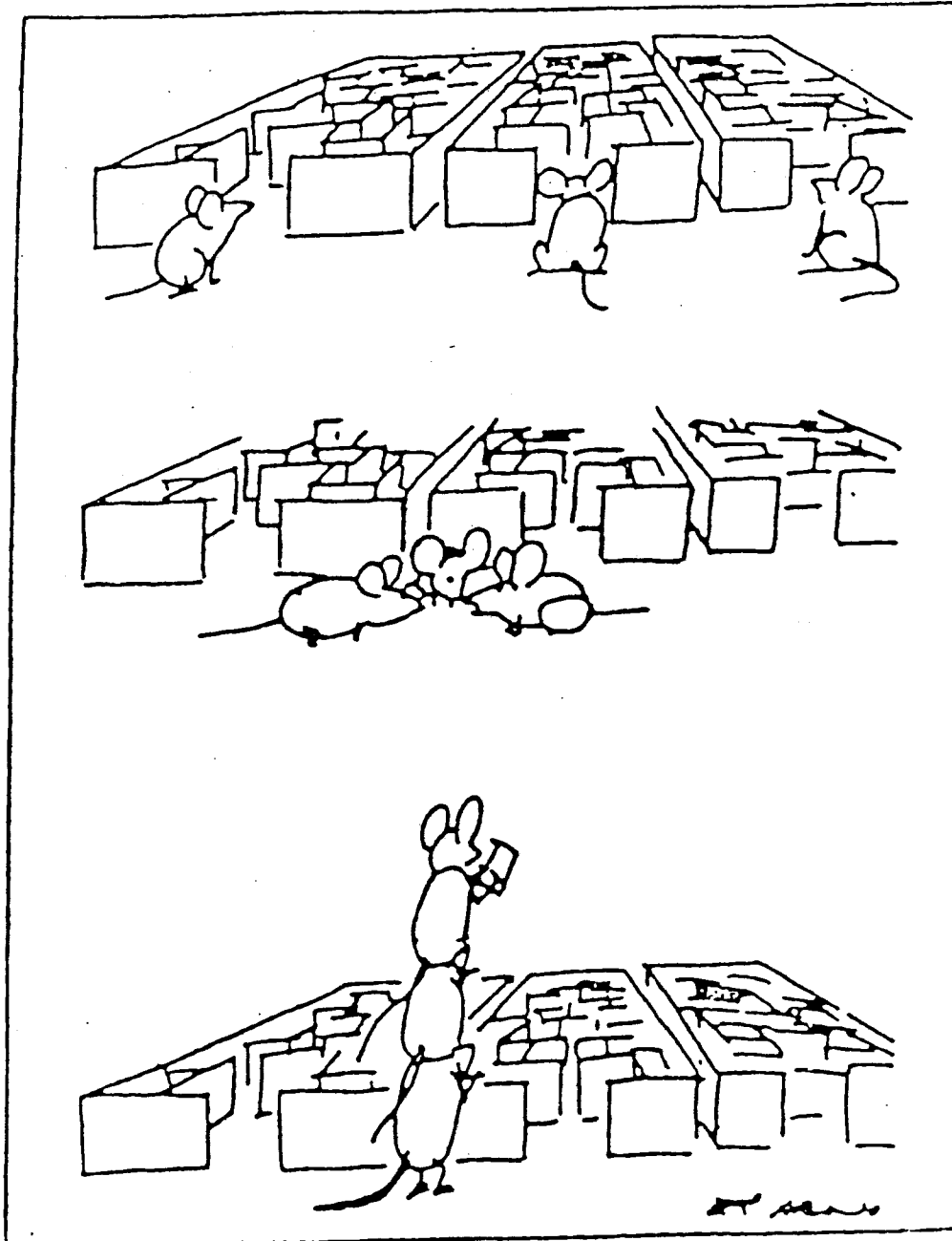


Co operative Learning



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Students Retention

Studies have shown that students will retain:



