

Cooperative Learning:
Students work in fixed teams
on structured learning tasks

Characteristics:

- Positive interdependence.
- Individual accountability.
 - Share workload
 - master all material.
- Interaction between members.
- Appropriate use of interpersonal skills.
Leadership, decision-making, communication, & conflict management.
- Regular assessment of team functioning.

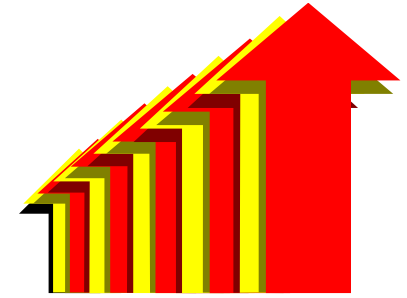


Cooperative Learning IS NOT

- students sitting around a table studying together
- team projects with just 1 or 2 students doing the work



Benefits of Cooperative Learning



- information retention
- academic achievement
- higher-level thinking skills
- attitudes toward subject, motivation to learn it
- race, gender relations
- class attendance
- teamwork, interpersonal skills
- understanding of professional environment
- communication skills
- self-esteem
- lower level of anxiety (reduced competition)

And Fewer Papers to Grade!

Why cooperative learning works

- *Active* learning
- Individual students get stuck, give up. Teams keep going.
- Students see and learn alternative problem-solving strategies.
- More and better question generation, less fear in class.
- Students, like professors, learn best what they teach.



Studies

- Astin (1993)
- Bonwell & Eison (1991)
- Felder (1998)
- Gardiner (1994)
- Johnson & Johnson (1975)
- Johnson et al. (1991, 1998)
- Lisght (1990)
- McKeachie (1994)
- Michaelsen (1994)
- Pascarella & Terenzini (1991)
- Stage (1998)

First research study published in 1898, nearly 600 experimental studies and over 100 correlational studies have been conducted

Requirements of Cooperative Learning:



- Assign team member roles and rotate.
- Start solutions individually;
complete solutions as a team.
- Names written on assignment of all who
 - participated in the solution of the problems
 - and understands *all the solutions*.

Accountability



- Give Individual Exams & Quizzes
- Team scores on projects and/or homework.
- Team bonus points will be given on quizzes and exams.
- Test of the extent of individual participation
 - present solution in class
 - quiz on homework
 - team member evaluation form

Peer Rating Form – first 2 categories of performance

		<u>Your name</u>				Peer Evaluation Section Number _____ Team Number _____
						<p>← Write the names of the people on your team including your own name.</p> <p>This self and peer evaluation asks about how you and each of your teammates contributed to the team during the time period you are evaluating. For each way of contributing, please read the behaviors that rating. Then confidentially rate yourself and your teammates by placing a mark in the relevant box.</p>
Contributing to the Team's Work						<ul style="list-style-type: none"> •Does more or higher-quality work than expected. •Makes important contributions that improve the team's work. •Helps to complete the work of teammates who are having difficulty.
						Demonstrates behaviors described in the row just above and just below.
						<ul style="list-style-type: none"> •Completes a fair share of the team's work with acceptable quality. •Keeps commitments and completes assignments on time. •Fills in for teammates when it is easy or important
						Demonstrates behaviors described in the row just above and just below.
						<ul style="list-style-type: none"> •Does not do a fair share of the team's work. Delivers sloppy or incomplete work. •Misses deadlines. Is late, unprepared, or absent for team meetings. •Does not assist teammates. Quits if the work becomes difficult.
Interacting with Teammates						<ul style="list-style-type: none"> •Asks for and shows an interest in teammates' ideas and contributions. •Improves communication among teammates. Provides encouragement or enthusiasm to the team. •Asks teammates for feedback and uses their suggestions to improve.
						Demonstrates behaviors described in the row just above and just below.
						<ul style="list-style-type: none"> •Listens to teammates and respects their contributions. •Communicates clearly. Shares information with teammates. Participates fully in team activities. •Respects and responds to feedback from teammates.
						Demonstrates behaviors described in the row just above and just below.
						<ul style="list-style-type: none"> •Interrupts, ignores, bosses, or makes fun of teammates. •Takes actions that affect teammates without their input. Does not share information.

