

**TEACHING METHODS TIPSHEET 1:  
FORMING STUDENT GROUPS**



**EFFECTIVE TEACHING AND LEARNING DEPARTMENT**

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# Teaching Methods Tipsheet 1- Forming Student Groups

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## ***Random Methods***

### **Benefits:**

- These techniques normally require no preparation on the part of the instructor.
- Since these are usually done in full view of the students, they “perceive this selection process as “fair,” (Barkley et al., 2005, p. 46).
- These are generally good methods for selecting formal groups (groups instructors intend to use throughout the quarter) as well as ad-hoc groups (groups only meant to last for a single class session or two).
  - If these methods are used often for ad hoc groups, students will get a chance to work with many of their classmates (Barkley et al., 2005).

### **Drawbacks:**

- Does not guarantee diversity (age, gender, socioeconomic class, race) within groups
- May limit student engagement if students are uncomfortable speaking up in diverse groups

For the following items, the idea is to randomly group students first, and then determine the “ideal” number of students for each group. Finally, form the

groups, either by grouping from the students who are next to one another or by counting off, 1-2-3-4, and forming groups that way.

## Methods

To form the random order, you can try lining up students:

1. Alphabetically by-
  - a. Student first name
  - b. Student last name
  - c. Student middle name
  - d. Student birthday month
  - e. Street student lived on at a particular age (say 10 or so)
  - f. State in which student was born
  - g. Color of shirt student is wearing
  - h. Brand of shoes student is wearing
  - i. Dream car
  - j. Favorite book
  - k. Favorite food
  - l. Favorite movie
  - m. Favorite sports team
  - n. Favorite subject in school
  - o. Favorite place to hang out
2. Numerical Listing by:
  - a. Year of birth (if brave enough to ask)
  - b. Number of pets at home
  - c. Number of brothers or sisters
  - d. Number of books in school bag at time
  - e. Number of movies seen in the last month (six weeks, six months)
  - f. Number of states lived in/traveled to
  - g. Number of times they have done X (class related)
3. Draw numbers out of a hat
4. Hand students playing cards as they walk in the door and have the students match their suit or their face card to form their group

## Other pre-class random methods

1. Use the randomize feature in Blackboard before class begins to select student groups
2. Give students a line from a poem or piece of text and have students find their matches. If forming groups of four, selecting well-known groups of four-line verses from poetry or literature works well for this exercise.
3. Jigsaw or picture matches-cut a picture into pieces and have the students match the pieces to form the group. Instructors can customize this to the size of the group desired. When the picture is complete, so is the group.

## ***Student Selection/Instructor Selection***

If you want to do a little preparation, you can place four options on the walls and have the students choose their favorite. Some categories here might be:

1. Favorite season (spring, summer, fall, winter)
2. Favorite breakfast food (cereal, eggs, pancakes, none)
3. Favorite candy bar (Snickers, Almond Joy, Hershey, Milky Way)
4. Favorite sport (baseball, football, basketball, hockey)
5. Chocolate preference (dark, milk, all, none)
6. Favorite soft drink (Coke, Pepsi, Sprite, Mountain Dew)
7. Favorite brand of shoes (Nike, Reebok, New Balance, Other)
8. Favorite type of movie (comedy, drama, horror, animated)

Once the students have selected their favorite option, simply select a student from each of the four categories until groups of four are formed. You can also have the students' line up and call out numbers to form the groups of four. This has the benefit of letting students select their favorite categories and ensuring that students who self-select to be together originally are not in the final group of four at the end of the exercise.

## ***Non-random Methods***

This involves more work on the part of the instructor, but can also ensure a more complete mix of students on a project. You may only want to do this for a formal project, one lasting several weeks or more and requiring a group product at the end.

