Formal Cooperative Learning Task Groups

Instructor's Role in
Formal Cooperative Learning

1. Specifying Objectives

2. Making Decisions

3. Explaining Task, Positive Interdependence, and Individual Accountability

4. Monitoring and Intervening to Teach Skills

5. Evaluating Students' Achievement and Group Effectiveness

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Decisions,Decisions

Group size?
Group selection?
Group member roles?
How long to leave groups together?
Task selection?
Arranging the room?
Providing materials?
Time allocation?

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Formal Cooperative Learning Task Groups

Perkins, David. 2003. *King Arthur's Round Table: How collaborative conversations create smart organizations.* NY: Wiley.

Hackman, J.R. 2002. *Leading Teams: Setting the Stage for great performances.* Boston: Harvard Business School Press.

Smith, K.A. 2014. *Teamwork and project management, 4th Ed. New York: McGraw-Hill.*
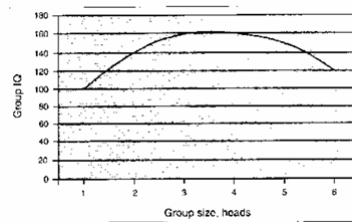
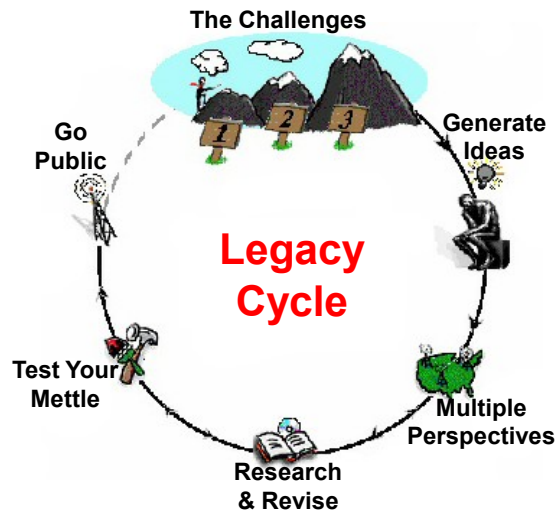**Formal Cooperative Learning – Types of Tasks**

1. **Jigsaw – Learning new conceptual/procedural material**

2. Peer Composition or Editing

3. Reading Comprehension/Interpretation

4. **Problem Solving, Project, or Presentation**

5. Review/Correct Homework

6. Constructive Academic Controversy

7. **Group Tests**

Challenge-Based Learning

- Problem-based learning
- Case-based learning
- Project-based learning
- Learning by design
- Inquiry learning
- Anchored instruction

John Bransford, Nancy Vye and Helen Bateman. Creating High-Quality Learning Environments: Guidelines from Research on How People Learn
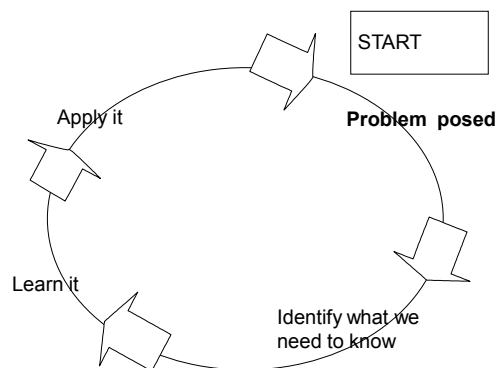
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Challenge-Based Instruction with the Legacy Cycle

The Challenges

Go Public

Generate Ideas

Legacy Cycle

Test Your Mettle

Multiple Perspectives

Research & Revise

https://repo.vanth.org/portal/public-content/star-legacy-cycle/star-legacy-cycle

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Problem-Based Learning

START

Apply it

Problem posed

Learn it

Identify what we need to know

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Problem Based Cooperative Learning Format

TASK: Solve the problem(s) or Complete the project.

INDIVIDUAL: Estimate answer. Note strategy.

