each other. |
| 18 | The discussion held per group and the exposure of questions regarding topics learnt during lectures |
| 19 | I like when we all get to discuss together the answers to all the questions given because we can exchange information and opinions to each other I also like when i realised how deep I understand about the topics. |
| 20 | I like how we could group with people we are comfortable with so the TBL session went on without a hitch. I could comfortably discuss and learn together with the people I prefer. I know if the grouping was randomising, I would become less encouraged to participate and uncomfortably discuss my opinions. Additionally, the TBL session was an eye-opener and a good way to learn new stuffs or re-learn some topics |

Table 2: Students' feedback on their disliking in regards to TBL, n=20.

| SL No | Students' feedback on their dis-likings in TBL |
|-------|--|
| 1 | TBL should be introduce and expose to the student much earlier, if we don't continue this TBL as soon as feasible, it would be unfortunate. |
| 2 | I think this method is very good to make sure all of the collages understand well in certain subtopics and I don't have anything to dislike in this method. |
| 3 | Nothing to be dislike. When working in a team, its normal that some feels like they are not good in the subject and tend to stay quiet during the activity, I would like it if we could just try to work together in it rather than staying quiet. |

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| 4 | Discomfort regarding late notice for TBL grouping. |
| 5 | So far no. |
| 6 | A very good program. Through this program i am able to identify my weakpoint and through group activity i am able review my answer. |
| 7 | It should be nice if we are able to have this program in longer period of time. |
| 8 | Since this is the first TBL session, it doesn't went so smooth as students need time to understand the concepts of TBL. |
| 9 | TBL session must be informed earlier so that we can study without any stress. |
| 10 | So far no. |
| 11 | So far everything is good and therefore there is no single thing that I dislike regarding our PBL session. |
| 12 | The TBL session could have been smoother if all students gives their best cooperation throughout the session. |
| 13 | Nothing. |
| 14 | The group arrangement. I would like to have different group mates for every further TBL session. |
| 15 | Overall, I enjoyed the TBL session very well. |
| 16 | So far, I do not have any dislike moments in the TBL session that I attended. |
| 17 | Nothing. It is a new and great method for me. |
| 18 | My classmates' intolerance in socializing with other class members that they are not used to and the lecturers voice's volume are low. |
| 19 | I like all activities that we did during TBL session. |
| 20 | It was a bit impromptu and the mandatory every-group-has-to-has-a-male was a bit awkward but other than that everything was fine. |

Table 3: Students' feedback on their suggestions in regards to TBL, n=20.

| SL No | Students' feedback on future improvement in TBL |
|-------|---|
| 1 | Whenever a subject's chapter is finished, TBL should be conducted for all of the subject. To further promote ongoing comfortability with one another, groups can be formed and broken up by the students themselves. As I believe, working in a group with people we feel comfortable around helps us perform better. |
| 2 | Increase the number of questions, by that we can discuss more about it each other's and increase our knowledge together. |
| 3 | Add more difficult question so the team can share their idea on how to solve the question. |
| 4 | TBL should be done more frequently especially after the end of each topic because it could create deeper understanding on the topic and we get to applied what we studied in the class. This could help us remember and understand it better. |
| 5 | Add more questions to discuss. |
| 6 | If lecturer want to combine students from different level of pharmacology intelligence, lecturer can just arrange the group of student based on their academic achievement example Pharmacology Quiz. |
| 7 | Add more question. |

| | |
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| 8 | I would suggest each group to have their own supervisor by means one group one lecturer - where we can have unlimited time with the lecturer - for us to be able to discuss with the lecture without having any worries other group waiting for their turn. |
| 9 | The questionnaire should be added more so that students have more time to discuss. |
| 10 | Questions must be ask in MCQ format not only in Single base answer. |
| 11 | Probably add more questions especially crucial topics. |
| 12 | It is very suggested for the students to build the groups earlier before the session. |
| 13 | No suggestion or improvement needed for me. |
| 14 | I think it would be better if we could answer and discuss more questions rather than having only 5 questions per session. We may have a deeper discussion for this amount of questions, but, we may not cover a variety of topics and will only receive such a small input throughout the whole 2 hours. |
| 15 | I think the time management should be improved and the teammates should be listed prior the session. |
| 16 | Yes, I do have one suggestion here, it would be good if this TBL session can apply to each topic in pharmacology. What I meant, is that after one session on one topic of pharmacology, then we proceed with the TBL session on that particular topic. |
| 17 | Yes, I do have a few suggestions. First, it would be great if we can shuffle the groups for the next TBL session so we can learn from everyone's opinions in the class. Next, I think it can be a good opportunity for us if we can do a TBL session for every chapter, after each chapter ends. |
| 18 | Won't level students based on quiz mark. |
| 19 | I suggest; our lecturer gives more questions so we can discuss more topics with our teammates. We shuffle team members for the next TBL session. Lecturer do TBL session chapter by chapter. Do more activity other than answering MCQ. |
| 20 | We can shuffle the group members, but I would prefer if we could choose who we want to be grouped with. But it's also good to learn with other people outside of our comfort zone. It might be a bit awkward for me but I can adapt, it's not that big of a deal for me. I also think it'll be a good opportunity for us if we can do a TBL session for every chapter, after each chapter ends. |

