Research

When Cooperative Learning is implemented effectively we can expect ...

- Higher Self-esteem
  - Higher Achievement
    - Increased Retention
      - Greater Social Support
        - More On-task behavior
        - Greater Collaborative Skills
        - Greater Intrinsic Motivation
        - Increased Perspective Taking
      - Better Attitudes Toward School
    - Better Attitudes Toward Teachers
  - Greater Use of Higher Level Reasoning
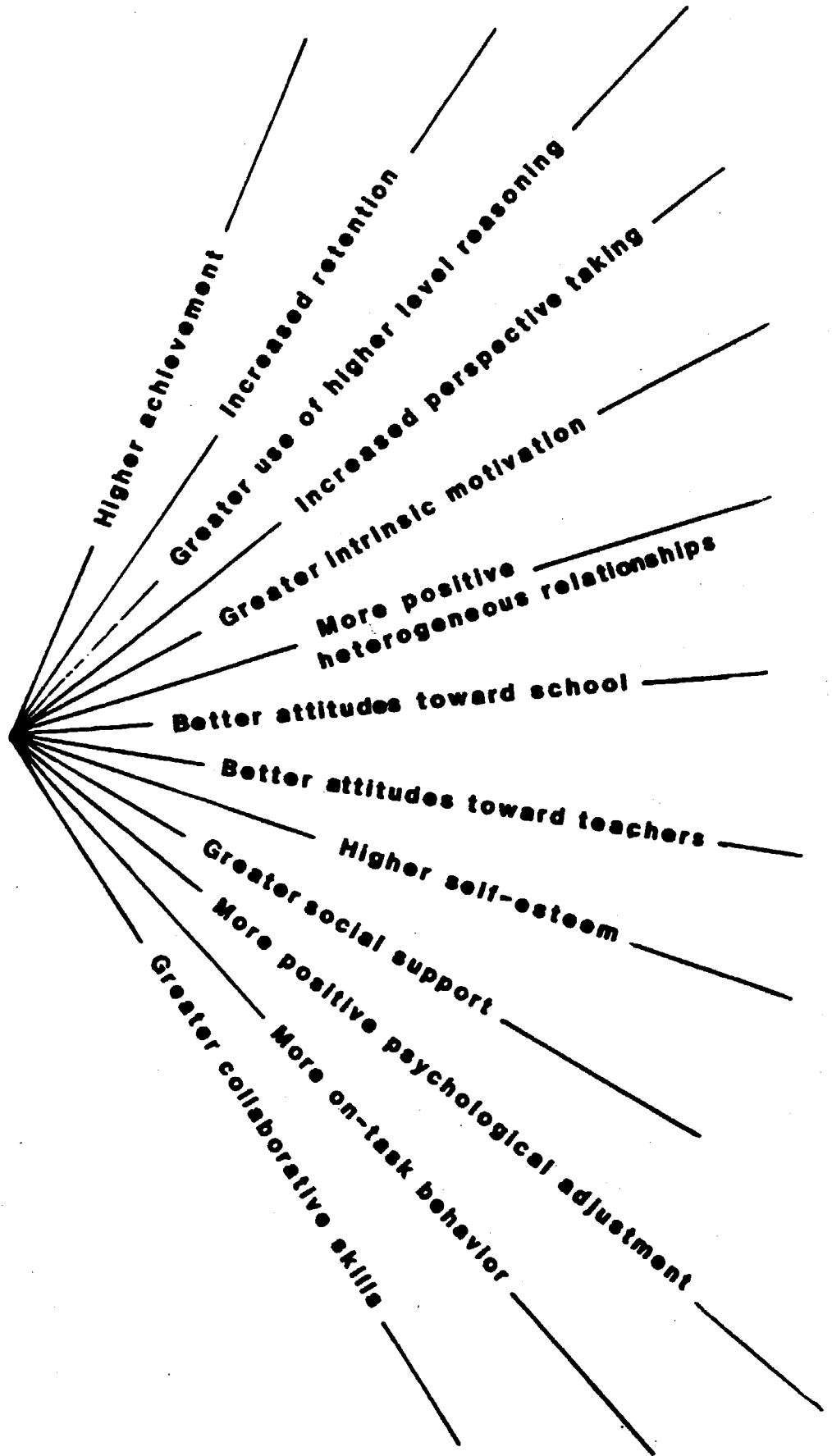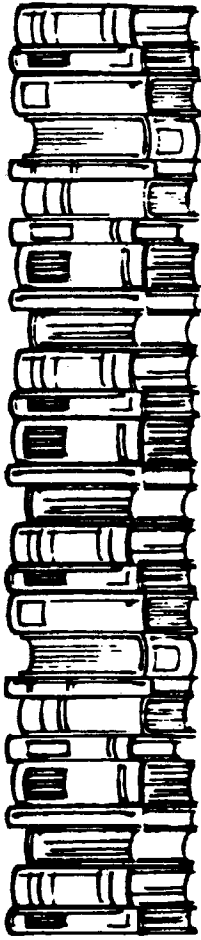- More Positive Psychological Adjustment

