## Creation of Teams for Team-Based Learning in the Anatomy and Physiology Classroom

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#### **Creating Teams**

According to the Team-based Learning Collaborative (TBL) website, it is important that the students not determine teams. Research shows that student-selected teams perform less well than instructor-determined teams.

I have tried a variety of approaches to forming teams in my anatomy and physiology classes of 30-45 students. Initially I attempted to form academically "balanced" teams with strong and weak students on each team. I gave them a quiz during the first week of classes which covered pre-requisite material found in the introductory, chemistry and cell chapters of most anatomy and physiology textbooks. The benefit of this approach was that students who learned by teaching others had the opportunity to do so, but often the weak students lost confidence and dropped out of the course.

My present approach involves giving students a survey which asks them a number of questions including the following:

1) If they have a laptop with internet access

2) If they have purchased the latest version of the textbook with access to the web-based material,

3) When they are available to study outside of class time

I try to ensure that each team has all the tools (computers, text resources) they need for success. This also includes giving students the opportunity to choose one classmate to be with on their team. This may be related to geographic location, car-pooling, work schedules, and other commitments, which lead to increased common availability outside of class time. In addition, I used to insist students stay in their assigned groups and work through their problems because in the real world they have to learn to work with difficult people. This created a lot of friction, but allowing movement in the first month solved this problem. My most successful approach has been to encourage students to stay with their team until we do our first case study in class. I use a chemistry-focused case (in order to review pre-requisite material) from the National Center for Case Study Teaching in Science called The Secret of Popping Popcorn. Of course, I supply popcorn in class while they work on the case! This usually helps unify the teams.

Another challenge is the lone wolf student. Some students prefer to work on their own both within and outside of class, but gaining the skills to work collaboratively is one of the learning outcomes for my course as measured by the completion of self and peer evaluations. I make it

very clear to these students (on the course syllabus) that they will not be able to earn marks for the peer-evaluation component of their final grade (5%) if they do not work in a team.

#### **Team Contracts**

Each group develops a team contract at the beginning of the semester that includes the expectations and penalties for violating the terms of the contract. It is surprising to see a team member show up to class with a tray of Starbucks coffee that turns out to be the team's penalty for not contributing to the preparation work that week. With this group, they had included their coffee orders in the team contract!

If a team member violates conditions of the contract, they can be "kicked out" of the group. This has occurred a few times when students have given up and stopped coming to class. There was also one instance where severe behavioral issues, initially revealed by the peer evaluations, resulted in a student not only being "kicked out" of their team but also removed from the course. The documented peer evaluations played a big role in this process.

What follows are the directions I provide to my students for setting up a team contract. I encourage them to use this as a guideline, but to craft their own unique team contract.

# TEAM CONTRACT SUGGESTIONS FOR THE TEAM-BASED LEARNING CLASS

In order for teams to work effectively, it is important that your team create a contract outlining the roles and responsibilities of the team members.

- Set up an editable document using Google Docs or any other web-based file sharing site to create this contract.
- Include your team name in the file name and at the top of the document.
- Inform your instructor of your individual team members' names (don't include in the posted contract)
- You can make your contract as simple or as detailed as you like.
- Try to address the various questions below
  - Remember that if a team member is not functioning well within the group, you need a clear statement in the contract to refer back to.
- Share the Google Doc link to your Team Contract with your teammates and your instructor (post to the Moodle Forum).
- You can go back and revise your contract at any time!

#### Team Name

• Your first team assignment is to come up with a team name, so that you do not need to include individual names on every activity.

## **Communication Outside of Class**

- 1. What method will your group use to communicate outside of class time?
  - Facebook messenger, text message, WhatsApp, email
    - Make sure everyone has access
- 2. What method will your group use for collaborating on definitions for terminology plus learning outcomes outside of class time?
  - Work on a joint Google Doc remotely?
  - Do it together at a study session?
  - Email your responses to one person who then shares final document?

## **Completion of Definitions of Terms and Learning Objectives**

- 3. How will your team divide the terminology list and learning objectives amongst team members?
  - Assign in class (end of last class on previous topic)
  - Sign up remotely on Google Doc (initial after the questions you want to do)

- 4. Will your team set specific deadlines for posting to the team terminology list and learning objectives? (give at least 24 hours to allow for studying)
  - What happens if someone does not fulfill their assignment?
  - Will you assign items to pairs of students to the same questions/terms to ensure coverage?
  - Will you assign a back-up person to cover for missed responses?

## **Team Interactions Outside of Class**

- Teams are typically large and it might be difficult to meet regularly
- Two methods to try:
  - set up meetings regularly with the entire team or **super group**
  - work together online as a team but study in smaller groups (**study buddies**) more frequently
- Here are some issues that may come up with individual team members
  - Chronic lateness
  - Inappropriate electronic use (Texting, Facebook, etc.) when members should be participating
  - Straying off topic frequently (socializing in the group instead of working)
  - Not participating in the "group" (pairing off to do their own work or working alone)
  - Missed deadlines for sharing preparation work (terms, learning objectives)
  - Lack of response to communications outside of class
  - Disrespectful behavior (rude, ignore team mates)
  - Consistently dominate conversations
  - Lack of interaction (e.g. not speaking up or speaking too quietly to hear)
  - 5. How will your team address these situations above?
    - Outlining this in your contract makes it easier for the group to discuss the issue with the team member in question as they can refer to the contract
  - 6. What consequences will there be for someone who does not follow the team contract?
    - Not contributing to pre-class preparation is the most common problem with teams and past groups have come up with some good options:
    - The team contract includes everyone's coffee/tea orders so that the violator knows what to buy and bring to the next meeting or class
    - Some teams give one free pass, but the offender can be voted out if they repeat
    - Still other teams just ask for a heads up and they will happily cover with no expectations of reciprocation
  - 7. Do you feel your team should be able to vote a member out of the team?
    - If so, under what circumstances? (Be very clear if you choose to have this as an option.)

• I have never actually seen a group kick a member out, but it is worth having a discussion about this

#### REFERENCES

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