Peer Rating Form – second 2 categories of performance

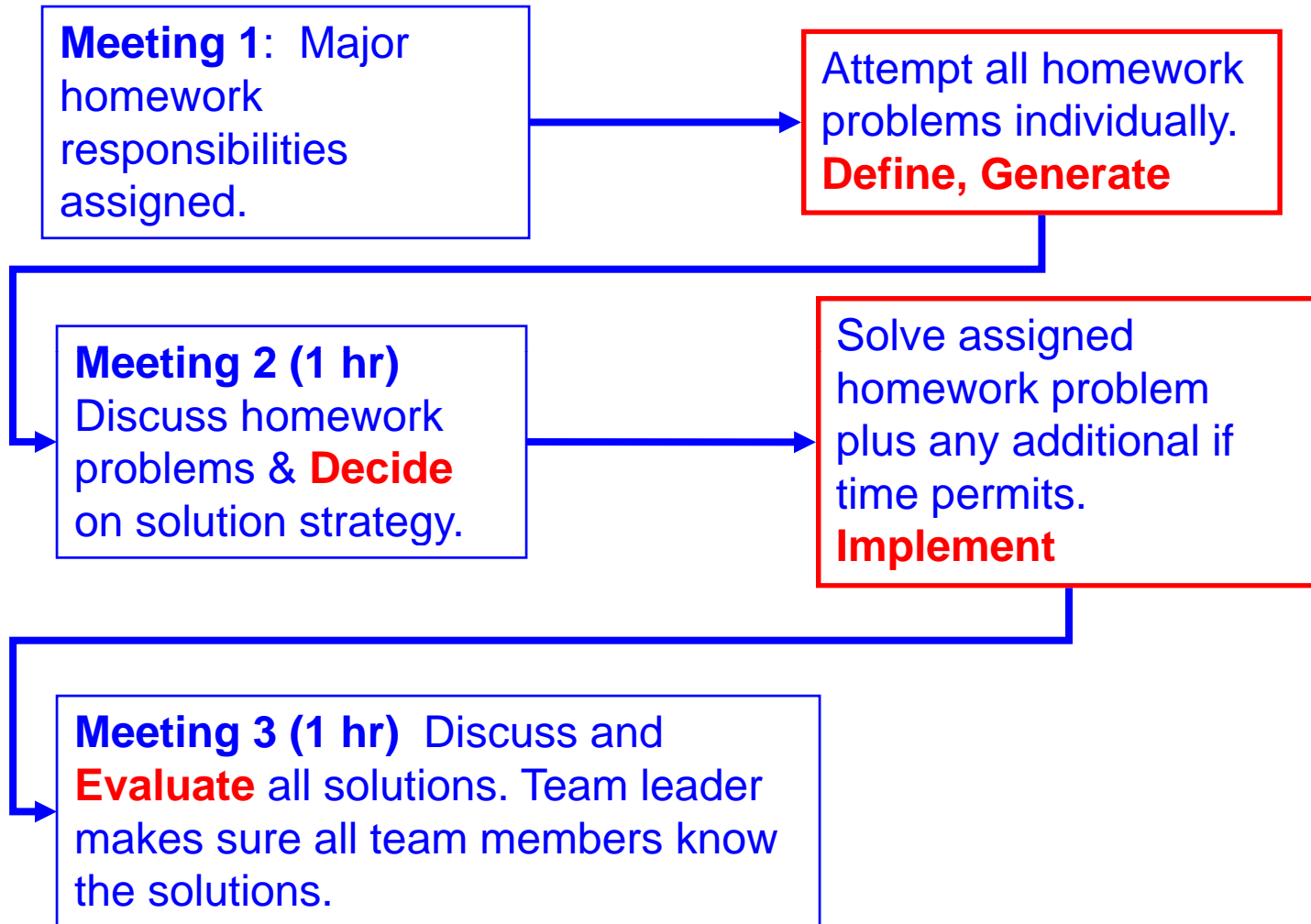
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Keeping the Team on Track			<ul style="list-style-type: none"> • Watches conditions affecting the team and monitors the team's progress. • Makes sure that teammates are making appropriate progress. • Gives teammates specific, timely, and constructive feedback.
			Demonstrates behaviors described in the row just above and just below.
			<ul style="list-style-type: none"> • Notices changes that influence the team's success. • Knows what everyone on the team should be doing and notices problems. • Alerts teammates or suggests solutions when the team's success is threatened.
			Demonstrates behaviors described in the row just above and just below.
			<ul style="list-style-type: none"> • Is unaware of whether the team is meeting its goals. • Does not pay attention to teammates' progress. • Avoids discussing team problems, even when they are obvious.
Expecting Quality			<ul style="list-style-type: none"> • Motivates the team to do excellent work. • Cares that the team does outstanding work, even if there is no additional reward. • Believes that the team can do excellent work.
			Demonstrates behaviors described in the row just above and just below.
			<ul style="list-style-type: none"> • Encourages the team to do good work that meets all requirements. • Wants the team to perform well enough to earn all available rewards. • Believes that the team can fully meet its responsibilities.
			Demonstrates behaviors described in the row just above and just below.
			<ul style="list-style-type: none"> • Satisfied even if the team does not meet assigned standards.

Team Homework/Projects

A typical week:

- **Assign responsibilities** -. Meeting 1-5 minutes after class
- **Define, Generate** attempt all homework problems individually
- **Decide** - solution strategy (Meeting 2 - 1 hr)
- **Implement** - Solve problems
- **Evaluate** all solutions.
(Meeting 3 – 1 hr) Team leader checks team members abilities.

Team Homework - A Typical Week



Remember Cooperative learning is not students sitting around a table and doing homework together.

How to Run Effective Meetings

- At your first meeting, introduce yourselves, and give a little background. Set the group norms and expectations (e.g., showing up on time for meetings, responsibilities).
- Appoint a leader who will inspire the group to high levels of performance and be an effective listener.
- Prepare and distribute an agenda prior to meetings and stick to it.
- State why the group has come together.
- Bring all your materials (such as problem statement, group notes, handouts, your work, etc.) to all the meetings.

How to Run Effective Meetings

- Keep the discussion focused.
- Have someone in charge of keeping the meeting on track.
- Appoint a "devil's advocate" to challenge ideas as they arise.
- Have someone take minutes to remind participants of decisions made, actions to be taken.
- Draft an agenda for the next meeting, identifying what is to be covered and who is responsible for it.



Meeting Effectiveness Guidelines

- Start and end on time
- Identify Explicit meeting objectives
- Create an agenda to achieve objectives
- Develop and follow meeting ground rules
- Stay focused on the agenda
- Work for clarity and closure
- Work for at least 70% agreement, 100% commitment
- Identify clear next steps and assignments

Meeting Ground Rules

- Say what you need to say IN meeting
- Take responsibility to surface issues and offer solutions
- Surface and resolve conflict
- Listen respond build on one another's ideas
- Take risks and support others as they do so

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