- Johnson, Johnson, & Holubec (1990) -

There is nothing as practical as good theory ...

Certainly one of the hallmarks of the teaching profession is our inquiry into the theory and practice of teaching and learning and the decisions we make as a result of that inquiry.

RESEARCH REVIEW

- Higher achievement
- Increased retention
- Greater use of higher level reasoning
- Increased perspective taking
- Greater intrinsic motivation
- More positive heterogeneous relationships
- Better attitudes toward school
- Better attitudes toward teachers
- Higher self-esteem
- Greater social support
- More positive psychological adjustment
- More on-task behavior
- Greater collaborative skills

Table 1.1 Comparison Of Old And New Paradigms Of Teaching

	Old Paradigm	New Paradigm
Knowledge	Transferred From Faculty To Students	Jointly Constructed By Students And Faculty
Students	Passive Vessel To Be Filled By Faculty's Knowledge	Active Constructor, Discoverer, Transformer Of Own Knowledge
Faculty Purpose	Classify And Sort Students	Develop Students' Competencies And Talents
Relationships	Impersonal Relationships Among Students And Between Faculty And Students	Personal Transaction Among Students And Between Faculty And Students
Context	Competitive/ Individualistic	Cooperative Learning In Classroom And Cooperative Teams Among Faculty
Assumption	Any Expert Can Teach	Teaching Is Complex And Requires Considerable Training

Cooperative Learning

Cooperative Learning is Groupwork, but not ALL Groupwork is Cooperative Learning!

What is the Difference?

Cooperative Learning Groups	Traditional Learning Groups
Positive Interdependence is structured	Positive Interdependence is not structured
Individuals demonstrate accountability for self and teammates	Individuals are accountable to self, not teammates
Team membership is heterogeneous	Team membership is homogeneous
Teambuilding activities promote trust, commitment, and group cohesion	No teambuilding activities
Teammates share leadership responsibilities	One teammate is appointed leader
Social skills are taught, practiced, and processed	Social skills are assumed (but are often lacking)
The teacher continually monitors groupwork, documents observations, provides feedback on group functioning, and intervenes when necessary	The teacher does not monitor groupwork or provide feedback on group functioning

Adapted from: Johnson, D.W., Johnson, R.T., & Holubec, E.J. (1990). *Cooperation in the Classroom* (rev. ed.). Edina, MN: Interaction Book Company.

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Questions teachers ask from the cooperative learning perspective

1. How do we teach social skills?

2. How can we develop self-esteem, responsibility, and respect for others?

3. How does social status effect learning in small groups?

4. How do you promote problem solving and manage conflict?

5. Are extrinsic or intrinsic rewards more effective?

6. How can we prove that cooperative learning increases academic achievement?

7. How do we teach children to take on various roles?

8. How do we structure cooperative activities?

Brody and Davidson (1998) identify a series of questions for teaching and learning in the classroom which help distinguish between the approaches. (p8)

Questions teachers ask from a collaborative perspective

1. What is the purpose of the activity?

2. What is the importance of talk in learning?

3. To what extant is getting off topic a valuable learning experience?

4. How can we empower children to become autonomous learners?

5. What is the difference between using language to learn and learning to use language?

6. How can we negotiate relevant learning experiences with children?

7. How do we interact with students in such a way that we ask only real questions rather than those for which we already know the answers?

