

## Team-Based Learning (TBL) Overview

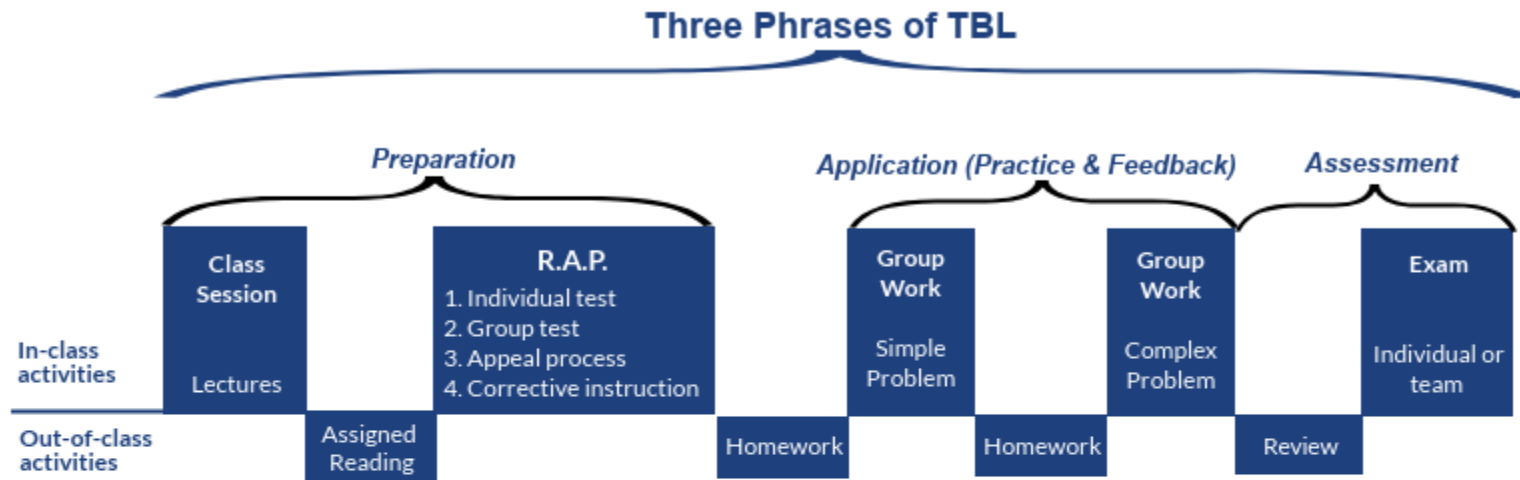
**Team-based Learning (TBL)** is an instructional strategy that requires students' to apply their knowledge of concepts acquired from lectures and assigned readings to solve a problem or accomplish a task. This strategy also requires students to work collaboratively on assigned problems or tasks.

The **TBL process** involves:

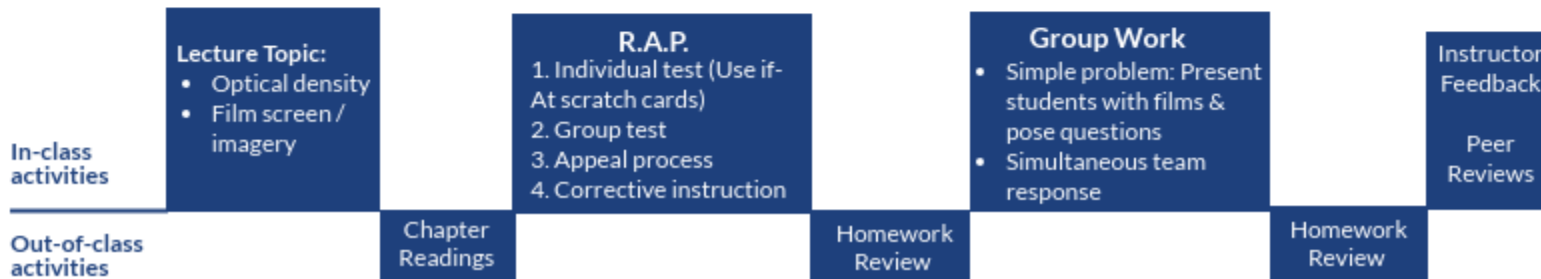
1. **Lectures and Readings:**
  - a. Assign readings to students (based on 2 to 4 chapters).
  - b. Place students in small teams.
  
