

Team-based Learning: The Transformative Use of Small Groups in University Teaching

What is Team-Based Learning

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- TBL ≠ small groups
- Peer evaluation
- Grade weight-setting exercise
- RAPs
- Team Application Exercises

Advantages of TBL

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- Students are more likely to read
- Enhanced understanding/application of course material
- Interpersonal and team skills
- Active learning
- More fun for everyone!

Team-Based

Traditional

Out of Class

Readings

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In Class

Readiness
Assessment

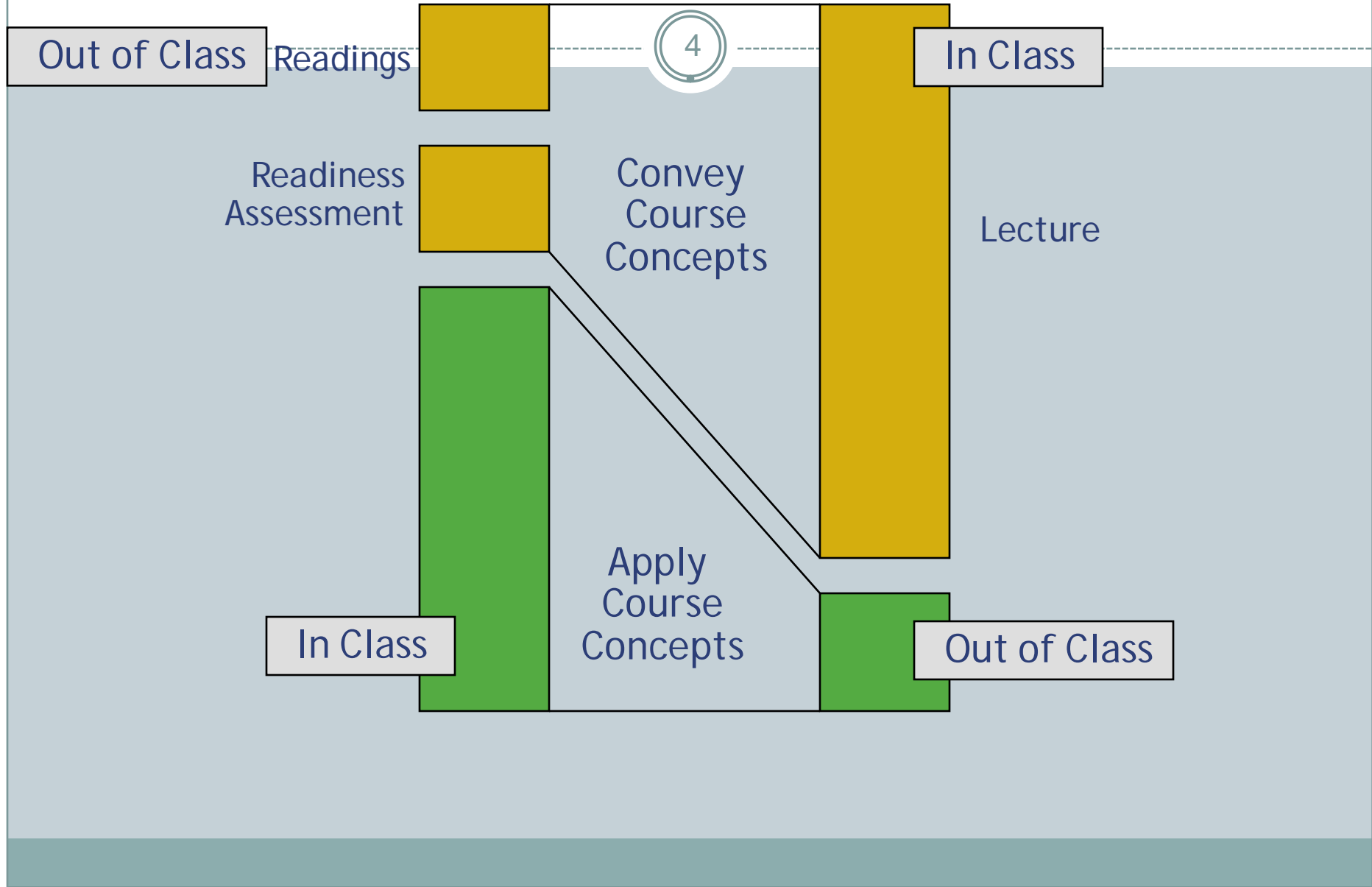
Convey
Course
Concepts

Lecture

In Class

Apply
Course
Concepts

Out of Class



Collaborative/Cooperative Learning

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- Collaborative learning is one of the most powerful tools instructors have in higher education.
- Students get a chance to speak, share personal views, and develop the skill of working with others.
- Requires that group members work together to complete a given task.

Debates

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- Debates staged in class can be effective tools for encouraging students to think about several sides of an issue.
- Debates can vary from simple, in-class presentations to more elaborate work over a period of time and with a group.
- Debates can be particularly powerful learning tools when students have to switch sides.



Key Principles

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Teams must be properly formed and managed

- Team formation process
- 5-7 members
- Permanent

Your Turn

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- Pick an authentic problem or scenario from your discipline
- Identify the issues and facts that students would have to know and consider
- Create specific choices that require both the understanding and application of course concepts

Implementing TBL

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Partitioning the course content

- Content should be divided into modules
 - ✦ 6-8 hours of content
 - ✦ What are the major themes of the course?

Designing Application Exercises

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Questions to consider when designing TBL learning activities

- What do I want students to be able to do?
- What will they need to know to do it?