10% of what they **READ**

20% of what they **HEAR**

30% of what they **SEE**

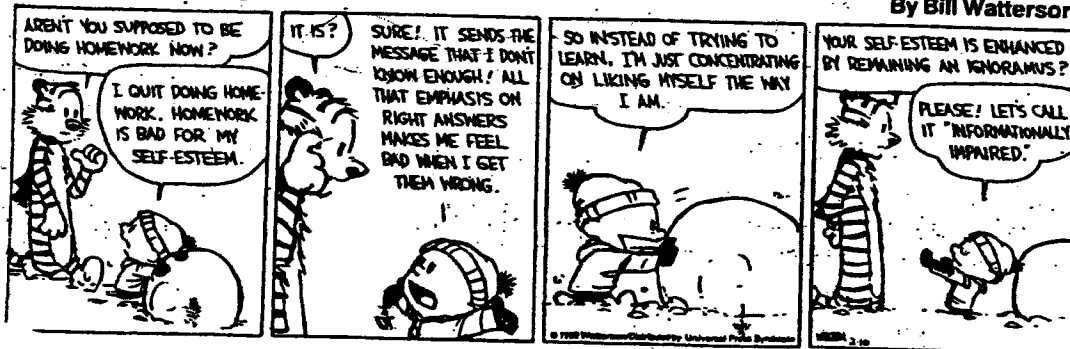
50% of what they **SEE & HEAR**

70% of what they **SAY**

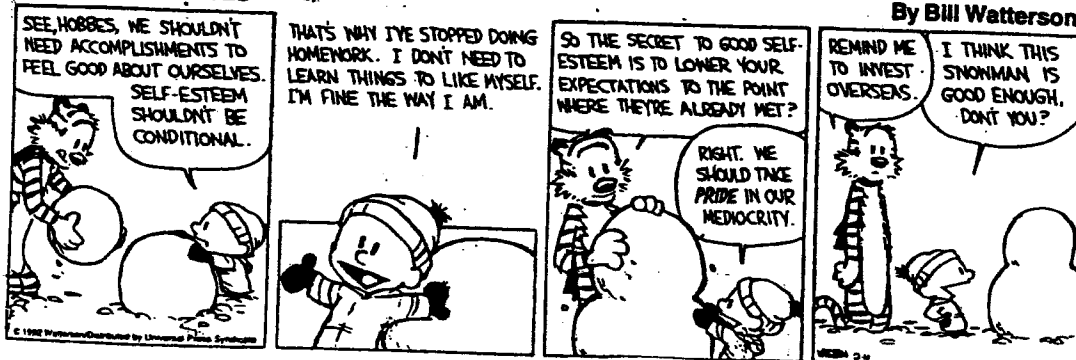
90% of what they **SAY** as they **DO SOMETHING**

