



What is Team-based Learning?

Team-based learning (TBL) is an instructional strategy developed by Larry Michaelsen that actively engages students in active learning and critical thinking. TBL students work in diverse collaborative teams (as opposed to small groups) that stay together for an entire semester. The course is divided into 5 or 6 major units, and each unit follows a particular organizational structure. Students are expected to do assignments and come to class prepared. When they come into class they take a short individual exam over the readings, followed by the team taking the same exam as a collaborative group. The student's scores are a combination of his or her individual score and the team's score. Students are encouraged to challenge the exam, and if they are successful, they get points for the questions challenged. This whole preliminary procedure is referred to as a RAT – readiness assessment test.

After the RAT the teams are given another critical thinking exercise. All the teams get the same exercise, and they are expected to all be ready to report their results at the same time. This exercise is not so much about correct answers as it is about the rational and procedure used to arrive at the team's report. The report is oral (as opposed to written), and the professor uses this opportunity to probe understanding and clarify misconceptions. Teams are scored on their presentations.

The team exercises may take from 2 to three weeks to complete, however, class time is allowed for team work and for short clarification lectures. The whole idea of the strategy is to get students engaged in talking and using the knowledge they learn from their assigned readings in solving problems similar to the ones over which they will be tested.

Critics of the technique question whether they could cover all the material they can in a traditional lecture class. The proponents of TBL feel that they can actually cover more material with TBL than traditional lecture because the students read their assignments outside of class, and the professor doesn't have to lecture that material. Of course this depends upon good resources from which to learn.

TBL changes the culture of a class from a teaching centered to a learning centered environment. A professor thinking about TBL should read Michaelsen's book, attend a TBL workshop offered by the Office of Distance Learning. Instructors have applied TBL to many disciplines and the book has examples and testimonials from professors who have tried it. Of course, there are many variations to the Michaelsen formula; however, the basic principles remain the same. The following page summarizes the steps in a typical TBL session. This technology has been found especially effective in medical schools like Baylor. [See more.](#)

This is a summary of Michaelsen's team-based learning procedure that has been tried and found successful. The purpose of team-based learning is to stimulate collaborative learning and student participation in discussions about the subject matter.

- 1) Assign the students to diverse (heterogeneous) teams of 5-7.
- 2) Have a practice reading and RAT session, so students understand the procedure.
- 3) Have them decide how their grades will be determined (see Michaelsen)
- 4) Divide the course into 5 or 6 units (2-3 Text chapters) – each to be initiated with a Readiness assessment procedure (RAP).
- 5) Prepare out-of-class assignments for the course. (Make the scope of the assignments reasonable).
- 6) Prepare 5 questions over the reading that assesses the student's knowledge of what the reading said – this is the readiness assessment test (RAT).
- 7) Prepare one or two "critical thinking" questions for each unit, that take the reader into interpreting what it was the content implies – if you can come up with multiple plausible options, so much the better.
- 8) At the start of the each unit give the 5 question readiness assessment test – collect the individual papers.
- 9) Have teams of three to five students convene and take the readiness test again as a group – hand it in for a group score or use the Immediate Feedback Assessment Test (IF-AT).
- 10) Let the groups discuss the critical assessment questions until they have a group response, have all the groups explain their responses. Students at this point may challenge items on the test.
- 11) Debrief the assignment, giving everyone feedback about their responses, and elaborate on the topic being taught.

Resources:

Michaelsen, L.K., Knight, A. B., and Fink, L.D. (2002). Team Based Learning, Stylus Pubs., Sterling, VA

Michaelsen covers many details in this book, and it is strongly recommended that anyone wishing to employ this technique purchase and read this book.

- *Walter Wager*