- What do they already know? (So I don't have to teach it)

TBL Phases

<u>Phase 1</u> Preparation (Pre-class)	<u>Phase 2</u> Readiness Assurance (In-class)	<u>Phase 3</u> Application of Course Concepts
Individual Study	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>Individual Test</p> </div> <div style="text-align: center;"> <p>Group Test</p> </div> <div style="text-align: center;"> <p>Team Appeals</p> </div> <div style="text-align: center;"> <p>Instructor Feedback</p> </div> </div>	Small Group Assignments
<ul style="list-style-type: none"> -Attend a lecture -Read textbook or journal articles 	IRAT and TRAT assess student's preparation to begin Group Assignment	Read case history and view visuals, then apply core concepts to complete group assignment

The RAP

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1. Individual study
2. Individual multiple-choice test
3. Team test
4. Appeals
5. Instructor mini-lecture

Key Principles

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Students must have frequent and timely feedback

- Instant grading on tRATs
- Instant grading on team projects

Change Your Teaching Role

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to “Guide on the Side,”

and asking open-ended questions
to prompt the team to find the information



Reporting Strategies

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- **Lettered Cards**
- **Whiteboards**

IF- AT

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- A relatively new strategy that encourages active learning is the Immediate Feedback Assessment Technique (IF-AT).
- This multiple-choice procedure provides immediate feedback to students and partial credit for answers.
- Powerful with team based learning.

IMMEDIATE FEEDBACK ASSESSMENT TECHNIQUE (IF AT®)
Name _____ Test # _____
Subject _____ Total _____
SCRATCH OFF COVERING TO EXPOSE ANSWER

	A	B	C	D	Score
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
7.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

IF- AT

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- This is a particularly powerful tool when used with groups.
- Each group decides the best answer and scratches off the coating of the rectangle corresponding to the answer. If correct, a star appears.
- If the first answer is incorrect, the group continues to look for the next best answer and scratch rectangles until the correct answer is found.

