



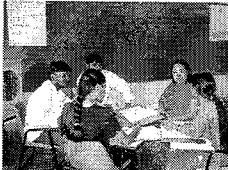
Part II. Collaborative and Cooperative Learning in Face-to-Face Classrooms

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Two C's:

1. Collaborative Learning
2. Cooperative Learning



Cooperative and Collaborative Learning Rationale

- Higher student-teacher interaction
- Increases feedback
- Links new info to prior knowledge
- Enhances perspective taking
- Utilizes resources better
- Teacher as mentor and co-learner
- Joint products and ownership
- Instills more risk taking
- Facilitates problem solving

Definitions

- Cooperative Learning = work toward common goal and understanding same material
- Collaborative Learning = use different skills or expertise to complete a task

Instructor Roles in Collaborative and Cooperative Learning

- Guide, assist, dialogue, clarify, feedback, question, push
- Elaborate, summarize, hint, cue, think sheets, think aloud
- Structure and restructure groups
- Mentor, friend, co-learner
- Help with group processing

Cooperative Learning Principles

1. Positive Interdependence
2. Individual Accountability
3. Group Processing
4. Social Skills and Trust
5. Face-to-Face Interaction

1. Building Positive Interdependence (sink or swim together)

- **Goals:** All have same goal: one team product or report
- **Rewards:** Team recognition based on all contributions
- **Task:** Division of labor, mini-topics, need 8 hands to complete
- **Resources:** 1 person has paper, another has the markers, etc.
- **Roles:** Question asker, recorder, checker. Taskmaster, encourager, leader

2. Building Individual Accountability

- **Pick our students at random**
- **Everyone certifies correctness**
- **Assign jobs to each student**
- **Color code each person's work**
- **Teach scores based on individual scores**
- **Have students reflect and summarize their progress**

3. Group Processing

- **Need time to reflect and analyze what they have accomplished and how well working together.**
- **Students need feedback from instructors on their processing.**
- **Should pause to reflect every so often.**
- **Perhaps use an observation sheet for feedback.**

4. Building Social Skills and Trust and Group Bonding

- **Where were you born?**
- **Favorite movie, music group, color**
- **I wish I had a second chance at?**
- **A job I would love is...**
- **Where born, hobbies, interests, pet**
- **Birthday, sign, etc.**
- **Proudest accomplishment, goals, etc.**
- **Other social ice breakers...**

Grouping Strategies

- **Goals, jobs, location, experience, familiarity with task, birthday, type of vehicle drive**

Pedagogical Strategies: Common Cooperative Learning Strategies

1. Starter-Wrapper Discussions (with roles)
2. Turn to Your Partner: Quizzes, Top Tens
3. Value Line and Graphs
4. Roundrobins and Roundtables
5. Synchronous Guest Conferencing
6. Structured Controversy
7. Jigsaw, Group Investigation, PBL
8. Gallery Tours of Student Work
9. Panel Discussions/Symposia
10. STAD, TGT, Jigsaw, Group Investigation



Cooperative Learning Generic Strategies: Discussion/Small Group Work Alternatives

- Group discussion: pool ideas
- Buzz group: small 4-6 people & then class
- Panel discussions: 4-8 people discuss topic
- Symposium: disc in phases by series of experts
- Debates: pro& con on a controversial issue
- Reaction sheets: Group reacts on predetermined controversial idea
- Role Play: act out situation with roles

Cooperative Learning Specific: Writing

- Database creation
- Peer editing and reviewers
- Publish class projects as a book
- Class critiques and thought papers
- Class newsletters
- Class conference proceedings and journal
- Other local publishing

Task Roles

- Reading: reader, materials handler, checker, summarizer, praiser, elaboration seeker, facilitator
- Writing: executive director, reporter, author, proofreader, co-author, editor
- Computer: keyboarder, recorder, reporter, praiser, checker, summarizer, encourager
- Journal Project: editor, writers, scanner, coordinator, etc.

Role 1: Starter/Mediator Reporter/Commentator



- Summarizes the key terms, ideas, and issues in the chapters, supplemental instructor notes, journal articles, and other assigned readings and asks thought provoking questions typically before one's peers read or discuss the concepts and ideas. In effect, he/she points out what to expect in the upcoming readings or activities. Once the "start" is posted, this student acts as a mediator or facilitator of discussion for the week.