4.0 Discussion

The TBL consists of a number of small groups of students in each class room, promoting inter and intra team discussion and peer learning (Burgess et al., 2020). This present study showed a great acceptance of the students of the TBL session. Students opined that it benefits them in their learning by doing the group work, it draws their attention and interest in the topic, helps to fix the misunderstanding and refresh their memories on the topic. The sharing and exchange of information and knowledge with their group members helps their better understanding on the topic

and identify the weak points. Their team work activity and sharing and cooperate each other is enhanced. One participant found TBL session as an eye-opener and a good way to learn new stuffs or re-learn some topics. There is evidence to suggests that TBL provides a significant positive impact in preparing medical students with their complex healthcare education systems (Parmelee et al 2012). In this present study, there was not much about the disliking other than a few students mention about late notice of TBL, and about group arrangement and cooperation among themselves. The suggestions given by the students indicates that they want TBL after finishing each chapter. They suggest to add more questions and to increase the difficulty level of the questions. Regarding the group member in each team, some suggest to make it according to their choice for their comfort in the discussion with the team members and some suggest to combine students from different level of intelligence, based on the academic achievement.

This study showed the positive feedback of the students to TBL. It shows TBL has a great role to achieve the objectives of student learning. In fact, it is widely accepted in many institutions in different disciplines in United States and in many other places (Parmelee and Hudes 2012). Positive feedback of the students in terms of experience and academic achievement is noted in earlier studies (Reimschisel et al., 2017; Beatty et al., 2009). In medical education and other health care profession education, the high acceptance of TBL as a student-centred teaching method has sometimes replaces Problem based learning method (Burgess et al., 2020).

TBL is helpful as a resource saving measure in medical and health care facilities where the numbers of students are increasing with limited availability of teachers. It allows a large number of students arranged in a number of small-group and to experience active learning without requiring a large number of faculty (Burgess and Mellis., 2015). It enables the learners to enhance their team work and communication and collaboration skills which is an important prerequisite and valuable in their future workplace (Ofstad and Brunner, 2013; Beatty et al., 2009).

The team formation in the TBL session is important as it need to be work effectively. A mixture of student characteristics such as students with different calibre on academic results, experience, communication skill, gender, ethnicity should be included in a group for effective functioning and the group should remain throughout the entire course or semester for proper bonding with time (Doshi, 2017). A team is a group of individuals, all working together for a common drive. Most

high performing teams go through five stages of team development: (i) forming, (ii) storming, (iii) norming, (iv) performing and (v) adjourning, which evidently start when the group first meets and last until the project ends (Jones, 2019). Members of the team trust on one another and share responsibilities to accomplish task and achieve the outcome. In our study, most of the students strongly found the team work is advantageous in their learning; few students comment on team formation with participants of their own choice. It is recommended that the team formation should be done impartially by the facilitator, with each team having a diverse mixture of students, and also ensuring no pre-existing social groupings are formed (Burgess and Mellis, 2015).

5.0 Conclusion

Student feedback is an important source of information about the courses and curriculum. Qualitative feedback from medical students at WUC concluded that the preliminary session of TBL session conducted by pharmacology discipline is a well-accepted method of teaching-learning. TBL is a new way to teach medical students to make it more collaborative, interactive, interesting and more learners directed with lecturers' guidance. TBL gives the benefits of small group teaching in a large group class setting. Other disciplines and faculties at WUC should replace their large group lectures to TBL aimed to develop higher order cognitive skills of students and can use students feedback to evaluate the ongoing courses.

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