IMMEDIATE FEEDBACK ASSESSMENT TECHNIQUE (IF-AT)

Name _____ Date # _____

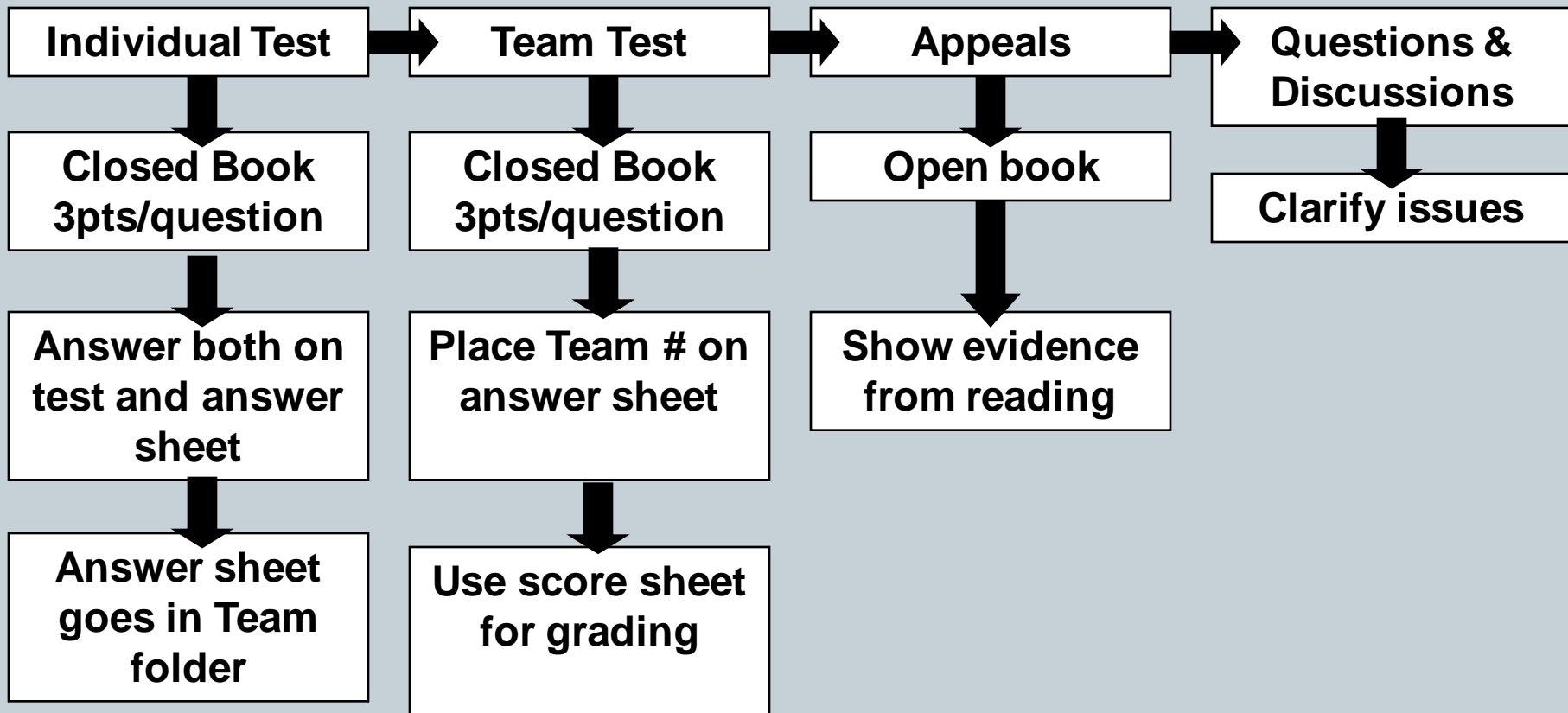
Subject _____ Total _____

SCRATCH OFF COATING TO REVEAL ANSWER

	A	B	C	D	Score
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

Readiness Assurance Test Procedures

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Appeals

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- Each team must appeal separately
- Appeals must be written
 - Question ambiguity – provide alternative wording
 - Ambiguity in readings – provide specific page numbers and quotations
- iRAT grades will change for members of team that successfully appeals

Practice Peer Evaluation

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- For each team member complete the following sentences:

- Something I appreciate about this person is...

- Something I would like to request of this person is...

- ✦ Name: _____ Score: _____

- Comments:

- ✦ Name: _____ Score: _____

- Comments:

What using TBL means

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- Course goals will shift from memorization to application of knowledge.
- Role of teacher will shift from dispenser of knowledge to manager of student-driven learning.
- Role of students will shift from passive learners to active learners and collaborative team members.