



Creating Effective TBL Assignments¹ - Summary

As more and more teachers using small groups in their courses, some find the results exhilarating and others are seriously disappointed.

- One or two vocal members often dominate the discussions to the point that quieter members' ideas are either unexpressed or ignored.
- Individuals in the group feel that they are forced to do the work for less able or less willing members.
- Even when small group discussions have high energy and engagement, subsequent whole-class discussions sometimes "fall flat."
- Arranging meeting times outside class can be problematic.

These 'problems' are actually natural symptoms of the real problem; poorly conceived group assignments. All three problems can be avoided if instructors create assignments that contribute to (as opposed to detracting from) group cohesiveness. Good group assignments are absolutely critical for team-based learning. The vast majority of dysfunctional student behaviors (e.g., social loafing, one or two members dominating the discussion, etc.) and complaints (e.g., having to carry the dead wood, the instructor isn't teaching, etc.) are the result of bad assignments, not bad groups.

There are three important characteristics of good group assignments:

1. Good group assignments should be effective in promoting students' mastery of basic conceptual material and enhancing higher-level thinking and problem-solving skills.
2. The single best way to gauge the effectiveness of group assignments is to observe the level of energy that is present during the total class discussion stage of the assignment.
3. The surest approach for creating effective group assignments is to maximize the extent to which the learning tasks promote the development of cohesive learning groups.

Principles for Designing Effective Team Assignments

Recent studies show that the key to designing assignments that promote both greater depth of understanding and retention is to use assignments that require higher-level thinking and problem solving. Instead of simple cognitive tasks like listening to a lecture or reviewing their notes, students are able to retain and use more course concepts when they engage in activities such as solving discovery-oriented problems, taking tests, writing 'minute papers' and being exposed to opposing views on a subject and then having to resolve the conflict in the process of making a decision.

¹ Adapted with permission from "Designing Effective Group Activities: Lessons for Classroom Teaching and Faculty Development" by Larry K. Michaelsen, L. Dee Fink and Arletta Knight. And from "Creating Effective Assignments" in *Team-Based Learning: A Transformative Use of Small Groups in College Teaching*, 2004. Michaelsen, L.K., Arletta Bauman Knight and L. Dee Fink (eds.), Sterling, VA: Stylus Publishing, LLC.

Wording Assignments to Promote Higher-level Cognitive Skills

The degree to which assignments stimulate higher level cognitive skills is largely a function of what we ask students to produce.

English Writing Course Objective: "Ensure that students can discriminate between effective and ineffective use of active vs. passive "voice" in written communication."

1. Make a list: Identify the 'mistakes' that writers most frequently make that detract from their efforts to write in active 'voice'.
2. Make a choice: Read the following passage and identify a sentence that is a clear example of a) active and b) passive 'voice'.
3. Make a specific choice: Read the following passage and identify the sentence in which passive 'voice' is used most appropriately.

The order of these tasks above reflects the degree to which they would require the use of higher-level cognitive skills. With item 1, students could simply make a list by extracting items from reference sources. Item 2 is better, as it requires students to critically examine sentences and to use the criteria that define active vs. passive voice in making choices. Item 3 provides the most practice in using higher level cognitive skills because it requires students to make multiple comparisons and discriminations, to analyze content and to apply their definitions of active and passive voice.

The Three S's

These procedures have been found to both create accountability and foster discussions. The "3 S's" also apply to **all three stages** of effective group assignments – individual work prior to group discussion, discussions within groups, and total class discussions.

- Same problem – Individuals/groups should work on the same problem, case, or question
 - A critical aspect of effective group assignments is the exchange within and between groups. To facilitate this exchange groups must have a common frame of reference. This provides students with important and immediate feedback on their own thinking and their group performance.
- Specific choice – Individuals/groups should be required to use course concepts to make a specific choice.
 - Cognitive research shows that learning is greatly enhanced when students are required to engage in higher-level thinking such as analysis, synthesis and evaluation. More on this below.
- Simultaneously report – If possible, individuals/groups should report their choices simultaneously.
 - Avoids the pitfalls of having students sequentially share the result of their thinking and decision making. Often later groups are tempted to change their mind by simply endorsing what seems to be the most popular, thereby avoiding the valuable give and take discussion that arises when differences of opinion are clear. Students must be willing to commit to and be ready to defend their answers.
 - The reporting process transitions group discussions into a larger class discussion. The key to maintaining high energy and engagement at this point is to ensure that the 3S's are implemented. As a whole class they need to make a specific choice – perhaps which is the most economical solution to a problem, the most creative, or the most effective. Incentives can be given to the winner. Providing students with

time to reflect on other teams' solutions and develop questions to challenge other teams will also foster higher energy levels in the between-group discussions.

