Strategies for Cooperative Learning: Helping Students Develop Teamwork Skills

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Felder and Brent Summary
Definition

• Producing a product of some sort:
  o a set of problem solutions
  o a laboratory or project report
  o the design of a product or a process

under conditions that satisfy five criteria

1. positive interdependence
2. individual accountability
3. face-to-face interaction for at least part of the work
4. appropriate use of interpersonal skills
5. regular self-assessment of team functioning
Advantages over traditional learning

• Greater learning
  o Higher academic achievement
  o Better high-level reasoning and critical thinking skills
  o Deeper understanding of learned material

• Superior development of communication and teamwork skills
  o Leadership
  o Project management
  o Conflict resolution
Effects on “weaker” students

• Working individually
  o They are likely to give up when they get stuck
  o They may tend to delay completing assignments or skip them altogether.

• Working cooperatively
  o They keep going.
    • Greater intrinsic motivation to learn and achieve
    • Greater persistence through graduation
    • Lower levels of anxiety and stress
    • More positive attitudes toward subject areas
    • Higher self-esteem
  o They know that others are counting on them, so they are motivated to do the work in a timely manner.
    • Greater time on task and less disruptive behavior in class
  o However, they complain about being discounted or ignored in group sessions.
Effects on “stronger” students

• Working cooperatively
  o They are faced with the task of explaining and clarifying material to weaker students, so they often find gaps in their own understanding and fill them in.
    • Greater ability to view situations from others’ perspectives
    • More positive and supportive relationships with peers
  o However, they complain about being held back by their slower teammates, and build resentment when some team members fail to pull their weight.
Suggested Strategies

Developing Teamwork Skills
Establish team policies and expectations

• Have teams generate and sign a list of policies and expectations:
  o Individual preparation
  o Team roles, expectations, and policies
  o Rewards and sanctions

• Have them sign the list and make copies for themselves and you.

• Questions:
  o Do students really take these seriously?
Keep groups intact for at least a month

- It takes at least that long for the teams to encounter problems.
- Learning to work through the problems is an important part of teamwork skill development.
- Questions:
  - Can the students decide in groups to remove members, who are not sufficiently contributing to the team work?
Provide for periodic self-assessment of team functioning

- **Plus/Delta team reflection**
  - Every 2–4 weeks, have teams respond in writing to questions such as:
    - What are we doing well as a team?
      - How well are we meeting our goals and expectations?
    - Is there one thing about the team that you would like to see improved?
    - Are there any common concerns?
    - What (if anything) will we do differently next time?
  - Peer ratings

- **Real-life example**
  - Intermediate deadlines (e.g., selected journal paper due to instructor, group presentation, critical review) scheduled weekly for Wujie’s Biopolymers class
Give students tools for managing conflict

• Adopt problem-based learning approach:
  o Start the course normally.
  o Let the interpersonal problems start to surface naturally.
  o Equip the students with strategies for dealing with them.
• Caution them that dealing with conflicts quickly and rationally can avoid later serious problems that are almost certain to arise if they attempt to ignore the conflicts.
• Introduce them to active listening:
  o Students on one side of a dispute make their case without interruptions, then students on the other side have to repeat it to the initial group’s satisfaction,
  o The second side then makes its case uninterrupted, and the first side has to repeat it to the second side’s satisfaction.
  o The students then brainstorm strategies and work out a solution. Once the students have articulated their opponents’ cases, the solution frequently comes very easily.
Use crisis clinics to equip students to deal with difficult team members

- Students brainstorm and then prioritize possible group responses to specified offending behaviors.
- Teams leave armed with several excellent strategies for dealing with the problem.
- Problem students in the class are on notice that their team members are likely to be ready for them in the future, which may induce them to change their ways.

- Questions:
  - What if problem students persist in their ways?
  - What if this induces even stronger students to drop the class and avoid conflicts?
Concluding remarks
Avoiding discouragement

• Aren’t we paying tuition for the professor to teach them and not to teach themselves?

• Isn’t it unfair that they’re carrying their team by themselves?
  o One of their team members rarely shows up for meetings and is never prepared or is racist or sexist or just plain nasty.
  o Their team is falling apart.

• Are we essentially “teaching to the mean” and forcing high-achieving students to put aside academic achievement for societal good?
Real-life example: Team 4

• Scheduling time to meet was challenging
  o Thanksgiving holidays limited participant availability

• Responsiveness to e-mail scheduling efforts varied among participants
  o Unfamiliarity with new group resulted in limited feelings of accountability
  o Some participants did not respond at all, while others felt pressure to complete all aspects of assignment

• Suggestions for future cooperative assignments
  o Agree on meeting times during VCP sessions (voice-to-voice)
  o Designate roles beforehand