Role 2: Wrapper/Summarizer Synthesizer/Connector/Reviewer



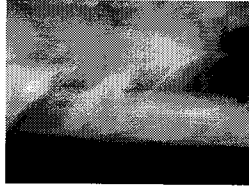
- Connects ideas, synthesizes discussion interrelates comments, and links both explicit and implicit ideas posed in online discussion or other activities. The learner looks for themes in online coursework while weaving information together. The wrapping or summarizing is done at least at the end of the week or unit, but preferably two or more times depending on the length of activity.

Getting Started; Restructuring; Caveats and Barriers

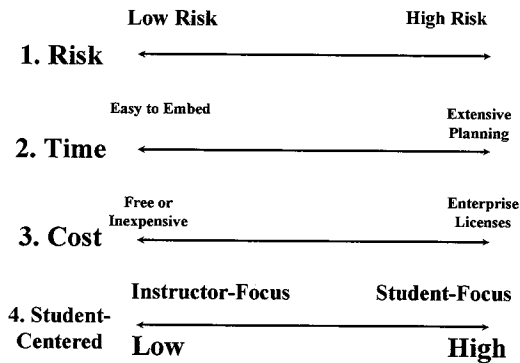
- Start small
- Group size of 2-3
- Think of 1/5 rule: competitive, cooperative, whole group discussion, individual exploration, lecture, etc.
- Work with a colleague to create
- Evaluate use and redesign

99 seconds: What have you learned so far?

- Solid and Fuzzy in groups of two to four



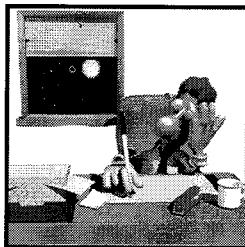
Part I: Collaborative Learning: Activities and Strategies



50 Engaging Collaborative, Cooperative, and Active Learning Ideas



Ok, who is falling asleep and needs a little chocolate?



Did he say chocolate?

Who wants some chocolate???



1. Structured Controversy Task (could be in a virtual debate) (L = Cost, M = Risk, M = Time)

- Select controversial topics (with class input)
- Assign 2 to pro side and 2 to con side for each topic
- Read, research, & produce different materials
- Hold debate (present conflicting positions)
- Argue strengths and weaknesses
- (Reply to other debates as well)
- Switch sides and continue debate
- Come to compromise



2. Reciprocal Teaching Scripts

- Instructor gives purpose of the method (e.g., summarization, prediction, clarification, and questioning skills)
- He/she models the method
- Student takes over as the teacher
- Student teacher models skills requested

3. Cooperative Learning Scripts

- Read same passage
- Put out of sight
- One person summarizes and the other tries to correct any errors
- Both work together to learn the information
- Read 2nd passage and change roles

4. Cooperative Teaching Scripts

- Read different passages
- Put out of sight
- One person summarizes the content of first passage and the other asks clarifying questions
- Work together to develop analogies, images, etc. to learn
- Repeat steps for other article
- Read passage that did not read

5. READER/READERS (Clark & Bonk, 1992)

- Review why you are about to read.
- Explore passage for main ideas.
- Ask questions about the main ideas.
- Draw conclusions.
- Evaluate your responses.
- Read for answers and summarize main ideas.

- Other similar strategies include paired repeated reading, paired reading, Cooperative Integrated Reading and Composition (CIRC) Program, reciprocal teaching, cooperative scripts.

6. Numbered Heads Together

- Assign a task and divide into groups (perhaps 4-6/group).
- Perhaps assign group names across class or perhaps some competition between them.
- Count off from 1 to 4.
- Discuss problem or issue assigned.
- Instructor calls on groups & numbers.
 - e.g., in a research methods class, one person reads intro, another the method, another the findings, discussion, implications, etc.



7. Human Graph



- **Class lines up: (1-5)**
- 1 = Strongly agree,
- 3 = neutral,
- 5 = strongly disagree
- e.g., this workshop is great!
- In a videoconference or synchronous session, have students line up on a scale (e.g., 1 is low and 5 is high) on camera according to how they feel about something (e.g., topic, the book, class).