2. **Readiness Assurance Process (RAP):**
  - a. Assess students individually using a multiple choice test.
  - b. Assess student teams using the same multiple choice test.
  - c. Use scratch cards (E.g. 50-pack IF-AT 10-question quiz cards) and answer sheet for grading and feedback.
  - d. Appeals: Student teams have the opportunity to improve their score on the team test by appealing questions that they answered incorrectly. The teams can use their textbook to provide justification for their responses.
  - e. Instructor feedback could take different forms, class discussion, mini-lectures or comments.
  
3. **Application Exercises:**
  - a. **In-Class Team Activity:**
    - i. Assign a problem to student teams to solve in class time (Students must use the knowledge they acquired from the readings and lectures to solve the problem).
    - ii. Simultaneous reporting – teams show voting cards that represent their choice or respond at the same time by showing color coded or numbered cards that represent their answers.
    - iii. **Note:** Assignments/problems should allow students to make decisions and give a simple report of that decision.
  
  - b. **Out-of-Class:**
    - i. Assign a problem to individual student teams to solve similar problems outside of class (Students must use the knowledge they've acquired from the readings and/or lectures to solve the problem).
  
4. **Accountability:** Use different strategies to hold students accountable for their own learning.
  - a. Individual and team multiple choices assessment results.
  - b. Student peer evaluation of group participation.
  - c. Instructor evaluations of in-class and out-of-class application activities.

### Team-Based Learning Model

**Team- Based Learning chart** recreated from Michaelsen, Knight, & Fink (2002). This chart illustrates the process for 4 to 7 primary instructional units so the first TBL session could apply to 2 to 4 chapters and then repeated for the next 2 to 4 chapters or the next major topic.



#### Concrete example - Radiologic Sciences



## References

- Center for Instructional Support. (2010, October, 26). *Team-based learning*. Retrieved from <http://www.teambasedlearning.org>
- Fink, D. L. (2003). *Creating significant learning experiences: An integrated approach to designing college courses*. San Francisco, CA: John Wiley & Sons, Inc.
- Michaelsen, L.K., Knight, A. B., & Fink, L.D. (2002). Team-based learning. In *Team-based learning: A transformative use of small groups*. Praeger publishers: Westport, CT

**Team-Based Learning Initial Course Design Form<sup>1</sup>**

Course Design Objectives	Comments and responses
1. Does the instructor want to redesign the entire course or include a TBL component in the course?	
Step 1: Situational Factors Questions	Comments and responses
2. How many students are enrolled in the course?	
3. Who will be taking the course? (Nontraditional students/ Undergraduates (underclassmen or upperclassmen) and/or Graduate students)	
4. What are students' experiences in the academic field?	
5. Do students have prior knowledge of the subject matter?	
6. What is the cultural composition of the class?	
7. What are students' motivations for taking the course?	
8. What is the purpose of the course? (Convergent or divergent)	
9. What are the teachers' experiences of the topic?	

<sup>1</sup> The initial design phase is based on Fink's (2003) Integrated course Design Model and CETL's online course consultation form

Step 2: Learning Goals	Comments and responses
<p>1. What does the instructor want the students to be able to do upon completing the course? (Master content, accomplish specific tasks)</p>	
<p>2. <b>Foundation knowledge goals</b> What key concepts, facts, and practices do students need to comprehend and remember?</p>	
<p>3. <b>Application goals:</b> Do students need to learn critical/creative/practical thinking skills? Do students need to learn theoretical and/or practical skills? Do they need to learn project and time management?</p>	
<p>4. <b>Determine integration goals:</b> What connections do students need to make between theory and practice? How will students integrate the course content into their professional lives? How does core course content connect to each other?</p>	
<p>5. <b>Human Dimensions goals:</b> What should students learn about themselves? What should students learn about working and interacting with others?</p>	
<p>6. <b>Caring goals:</b> What changes would the instructor like to see in students' values and attitudes?</p>	
<p>7. <b>Learning how to learn goals:</b> What additional learning goals does the instructor have for students?</p>	

