**Cooperative Learning**

### Positive Interdependence

**Goal Interdependence (essential)**
1. All members show mastery
2. All members improve
3. Add group member scores to get an overall group score
4. One product from group that all helped with and can explain

**Role (Duty) Interdependence**
Assign each member a role and rotate them

**Resource Interdependence**
1. Limit resources (one set of materials)
2. Jigsaw materials
3. Separate contributions

**Task Interdependence**
1. Factory-line
2. Chain Reaction

**Outside Challenge Interdependence**
1. Intergroup competition
2. Other class competition

**Identity Interdependence**
Mutual identity (name, motto, etc.)

**Environmental Interdependence**
1. Designated classroom space
2. Group has special meeting place

**Fantasy Interdependence**
Hypothetical interdependence in situation (“You are a scientific/literary prize team, lost on the moon, etc.”)

**Reward/Celebration Interdependence**
1. Celebrate joint success
2. Bonus points (use with care)
3. Single group grade (when fair to all)

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### Individual Accountability

**Ways to ensure no slackers:**
- Keep group size small (2-4)
- Assign roles
- Randomly ask one member of the group to explain the learning
- Have students do work before group meets
- Have students use their group learning to do an individual task afterward
- Everyone signs: “I participated, I agree, and I can explain”
- Observe & record individual contributions

**Ways to ensure that all members learn:**
- Practice tests
- Edit each other’s work and sign agreement
- Randomly check one paper from each group
- Give individual tests
- Assign the role of checker who has each group member explain out loud
- Simultaneous explaining: each student explains their learning to a new partner

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### Face-to-Face Interaction

**Structure:**
- Time for groups to meet
- Group members close together
- Small group size of two or three
- Frequent oral rehearsal
- Strong positive interdependence
- Commitment to each other’s learning
- Positive social skill use
- Celebrations for encouragement, effort, help, and success!

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### Cooperative Teamwork Skills

#### Forming Skills

**Initial Management Skills**

- Move Into Groups Quietly
- Stay With the Group
- Use Quiet Voices
- Take Turns
- Use Names, Look at Speaker
- No “Put-Downs”

#### Functioning Skills

**Group Management Skills**

- Share Ideas and Opinions
- Ask for Facts and Reasoning
- Give Direction to the Group’s Work (state assignment purpose, provide time limits, offer procedures)
- Encourage Everyone to Participate
- Ask for Help or Clarification
- Express Support and Acceptance
- Offer to Explain or Clarify
- Paraphrase Others’ Contributions
- Energize the Group
- Describe Feelings When Appropriate

#### Formulating Skills

**Formal Methods for Processing Materials**

- Summarize Out Loud Completely
- Seek Accuracy by Correcting/Adding to Summaries
- Help the Group Find Clever Ways to Remember
- Check Understanding by Demanding Vocalization
- Ask Others to Plan for Telling/Teaching Out Loud

#### Fermenting Skills

**Stimulate Cognitive Conflict and Reasoning**

- Criticize Ideas Without Criticizing People
- Differentiate Ideas and Reasoning of Members
- Integrate Ideas into Single Positions
- Ask for Justification on Conclusions
- Extend Answers
- Probe by Asking In-depth Questions
- Generate Further Answers
- Test Reality by Checking the Group’s Work

### Teaching Cooperative Skills

1. Help students see the need to learn the skill.
2. Help them know how to do it (T-chart).
3. Encourage them to practice the skill daily.
4. Help them reflect on, process, & refine use.
5. Help them persevere until skill is automatic

### Monitoring, Observing, Intervening, and Processing

**Monitor** to promote academic & cooperative success

**Observe** for appropriate teamwork skills: praise their use and remind students to use them if necessary

**Intervene** if necessary to help groups solve academic or teamwork problems.

**Process** so students continuously analyze how well they learned and cooperated in order to continue successful strategies and improve when needed

### Ways of Processing

**Positive Feedback:**

1. Have volunteer students tell the class something their partner(s) did which helped them learn today.
2. Have all students tell their partner(s) something the partner(s) did which helped them learn today.
3. Tell the class helpful behaviors you saw today.

**Group Analysis:**

1. Name 3 things your group did today which helped you learn and work well together.
2. Name 1 thing you could do even better next time.

**Cooperative Skill Analysis:**

1. Rate your use of the target cooperative skill:
   - Great! - Pretty Good - Needs work
2. Decide how you will encourage each other to practice the target skill next time.

**Start:** “Tell your partners you’re glad they’re here.”

**End:** “Tell your partners you’re glad they were here today. Thank them for helping.”

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**REFERENCES**