COOPERATIVE: One set of answers from the group, strive for agreement, make sure everyone is able to explain the strategies used to solve each problem.

EXPECTED CRITERIA FOR SUCCESS: Everyone must be able to explain the strategies used to solve each problem.

EVALUATION: Best answer within available resources or constraints.

INDIVIDUAL ACCOUNTABILITY: One member from your group may be randomly chosen to explain (a) the answer and (b) how to solve each problem.

EXPECTED BEHAVIORS: Active participating, checking, encouraging, and elaborating by all members.

INTERGROUP COOPERATION: Whenever it is helpful, check procedures, answers, and strategies with another group.

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Teamwork Skills

- Communication
- Listening and Persuading
- Decision Making
- Conflict Management
- Leadership
- Trust and Loyalty

Team Member Roles

- Observer/ Process Recorder (non participant role)
- Facilitator/Time Keeper
- Task Recorder
- Skeptic/Prober

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Action	Name 1	Name 2	Name 3	Name 4	Total
Contributes Ideas					
Describes Feelings					
Encourages Participation					
Summarizes, Integrates					
Checks for Understanding					
Relates New To Old Learning					
Gives Direction To Work					
Total		12			

Group Processing
Plus/Delta Format

Plus (+) Things That Group Did Well	Delta (Δ) Things Group Could Improve

Team Charter

- Team name, membership, and roles
- Team Mission Statement
- Anticipated results (goals)
- Specific tactical objectives
- **Ground rules/Guiding principles for team participation**
- Shared expectations/aspirations

Code of Cooperation

•EVERY member is responsible for the team's progress and success.
•Attend all team meetings and be on time.
•Come prepared.
•Carry out assignments on schedule.
•Listen to and show respect for the contributions of other members; be an active
        listener.
•CONSTRUCTIVELY criticize ideas, not persons.
•Resolve conflicts constructively,
•Pay attention, avoid disruptive behavior.
•Avoid disruptive side conversations.
•Only one person speaks at a time.
•Everyone participates, no one dominates.
•Be succinct, avoid long anecdotes and examples.
•No rank in the room.
•Respect those not present.
•Ask questions when you do not understand.
•Attend to your personal comfort needs at any time but minimize team disruption.
•HAVE FUN!!
•?

Adapted from Boeing Aircraft Group Team Member Training Manual

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Ten Commandments: An Affective Code of Cooperation

• Help each other be right, not wrong.
• Look for ways to make new ideas work, not for reasons they won't.
• If in doubt, check it out! Don't make negative assumptions about each other.
• Help each other win, and take pride in each other's victories.
• Speak positively about each other and about your organization at every opportunity.
• Maintain a positive mental attitude no matter what the circumstances.
• Act with initiative and courage, as if it all depends on you.
• Do everything with enthusiasm; it's contagious.
• Whatever you want; give it away.
• Don't lose faith.
• Have fun

Ford Motor Company

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Team Charter Examples & Research

- Team Charter – Developed by Vivian Corwin and Marilyn A. Uy for COM 321 (Organizational Behaviour) Gustavson School of Business, University of Victoria
- Group Ground Rules Contract Form – Developed by Deborah Allan, University of Delaware
- Mathieu, John E. & Rapp, Tammy L. 2009. Laying the foundation for successful team performance trajectories: The role of team charters and performance strategies. *Journal of Applied Psychology, 94*(1), 90-103

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Group Ground Rules Contract Form

(Adapted from a form developed by Dr. Deborah Allen, University of Delaware)

Project groups are an effective aid to learning, but to work best they require that all groups members clearly understand their responsibilities to one another. These project group ground rules describe the general responsibilities of every member to the group. You can adopt additional ground rules if your group believes they are needed. Your signature on this contract form signifies your commitment to adhere to these rules and expectations.

All group members agree to:
1. Come to class and team meetings on time.
2. Come to class and team meetings with assignments and other necessary preparations done.