95% of what they **TEACH** to **SOMEONE ELSE**

CALVIN AND HOBBS

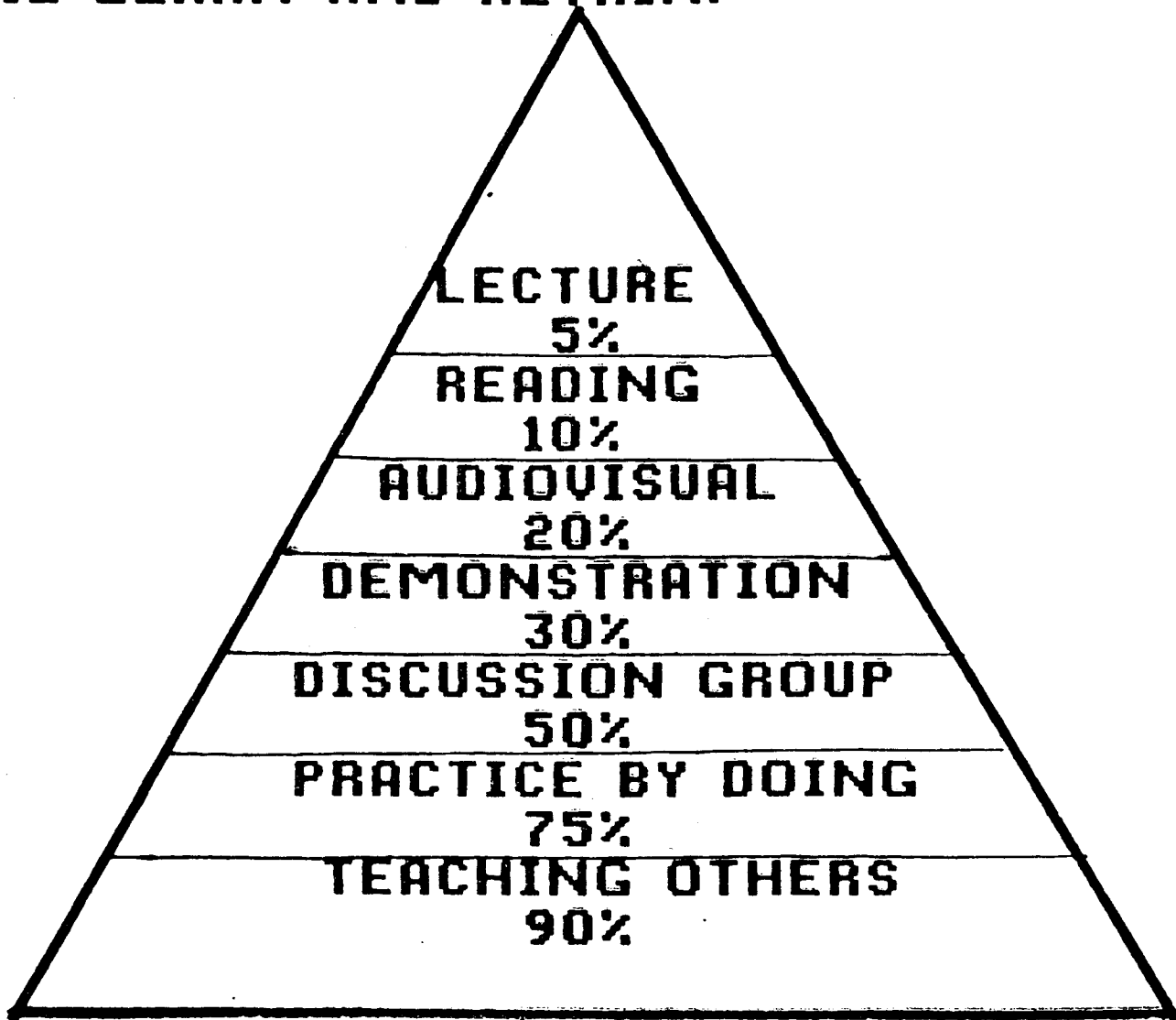


CALVIN AND HOBBS



THE LEARNING PYRAMID

WE LEARN AND RETAIN:



Students construct their own understandings.

To know something is to know relationships.

The best indicator of what you can learn is what you already know.

Collaborative definition

Collaboration is a philosophy of interaction and personal lifestyle where individuals are responsible for their actions, including learning, and they respect the abilities and contributions of their peer

Cooperative definition

Cooperation is a structure of interaction designed to facilitate the accomplishment of a specific end product or goal through people working together in groups.

The Continuum Model for comparing collaborative/cooperative/lecture paradigms

Collaborative ----- Cooperative ----- Lecture

- 1. student-centered----- teacher-centered**
- 2. intrinsic motivation----- extrinsic motivation**
- 3. knowledge construction-----knowledge transmission**
- 4. loose, trusting students to do-----structured- teacher
it right, social engineering maintains control**

FIVE ELEMENTS OF COOPERATIVE LEARNING

Positive Interdependence-

Students perceive that they need each other to complete the group's task ("sink or swim together"). Teachers may structure positive interdependence by establishing mutual goals (learn and make sure all other group members learn), joint rewards (if all group members achieve above criteria, each will receive bonus points), shared resources (one paper for each group or each member receives part of the information), and assigned roles (summarizer, encourager of participation, recorder, time keeper etc.).

Face-to- Face Promotive Interaction-

Students promote each other's learning by helping, sharing, and encouraging efforts to learn. Students explain, discuss, and teach what they know to classmates. Teachers structure the groups so that students sit knee to knee and talk through each aspect of the assignment.