8. How can we use our awareness of the social nature of learning to create effective small group learning environments?"

Characteristics of Each Interaction Pattern

Competitive
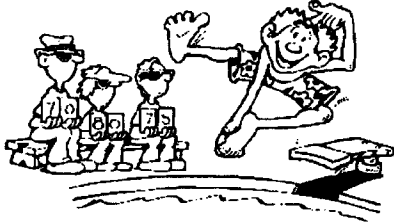
Me instead of you

- If I achieve my goal you cannot achieve yours and vice versa.
- My success depends on doing better than you.
- I do not want competitors to do as well as me.
- Often my concern for self is greater than my concern for others.
- Interpersonal comparisons are made.
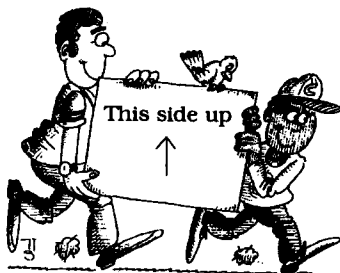- Evaluation is norm-referenced.

Individualistic

Me alone

- My achieving my goal is unrelated to you achieving yours.
- My success is independent of the success or failure of others.
- I am accountable to myself.
- Evaluation is criterion-referenced.

Cooperative

We as well as me

- I can attain my goal only if you attain yours.
- Group success depends on the success of all members.
- We care about the success and effort of our group.
- We have greater concern for one another.
- Evaluation is criterion-referenced.

The Models of Teaching Families

the information processing family	the personal family	the social family	the behavioral family
CONCEPT ATTAINMENT (Jerome Bruner)	**NONDIRECTIVE TEACHING** (Carl Rogers)	**COOPERATIVE LEARNING** (Elliot Aronson, David & Roger Johnson, Spencer Kagan, Shlomo Sharan, Robert Slavin)	**CONTINGENCY MANAGEMENT**
INDUCTIVE THINKING (Hilda Taba)	**SYNECTICS** (William Gordon)		**SELF CONTROL THROUGH OPERANT METHODS**
INQUIRY TRAINING (Richard Suchman)	**AWARENESS TRAINING** (William Schutz & George Brown)	*COLLABORATIVE (BRUFEE)*	**TRAINING MODEL**
ADVANCE ORGANIZERS (David Ausubel)	**CLASSROOM MEETING MODEL** (William Glasser)	*PBL - problem based Learning*	**STRESS REDUCTION**
MEMORY MODELS (Jerry Lucas)			**DESENSITIZATION**
COGNITIVE GROWTH (Lawrence Kohlberg & Irving Sigel)		**ROLE PLAYING** (Fannie & George Shaftel)	**ASSERTIVENESS TRAINING**
BIOLOGICAL SCIENCE INQUIRY (Joseph Schwab)		**JURISPRUDENTIAL INQUIRY** (Donald Oliver)	
		LABORATORY TRAINING	
		SOCIAL SIMULATION	

What Makes Teaching "Go?"

- Art
- Second Language
- Business Studies
- Family Studies
- Design & Technology/Industrial Arts
- Language Arts
- Mathematics
- Music
- Physical Education & Health
- Science
- Social Sciences
- Other...

- Cooperative Learning
- Direct Instruction
- Concept Attainment
- Concept Formation
- Inquiry
- Advance Organizer
- Memory Models
- Synectics
- Simulations
- Mind Mapping
- 4 - Mat Planning
- Other...

Content

Instructional Strategies

Instructional Skills

Classroom Management
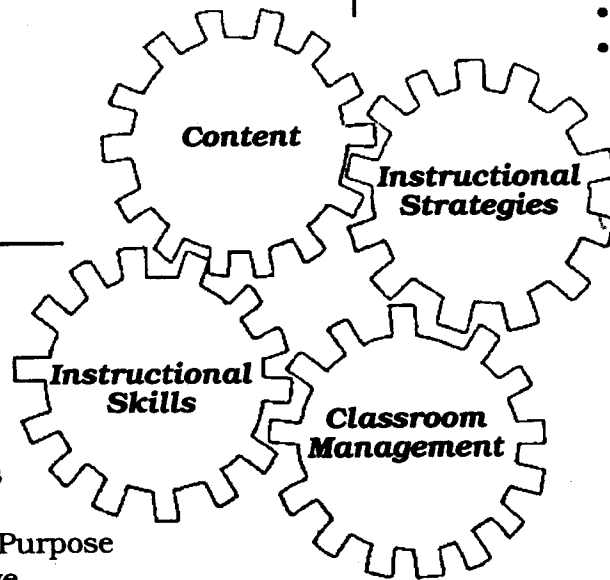
- Formulate Objectives
- Task Analyze
- Share Objective and Purpose
- Teach to the Objective
- Affirmatively Involve All Students
- Monitor and Adjust
- Frame Questions
- Encourage Thinking at Various Levels
- Provide Wait Time
- Give Clear Directions
- Model
- Provide Appropriate Practice
- Hold Students Accountable
- Give Knowledge of Results
- Stimulate Interest
- Make Learning Meaningful
- Structure Success
- Promote Retention
- Promote Transfer
- Provide a Set for Learning
- Facilitate Closure
- Accomodate/Stretch Learning Styles
- Dignify All Students
- Other...