Additional ground rules:
1.

2.

If a member of the project team repeatedly fails to meet these ground rules, other members of the group are expected to take the following actions:

Step 1: (fill in this step with your group)

    If not resolved:
Step 2: Bring the issue to the attention of the teaching team.
    If not resolved:
Step 3: Meet as a group with the teaching team.

The teaching team reserves the right to make the final decisions to resolve difficulties that arise within the groups. Before this becomes necessary, the team should try to find a fair and equitable solution to the problem.

Member's Signatures: Group Number:_____

1._____   3._____

2._____   19   4._____

Appendix

The Team Charter

The Team Charter was a lengthy, structured exercise that was introduced and explained during class time. It was framed in terms of how the team would function to compete in the business simulation. It contained three major parts, as detailed below. Teams could complete it in any way they chose (methods ranged from completing it together in person to exclusive use of virtual communications). Teams had a week to complete the assignment outside of class time.

Part 1: Individual Preparation
(Each member completed separately)

Members were asked to detail, in writing, their personal characteristics in terms of their

personal background (whatever they chose to share; usually, it was where they grew up, major, hobbies, personality features);

contact information and preferred medium or mediums (e.g., text, e-mail, voice, face-to-face);

availability in terms of hours and days, as well as preferred work times;

individual business-related strengths and weaknesses, including factors such as content knowledge and work experiences;

preferred work styles, particularly as related to teamwork, and;

anything else they believe the team should know.

Part 2: Team Roles, Expectations, and Processes
(One version for the entire team)

Members were to meet and share their individual information from Part 1 and then to determine, as a team, how they would operate and what types of norms they wished to establish. They were provided with a series of questions to prompt such a discussion:

What are your goals for the simulation, performance and otherwise?

Who will be responsible for what activities (including, perhaps, backup roles)? and

What is your timetable for activities?

As for norms, they were prompted to address specific expectations regarding

meeting attendance;

task performance and quality;

idea contributions;

cooperation and attitudes; and

anything else they wanted.

Part 3: Rewards and Sanctions
(One version for the entire team)

Members also determined, as a group, how they would

Ensure expected contributions and performance levels;

Reward members and the team for successes; and

Manage or sanction poor performance (often tied to peer evaluations, which contributed to students' course participation grades).

Teams were required to circulate a single copy to all members and to incorporate any edits or changes that were warranted. The final integrated document was passed in for the team grade and was posted in their team web space.

Mathieu, John E. & Rapp, Tammy L. 2009. Laying the foundation for successful team performance trajectories: The role of team charters and performance strategies. *Journal of Applied Psychology, 94*(1), 90-103

The Instructor's Role in Cooperative Learning

Make Pre-Instructional Decisions

Specify Academic and Teamwork Skills Objectives: Every lesson has both (a) academic and (b) interpersonal and small group (teamwork) skills objectives.

Decide on Group Size: Learning groups should be small (groups of two or three members, four at the most).

Decide on Group Composition (Assign Students to Groups): Assign students to groups randomly or select groups yourself. Usually you will wish to maximize the heterogeneity in each group.

Assign Roles: Structure student-student interaction by assigning roles such as Reader, Recorder, Encourager of Participation and Checker for Understanding.

Arrange the Room: Group members should be "knee to knee and eye to eye" but arranged so they all can see the instructor at the front of the room.

Plan Materials: Arrange materials to give a "sink or swim together" message. Give only one paper to the group or give each member part of the material to be learned.

Explain Task And Cooperative Structure

Explain the Academic Task: Explain the task, the objectives of the lesson, the concepts and principles students need to know to complete the assignment and the procedures they are to follow.

Explain the Criteria for Success: Student work should be evaluated on a criteria-referenced basis. Make clear your criteria for evaluating students' work.

*Structure Positive Interdependence: Students must believe they "sink or swim together." Always establish mutual goals (students are responsible for their own learning and the learning of all other group members). Supplement, goal interdependence with celebration/reward, resource, role, and identity interdependence.