8. Value Lines

- Pose question or issue
- Students mark down their feelings or votes
- Share votes and rationale with class
- Recast votes

9. Think-Pair-Share or Turn To Your Partner and Share

- Assign a topic for reflection or writing.
- Have share their responses with someone next to them.
- Share with another team.
- Ask to share 1-2 ideas with class.
- Alternatively, ask students to volunteer something they heard from a peer.

10. Phillips 66

- Assign topic (e.g., review readings for this week).
- Students work in groups of 6 for 6 minutes on a particular problem.
- After 6 minutes, stop discussion.
- Share with class.

11. Buzz Groups

- Meet in small groups for a set period of time followed by group discussion.
- (perhaps discuss assigned readings)

12. Stand and Share

1. Present a question.
2. When know the answer, stand up to indicate to the instructor that you have an answer.
3. Wait until all are standing.
4. Call on one at a time.
5. When you give an answer or hear you answer given, you can sit down (unless you have an additional answer).

13. Inside and Outside or Fishbowl

- Situate students in two circles; an outer & inner circle.
- Present a problem, situation, or discussion topic.
- Have students immediately behind each other discuss their solutions, ideas, or answers.
- Only those on the inner circle can talk or discuss. Those behind have to listen.
- Later switch

14. Role Play or Debate Panel or Symposia

- Find controversial topic(s) in the readings.
- Hand students slips of paper with different persona or roles (i.e., authors) that form into 2-3 different groups or factions.
- Have students meet in their respective groups to form a plan of action.
- Role play perhaps with alternating views being presented with 4-6 students

15. One Stray-Three Stay

- Give a task to small groups of students.
- Assign one person as spy or pirate to see the answers of other students (one stray-three stay method) and share with group.

16. One Stay-Three Stray

- Group assigns one person from their group to stay behind and share product or ideas with others who visit their poster or station (one stay-three stray method).

17. Group Investigation or Coop-Coop

- Divide a general topic into sub-topics.
- Groups divide sub-topics into mini-topics.
- Each student investigates their mini-topic.
- Students present findings within groups.
- Integration is made of all the material in each group.
- Presentation is made to the class.
- Evaluation is made of team as well as individual efforts.

18. Jigsaw

(L = Cost, M = Risk, H = Time)

- Form home or base groups of 4-6 students.
- Student move to expert groups.
- Share knowledge in expert groups and help each other master the material.
- Come back to base group to share or teach teammates.
- Students are individually tested; there are no group grades.

19. Product and Project-Based Learning (and Gallery Tours)

- Students decide on a project to pursue from a list.
- Must design something—a poster, poem, song, presentation, radio or TV show, report, advertisement, research report, glossary, website, Wikibook.
- Presentation is made at the end of the unit or semester (perhaps post products on walls in room).
- Evaluation is made by experts and/or the instructor.

20. Issues and Discussion Questions

(L = Cost, L = Risk, M = Time)

- Make a list of issues people would like to discuss.
- Perhaps everyone brings 2-3 questions or issues to the meeting.
- Partner off and create a list and then collect question cards, and,
- Then distribute and your group must answer questions of the other groups.

21. Outlines (Thiagi, 1988)

(L = Cost, M = Risk, M = Time)

- Give students choice in the assigned readings.
- Have them bring an outline of the best 1 article he/she read.
- Have them mentor another student who did not read that article.

22. Reciprocal Questioning

(Allison King)

(L = Cost, M = Risk, M = Time)

- Have students bring in question cards from the readings
- Perhaps add a question sheet or scaffold from the instructor
- Pair them off
- After or during lecture, have them ask those questions of each other.

23. Bingo Quizzes

BINGO

clock	pen	book	blackboard
eraser	door	desk	light
notebook	bag	window	chair
table	chalk	pencil	window

with answers that card. Put course or statements on a each #.
in a hat.



24. After a Lecture

(Derek Bok, Harvard, 1992)

- After a lecture, give students a one question quiz based on the material just covered. Leave the room for 10-15 minutes so that they can discuss. When return, have them report answer.
- Do one minute reflections or mini-activities at the end.