Step 3: Feedback and Assessment	Comments and responses
1. What types of authentic tasks/assessments (exams, problems, assignments) will enable students to apply their knowledge of the course content? (Relate assessments to learning goals)	
2. What criteria and standards will guide the student assessments?	
3. Does the instructor want to include opportunities for self-assessment? (The student or instructor or both will generate criteria and standards for self-assessment)	
4. What method of feedback will be used? (verbal, written, dialogue) How often will feedback be provided to students? Will the feedback be based on criteria and standards?	
Step 4: Teaching and Learning Activities	Comments and responses
1. What teaching activities will instructors use? (lectures, reading, examine primary and secondary sources)	
2. What learning activities will be included in the course that enables learners to achieve the learning goals specified? (TBL problem, problem-based learning, scenarios/case studies)	
3. What technologies will be integrated into the course to facilitate teaching and learning activities? (Media, blogs, web quests, narrated PowerPoint presentations, pod casts)	
4. What learning activities will encourage students to reflect on what they have learned and derive meaning from the course content? (journals, portfolios, peer reviews)	
Step 5: Integration	Comments and responses
1. How will the instructor ensure that the learning goals, assessments and learning activities are integrated?	

## Team-building Guidelines

### **Purpose:**

The purpose of this team learning activity is to encourage you to work collaboratively and diplomatically. This guideline focuses on three fundamental topics; communication, decision-making and feedback. Please use the following guidelines to help you work effectively in your teams.

Team members should:

- Communicate respectfully to each other.
- Give each team member the opportunity to contribute and provide a reason for their suggestions/answers (**An example could be passing the pen around so that each team member can lead the discussion and share their ideas**).
- Listen to their team mate's ideas without interrupting and before commenting or offering feedback.
- Not disregard another team member's idea before discussing and evaluating the idea as a team.
- Discuss competing opinions respectfully by stating the pros and cons OR ask questions to seek clarification not to humiliate. (Remember that you disagree with the team member's ideas not the individual).
- Endeavor to provide positive feedback to their team member's especially when the team member's idea/response is deemed to be incorrect (**An example would be to thank the team member for their suggestion and then provide an explanation as to why someone else's idea is preferable**).
- Ensure that the decision-making process is being made by the team not by an individual team member (**An example would be for the team to vote on a course of action or on a particular answer or solution**).
- Be committed to the team's succeeding at the assigned task.

**Team-Based Learning (TBL)**  
**Student Team Discussion Prompts**

1. How did your group work together to complete the group assignments?

2. How did your group discuss competing opinions respectfully?

3. List several ways in which members have helped your group to be successful and identify the member(s) who are particularly good at each one so that you can share your perceptions with the group.

4. What could members of your group do that would help most to improve your group's performance?



Peer Review SAMPLE

**Submission Details:**

**Student Name:** \_\_\_\_\_

**Team #:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Guidelines:**

- This peer review should reflect your perceptions of the extent to which the other members of your team contributed to your learning and your team’s overall performance.
- Peer reviews that portion the percentage equally indicate that the quality of the team member’s work were typical and representative of the overall quality of the team's work.
- A mark of ‘0%’ should only be used when a student did not contribute at all to the team’s activities.
- You must be **objective, fair** and **honest** when reviewing your team members.

**Review Details:**

1. List the name of each member of your team.
2. List the peer review percentage for all members of your team.
3. The total peer review allocated must be a percentage and must add up to 100% exactly.
4. Consider the team members’ contribution to the team assignment and assign a suitable percentage.
5. Add comments or feedback if necessary (**These comments not information about who provided them – will be used to provide feedback to team member**).
6. Please complete the form after each group assignment.

<b>Team Member (Full Name)</b>	<b>Peer Review Mark (%)</b>	<b>Feedback/Comments (Consider: Student preparation, contribution, problem-solving efforts, flexibility, collaboration)</b>