Impact of Make-A-Specific Choice Assignments

Make-a-specific choice assignments require students to already know the core concepts, and to use their knowledge in order to make a meaningful decision. Make-a-specific choice assignments have other impacts as well:

- Focus on "Why?" – Members generate reasons for making their choice.
- Require high-level cognitive skills – includes multiple comparisons and discriminations, exchange and analysis of content information and verification of rule applications.
- Produce commitment to output – members are likely to engage in an intense give and take discussion of why any given choice is better than another so as to be able to present a clear and cogent rationale for their position to both their team mates and to other teams.
- Portend high individual accountability – since members expect to be asked to share their choice with the group they enter group discussions with a clearly defined position and the ability to defend it.

Forces that Promote Social Loafing (Uneven Contributions in Group Discussions)

Under certain conditions, many group members would prefer to sit back and watch 'someone else' work on their behalf. This phenomenon of 'social loafing' can be a serious problem as it constrains the interaction necessary for a productive learning environment.

- Some individuals naturally resist participation (shyness).
- Some individuals prefer to dominate discussions.
- Members may believe they lack the content knowledge required for making a meaningful contribution.
- Members may not be committed to the success of the group.
- Members may be concerned about appearing to be disagreeable or overly aggressive.
- The task may be inappropriate for groups because it:
 - Can be completed by one or two members working alone.
 - Does not require members to reach an agreement.

Assignments that Promote Group Cohesiveness

The forces that promote social loafing can be offset by assignments and practices that develop group cohesiveness. These five variables can determine if an assignment will effectively build group cohesiveness:

- 1. Does it ensure a high level of individual accountability for team members?**
 - Individual accountability is critical in the initial assignment as it sets the stage for the rest of the course. Tasks that require pre-work and input from all group members produce a set of dynamics that largely prevent social loafing from happening in the first place.
 - The Readiness Assessment Process fosters individual accountability since the individual test counts toward members marks and ensures students do the work prior to class.
- 2. Does it bring members into close physical proximity?**
 - Group cohesiveness is directly related to the extent to which members do things together and interact. It is fostered by in-class group work and often countered by assignments that allow students to complete assigned tasks outside of class, working individually.

3. Does it motivate a great deal of discussion among team members?

- A reliable way to ensure high levels of interaction is to require members to make a concrete decision that is based on the analysis of a complex issue. (e.g. Ask students to apply a rule or to solve a truly challenging problem.)
- This kind of activity will reinforce two important lessons about group interaction 1) other members' input is a valuable resource, and 2) we can accomplish things by working together that none of us could accomplish on our own.

4. Does it ensure that members receive immediate, unambiguous, and meaningful feedback (preferably involving direct comparisons with the performance outputs from other teams)?

- Knowing that another team has the power to outperform 'your' team is extremely motivating to students. It can also de-emphasize the differences among individual group members as they pull together to protect themselves and their public image.
- In contrast, assignments that require students to produce a complex product (like a group paper) without knowing how they are doing will likely create a great deal of tension in the group, exacerbated by different working styles among members.

5. Does it provide explicit rewards for team performance?

- Include group performance in the grading system to create incentives for members to devote time and energy to group work.

A Checklist for Effective Group Activities

PRIOR TO Group Activity

- ☒ Are group members working on the same assignment and required to make a specific choice, individually and in writing? (Note: This individual accountability is especially important in newly formed groups.)

During Discussions WITHIN Groups

- ☒ Are groups required to share members individual choices and agree (i.e. reach a group consensus) on a specific choice?
- ☒ Will the Discussion focus on "Why?" (and/or "How?")
- ☒ Will the groups' choice(s) be represented in a form that enables immediate and direct comparisons with other groups?*

During Discussions BETWEEN Groups

- ☒ Are group decisions reported simultaneously?*
- ☒ Do group "reports" focus attention on absolutely key issues?*
- ☒ Are groups given the opportunity to digest and reflect on the entire set of "reports"* before total class discussion begins?
- ☒ Will the discussion focus on "Why?" (and/or "How?")

*The form in which individual and group choices are represented largely determines the dynamics of the discussions that follow. Both individual reports to groups and group reports to the class should be as absolutely succinct as possible. One-word reports are the very best (e.g., yes/no, best/worst, up/down/no change, etc.)