Structure Intergroup Cooperation: Have groups check with and help other groups. Extend the benefits of cooperation to the whole class.

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*Structure Individual Accountability: Each student must feel responsible for doing his or her share of the work and helping the other group members. Ways to ensure accountability are frequent oral quizzes of group members picked at random, individual tests, and assigning a member the role of Checker for Understanding.

*Specify Expected Behaviors: The more specific you are about the behaviors you want to see in the groups, the more likely students will do them. Social skills may be classified as **forming** (staying with the group, using quiet voices), **functioning** (contributing, encouraging others to participate), **formulating** (summarizing, elaborating), and **fermenting** (criticizing ideas, asking for justification). Regularly teach the interpersonal and small group skills you wish to see used in the learning groups.

Monitor and Intervene

*Arrange Face-to-Face Promotive Interaction: Conduct the lesson in ways that ensure that students promote each other's success face-to-face.

Monitor Students' Behavior: This is the fun part! While students are working, you circulate to see whether they understand the assignment and the material, give immediate feedback and reinforcement, and praise good use of group skills. Collect observation data on each group and student.

Intervene to Improve Taskwork and Teamwork: Provide **taskwork assistance** (clarify, reteach) if students do not understand the assignment. Provide **teamwork assistance** if students are having difficulties in working together productively.

Evaluate and Process

Evaluate Student Learning: Assess and evaluate the quality and quantity of student learning. Involve students in the assessment process.

*Process Group Functioning: Ensure each student receives feedback, analyzes the data on group functioning, sets an improvement goal, and participates in a team celebration. Have groups routinely list three things they did well in working together and one thing they will do better tomorrow. Summarize as a whole class. Have groups celebrate their success and hard work.

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Cooperative Lesson Planning Form

Subject Area: _____ Date: _____

Lesson: _____

Objectives

Academic: _____

Social Skills: _____

Preinstructional Decisions

Group Size: _____ Method Of Assigning Students: _____

Roles: _____

Room Arrangement: _____

Materials: _____

◊ One Copy Per Group   ◊ One Copy Per Person

◊ Jigsaw   ◊ Tournament

◊ Other: _____

Explain Task And Cooperative Goal Structure

1. Task: _____

2. Criteria For Success: _____

3. Positive Interdependence: _____

4. Individual Accountability: _____

5. Intergroup Cooperation: _____

6. Expected Behaviors: _____

Monitoring And Intervening

1. Observation Procedure: _____ Formal _____ Informal

2. Observation By: _____ Teacher _____ Students _____ Visitors

3. Intervening For Task Assistance: _____

4. Intervening For Teamwork Assistance: _____

5. Other: _____

Evaluating And Processing

1. Assessment Of Members' Individual Learning: _____

2. Assessment Of Group Productivity: _____

3. Small Group Processing: _____

4. Whole Class Processing: _____

5. Charts And Graphs Used: _____

6. Positive Feedback To Each Student: _____

7. Goal Setting For Improvement: _____

8. Celebration: _____

9. Other: _____

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Additional Resources
http://www.ce.umn.edu/~smith/links.html

Cooperative Learning and Problem-Based Learning Notes and Planning Forms

    Cooperative Learning Notes[CL College-804.doc]

    Informal Cooperative Learning Planning Form [Informal Cooperative Learning Planning Form.doc]

    Formal Cooperative Learning Planning Form [Formal Cooperative Learning Planning Form.doc]

Formal Cooperative Learning Examples

    Cooperative PBL-Modeling Example [Smith-CLPBL-estimation-109-2-ho.ppt]

    Cooperative Project-Based Learning Example [Smith-PrBL-tower-ho.ppt]

    Cooperative comprehension/interpretation [clcompchoice308.ppt]

    Cooperative Jigsaw [Smith-CL-wks-jigsaw-509.ppt]

Cooperative Base Groups [Smith-clbase-509.ppt]

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