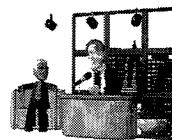
25. Pruning the Tree (i.e., 20 questions) (V)



- Have a recently learned concept or answer in your head.
- Students can only ask yes/no types of questions.
- If guess and wrong they are out and can no longer guess.
- The winner guesses correctly.



Half-Way...Brief Intermission Conduct Phillips 66 Method



26. Problem-Based Learning (PBL) (Blumenfeld, Soloway, et al. 1991; Duffy & Savery, 1996; George Lucas Educational Foundation, 2003)

1. Instructor lays out the problem situation.
2. Students work on a major problem with multiple solutions for a unit, semester, or year.
3. Evaluation is made by experts and/or the instructor
4. Debate, ask questions, refine questions, make predictions
5. Collect and analyze data, draw conclusions
6. Presentation and communicate ideas and findings



27. Case-Based Learning: Student Cases

1. Model how to write a case and practice answering.
2. Generate 2-3 cases during semester based on field experiences.
3. Link to the text material—relate to how text author or instructor might solve.
4. Respond to 6-8 peer cases.
5. Summarize the discussion in their case.
6. Summarize discussion in a peer case.
(Note: method akin to storytelling)



28. 99 Second Quotes



- Everyone brings in a quote that they like from the readings
- You get 99 seconds to share it and explain why you choose it
- Options
 - Discussion wrapped around each quote
 - Small group linkages—force small groups to link quotes and present them
 - Debate value of each quote in an online forum

29. Six Hats (Role Play):

(from De Bono, 1985; adopted for online learning by Karen Belfer, 2001, Ed Media)



- White Hat: Data, facts, figures, info (neutral)
- Red Hat: Feelings, emotions, intuition, rage...
- Yellow Hat: Positive, sunshine, optimistic
- Black Hat: Logical, negative, judgmental, gloomy
- Green Hat: New ideas, creativity, growth
- Blue Hat: Controls thinking process & organization

Note: technique was used in a business info systems class where discussion got too predictable!

30. Tell Tall Tales, Creative Writing

- a. Start a topic of discussion perhaps with an interesting scenario or "just imagine" if this happened or an object obituary.
- b. Pass on the story to a student to continue it at another location or have volunteers.
- c. Continue with story.
- d. Perhaps combine with a Stand and Share activity.

31. Roundrobins

- Select a topic
- Respond to it
- Pass answer(s) to next person in group
- Keep passing until everyone contributes or ideas are exhausted
- Summarize and/or report or findings



32. Index Match Cards (Active Learning, Silberman)

- Make an equal amount of note cards, half with questions and the other half with the answers to the questions. Mix up and give each student a card. The exercise is to find you match. After they find their match, go around the class and go through questions and answers.

33. Giving Questions and Getting Answers (Silberman)

- Give each student two index cards. Ask the students to complete the following sentences:
 - Card 1: I still have a question about....
 - Card 2: I can answer a question about....
- Break class into groups; ask each group to select the most pertinent questions to ask, and the most interesting question to answer from the cards of their group members. Then go around the class and have the groups give their responses. (This is a good review activity.)

34. Planted Questions (Active Learning, Silberman)

- I will choose questions that will help guide my lesson and write them out on note cards sequentially with a cue on them. Prior to the lesson pass the cards and explain to the students who you gave cards to about the cues. Then during the implementation of the lesson perform cues to get students to ask questions which guide lesson.

35. Movie assignments (Bonk 2004)

- Create a glossary of words from the TV show or movie.
- Bring to class or post to blog.
- Write reflection paper on terms or concepts learned.
- Share with class.

36. It'll Never Fly...It will not work...

- a. Introduce a new idea or concept or plan.
- b. Everyone writes 4-5 problems they see in it.
- c. Divide into groups of 3-4 and discuss concerns.
- d. Each group writes down 3 roadblocks on a 3 X 5 card.
- e. Facilitator redistributes so each group gets a different card.
- f. Subgroups think creatively of how to solve those problems and share with group.