- Win Students Over
- Teach Appropriate Behaviors
- Provide Clear Direction
- Establish Routines
- Low Key Responses
- Encouragement
- Provide Choices
- Informal and Formal Contracts
- Defuse Power Seeking Behaviors
- Teach students to resolve conflicts
- Other...

Lecture
by Hellmut Lang (langhr@UREGINA.CA)

LECTURE CAN BE EFFECTIVELY USED WHEN:

1. The subject matter is factual in nature and there is little opportunity for difference of opinion or for problem-solving.

2. "Fire-power" is needed before another method is used. For example, you may wish students to use discussion or do a simulation or role play, and want to make sure that they are doing more than "pooling ignorance" or using misinformation.

3. A subject is being introduced.

4. Time is limited.

5. It is later reinforced by another technique.

LECTURE IS NOT RECOMMENDED WHEN:

1. The material is complex, abstract, or very detailed.

2. The content deals with attitudes and feelings, or communication, interpersonal or group skills.

3. The learner is asked to integrate the content with previous learning or life experiences.

4. The emphasis is thinking skills and processes (when process outcomes are more important than product outcomes).

5. An experiential approach may be more appropriate.

6. A high degree of learning and retention are desired. Forgetting rate tends to be high; and, there may be no assurance that students understand.

7. The information should be available in its fullest form for long-term retention.

EFFECTIVE LECTURING:

1. Be well organized. A good lecture is something like a good speech. You tell them what you are going to tell them; you tell them; and, you tell them what you told them. Relate past learning to what is presented, and relate what is being presented to what will later be learned.

2. Don't present too many points. Five or six points are enough in an hour.

3. Use (or ask for) summaries at the beginning, during, and at the end of a presentation.

4. Use the pause effectively. This gives listeners a chance to catch up and summarize for themselves, or provides emphasis.

5. Invite covert participation, use rhetorical questions, challenge students to think, summarize, or to formulate questions that they will later have a chance to raise.

6. Supplement the lecture with visuals, demonstration, or discussion. Support major points with visuals (e.g., chalkboard, overhead, charts, or slides).

7. Show enthusiasm, interest in the topic, and color in your lecture.

8. Be aware of your students' developmental levels, "what they can handle."

9. Incorporate ample examples (verbal or visual) to illustrate your points. Select examples that will motivate, things that students have had experience (or success) with or they will be interested in.

10. Use a rate of speaking and choice of vocabulary appropriate to the comprehension of the class. Speak loudly enough to be easily heard, but not so loud as to irritate. Seat students so all can hear and see.

11. Use stimulus variation techniques: move around the room, use gestures, focus attention ("listen carefully," "look at the diagram," etc.), vary interactions, vary volume and tone of voice, and use silence effectively.

12. Create the impression that every student, personally, is being addressed. Use eye contact, room position, and ask questions like "what do think the result will be."

13. Don't read from your notes or text. Have "key ideas" on a card, chalkboard, or visual.

14. If you sense you are not "striking oil, quit boring," switch to another method.

15. Decide if students will take notes, receive a handout or if the information is in the text. If note-taking is used, teach and provide practice in it. Note- taking involves teacher pacing and pausing so students can take notes properly.

POTENTIAL SHORTCOMINGS OF LECTURE:

1. Little opportunity for students to apply newly acquired knowledge.

2. No time for discussion in class, leaving the student the task of memorizing meaningless material.

3. Lack of opportunity to question or criticize.

4. Students may not understand the material; high forgetting rate; passively gained knowledge is not readily assimilated and saturation sets in quickly.

5. Students are not learning by doing, so little may be remembered.

6. Little opportunity for student participation or checking for understanding and it is hard to allow for individual differences.

7. Effective lecturing is VERY difficult. It is not as easy as it may seem--much preparation is needed.

8. Interest is centered on you, not the learners.

9. The attention spans of students may be easily exceeded.

10. Students may take notes that are inaccurate or incomplete.