### **Benefits:**

- The instructor can ensure that there is an appropriate mix of students in each group for diversity and student skill purposes
- Instructors can “encourage” students who do not usually work together to do so

### **Drawbacks:**

- Instructors can be accused of bias during the selection process
- If a member of a single gender or class is the sole representative on that team, it may actually prohibit, rather than encourage the student to speak out. Separating all races, classes, genders, onto separate teams may not be in the best interests of the student. Asking the students how he or she would feel most comfortable might be the best route to take in this

situation (Barkley et al, 2005; Meyers & Jones, 2001; Millis & Cottell, 1998).

## Methods

1. Survey method:
  - a. Ask each of the students to complete a questionnaire about their experience with the following:
    - i. Technology (if the project is going to require a typed product or computer research)
    - ii. Project management – for group dynamics purposes
    - iii. The subject itself--this way the group has a mix of people familiar with the topic and novices so that the students can learn from one another.

- b. Once the students have completed the survey, the instructor can then go back and review the responses and select the best **mix** of teams, putting experienced students with inexperienced students to provide everyone with a balance.  
**Note:** Be sure to explain this process to your students and describe how it models the workplace, where students do not get to choose their teammates, but will often be working with a mix of experienced and inexperienced people.
2. General instructor selection: consider other class-related factors relevant to the project (i.e. age, class, race, or gender) to balance the teams and attempt to ensure that there is diversity on each team.
  - a. **Note:** This can get tricky and sometimes students can accuse instructors of bias, so try and make this process as visible to the students as possible.
3. Learning or personality style inventory – select students for groups based on a student completed learning style quiz, so that an appropriate mix of learning styles appear on each team (Barkley et al, 2005).

### ***Student Selection***

There is always the tried and true student selection method of forming groups, where students select their own group members.

#### **Benefits:**

- No preparation on the part of the instructor for selection process
- Instructor cannot be accused of bias

#### **Drawbacks**

- Students often choose to work with friends and/or same people repeatedly, particularly if these students have taken several classes together, however these teams rarely tend to be successful (Millis & Cottell, 1998)
- Does not guarantee diversity (age, gender, socioeconomic class, race) within groups
- Does not guarantee that students will work with a variety of their classmates if this process is used often within a class to form ad hoc groups

## Methods:

1. Team leader approach:
  - a. Designate a group leader and (perhaps by drawing this name out of a hat).
  - b. Identify methods for selecting other group members by identifying skills needed for the project.
  - c. Instruct the other members of the class to prepare a short interview of how/why they fit the bill.
  - d. Have a round robin set of interviews of the class members.
  - e. Instruct the team leaders to meet and decide how the teams will be formed.
  - f. Announce the team formations.
2. Random student self-selection
  - a. Announce that there should be student teams of X number and allow the students to select the students with whom they would like to work. Remember, this is the least likely method for student success.
3. Ask students to name three students with whom they would like to work and let them know that they will most likely get to work with one of the students they have identified (Barkley et al, 2005; Millis & Cottell, 1998).

## Group Size

The ultimate size of the group depends on many things, but instructors should consider the following:

- Size of the class as a whole
- Complexity of the task
- Skill level of the students
- Time available to complete the project
- Collaborative learning experience of the students
- Nature of the task or problem presented to the students
- Roles (if formal roles are being used) and the minimum number being used in the project
- Physical space (particularly important in large lecture halls where the chairs are not mobile)
- Potential for non-participation on the part of the students-how will other students pick up the slack?
- Diversity issues
- Resource issues

Anywhere from two to five is recommended by the experts, depending on the nature of the task, but for formal groups, four to five is generally recommended to account for absenteeism and to allow for maximum effectiveness when using formal roles (Barkley et al, 2005; Millis & Cottell, 1998)

**References:**

- Barkley, E., Cross, P., & Major, C. (2005). *Collaborative learning techniques: A handbook for college faculty*. San Francisco: Jossey-Bass.
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- Millis, B., & Cottell, P. (1998). *Cooperative learning for higher education faculty*. Westport: Oryx Press.