37. Group Grope (Thiagi, 1988)

- Each student writes 4 imp't pts
- Instructor pts imp't and less imp't on cards
- Collect cards
- Distribute 3 to each student and arrange according to importance
- Spread rest on table (can exchange and trade)
- Compare cards and form coalitions
- Each team prepares poster that nonverbally reflects their ideas

38. Group Reading with Different Purposes

- Assign reading task.
- Student form teams.
- Have each student read with a different purposes (e.g., one person for key points or to summarize, one person for terminology, one person for models or frameworks, one person for questions to raise, etc.).
- Conduct task and debrief.

39. The Envelope Game (Thiagi, 1988)

- Tell class they will be tested on ability to apply their learning.
- Have teams write a problem on a large envelope.
- Pass to next team to solve (they place solution in envelope).
- Pass to next team to solve and so on.
- Original team ranks solutions.
- Have teams retrieve ranked solutions.

40. Two Heads vs. One (Thiagi, 1988)

- Everyone brings 100 word summary.
- Pair up and produce a better 100 word summary.
- Collect all 3 and pass to different group
- Groups rank them for 1 for best, 2 for 2nd best, and 3 for third.
- Pass back to original team.

41. Press Conference (Thiagi, 1988)

- Divide class into 3 teams and assign different articles or readings
- Next time announce a team to get for a press conference
- Others write down 3 questions each on index cards
- Mix and redistribute 3/student
- Identify particular people and ask questions of them
- Other 2 groups decide on most imp't points and makes a presentation on them.

42. The Question Game (Thiagi, 1988)

- Each student comes with 10 questions cards with answers on the back.
- Divide into groups of 4-5
- Mix cards up and exchange with another group.
- Players read cards and answer it or bluff
- Others in group can challenge
- 2 pts for correct challenge, 1 pt for correct answer (2 if challenged), and 2 pts for successful bluff

43. Best 3 (Thiagi, personal conversation, 2003)

- After a lecture, have students decide on the best 3 ideas that they heard (perhaps comparing to a handout or dense sheet of paper).
- Work with another who has 3 as well and decide on best 3 (or 4).
- Those pairs work with another dyad and decide on best 3 (or 4).
- Report back to class.

44. Tests and Bells (Bonk, 2004)

- After or during a lecture, have students form into interest groups and make summaries of pts.
- Have the students take a class quiz.
- Each group gets a bell to answer pts from the lecture.
- Give pts for first group (or 2) that rings their bell and has correct answer. (take off pts for wrong answers.)
- Total pts and give prizes.
- Discuss and debrief

45. Library Day (Bonk, 1999)

- Have students spend a day in the library finding and summarizing a set number of articles.
- Have them bring to class and share in small groups interested in similar topics.
- Perhaps give each student 1 minute to describe what found.

46. One Visual Exercises

- Tell students to bring in one visual representing their outside readings.
- Have students become the instructors using that visual.

47. Different Strokes (Thiagi, 1988)

- Have students create a summary of the readings: 1 page, 2 page, 10 question, an outline, a visual, a list of key points, a flowchart, a mind map, a slogan, a bumper sticker.
- Share and compare.
- Discuss.

48. Summary Judgment (Thiagi, 1988)

- Collect summaries and distribute 2 to each group of 2 people.
- Have them put a smiley face by the best summary.
- Post summaries on wall and have students read them.

49. Poster Sessions (Bonk, 1995)

- Have students create something from the readings—a flowchart, timeline, taxonomy, concept map.
- Have half of the students present their ideas in one half of the room for 15-20 minutes and then reverse roles.

50. Peer Mentoring Sessions (Bonk, 1996)

1. Have students sign up for a chapter wherein they feel comfortable and one that they do not.
2. Have a couple of mentoring sessions in class.
3. Debrief on how it went.

Final Advice

- Start small, share.
- Do not be afraid to share or ask for help
- Learn from as well as with your students
- Lower immediate expectations (change takes time)
- Think low risk to high risk and low time to time intensive
- Make an action plan.



Any questions, comments, or concerns?

Stand and Share One Idea from this Session

- Will Work: _____
- Might Work: _____
- No Way: _____