Individual Accountability-

Each student's performance is frequently assessed and the results are given to the group and the individual. Teachers may structure individual accountability by giving an individual test to each student or randomly selecting one member of the group to give the answer.

Interpersonal And Small group Skills-

Groups cannot function effectively if students do not have and use the needed social skills. Teachers teach these skills as purposefully and precisely as academic skills. Collaborative skills include leadership, decision making, trust building, communication, and conflict-management skills.

Group Processing-

Groups need specific time to discuss how well they are achieving their goals and maintaining effective working relationships among members. Teachers structure group processing by assigning such tasks as (a) list at least three member actions which helped the group be successful and (b) list one action that could be added to make the group more successful tomorrow. Teachers also monitor the groups and give feedback on how well the groups are working together and the class as a whole.

Johnson, Johnson & Holubec (1991) have established a definition of cooperative learning which identifies five basic elements necessary for a procedure to be considered cooperative.

Five Basic Elements of Cooperative Learning *

Facilitating effective small group learning means helping group members perceive the importance of working together and interacting in helpful ways. This can be accomplished by incorporating five basic elements into small group experiences. Ultimately, these elements become tools for solving problems associated with groupwork.



Positive Interdependence

When all members of a group feel connected to each other in the accomplishment of a common goal. All individuals must succeed for the group to succeed. (Refer to Chapter 6 for further information.)



Individual Accountability

Holding every member of the group responsible to demonstrate accomplishment of the learning. (Refer to Chapter 7 for further information.)



Face-to-face Interaction

When group members are close in proximity to each other and dialogue with each other in ways that promote continued progress:



Social Skills

Human interaction skills that enable groups to function effectively (e.g., taking turns, encouraging, listening, giving help, clarifying, checking understanding, probing). Such skills enhance communication, trust, leadership, decision-making, and conflict management. (Refer to Chapter 8 for further information.)



Processing

When group members assess their collaborative efforts and target improvements. (Refer to Chapter 9 for further information.)

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

OPTIONS IN COOPERATIVE LEARNING (Lee 1997)

There are many ways that cooperative learning can be implemented. An educator's philosophy plays a key role in determining how cooperative learning is used. The table below displays a number of issues in education. Following the table, implications of various choices are discussed. Please bear in mind that the choices in the table are not either-or choices. Instead, they represent continua, and the views of educators lie at many different points along these continua. Further, a given educator's views are affected by the students they are currently teaching.

1. **student-centered**-----**teacher-centered** -----**lecture**

2. **intrinsic motivation**----- **extrinsic motivation**

3. **knowledge construction**-----**knowledge transmission**

4. **loose, trusting students to do**-----**structured**
it right social engineering

Issue 1. Student centered -- Teacher-centered

The issue here is the role of students in shaping the classroom. Student-centered, also called learner-centered, means that students provide input into what the class does and how it does it. This includes decisions about what to study, how to study it (e.g., by reading, field trips, discussion, lecture), choice of group mates, how often to use groups, which group activities to do, how assessment is conducted, and what rewards and punishments - if any - are given.

In a teacher-centered situation the above decisions are made exclusively by the teacher. Teachers are the bosses, leaders, and creators, while students are the employees, followers, and users. The what and how of learning are preplanned by the teacher. When students are in groups, they are studying material chosen by the teacher. The teacher decides who is in which group, gives groups time limits for finishing their tasks, and does all the assessment.

Issue 2. Intrinsic motivation - Extrinsic motivation

The issue here is how students become motivated to learn and cooperate. Intrinsic motivation comes from within students. For example, they want to learn for the joy of learning, because they are very interested in the topic, or to improve themselves. Helping other students flows from the desire to be altruistic and the enjoyment of collective effort. Students learn together without the use of grades, team award certificates, and other rewards or punishments to encourage them.

On the other hand, extrinsic motivation comes from outside the students. For example, they learn in order to receive praise, grades or other rewards from teachers, parents, classmates, and others. They may not help one another learn if there are no outside incentives. When rewards or threats of punishment are not there, students may be less eager to learn and to help one another.

Issue 3. Knowledge construction - Knowledge transmission

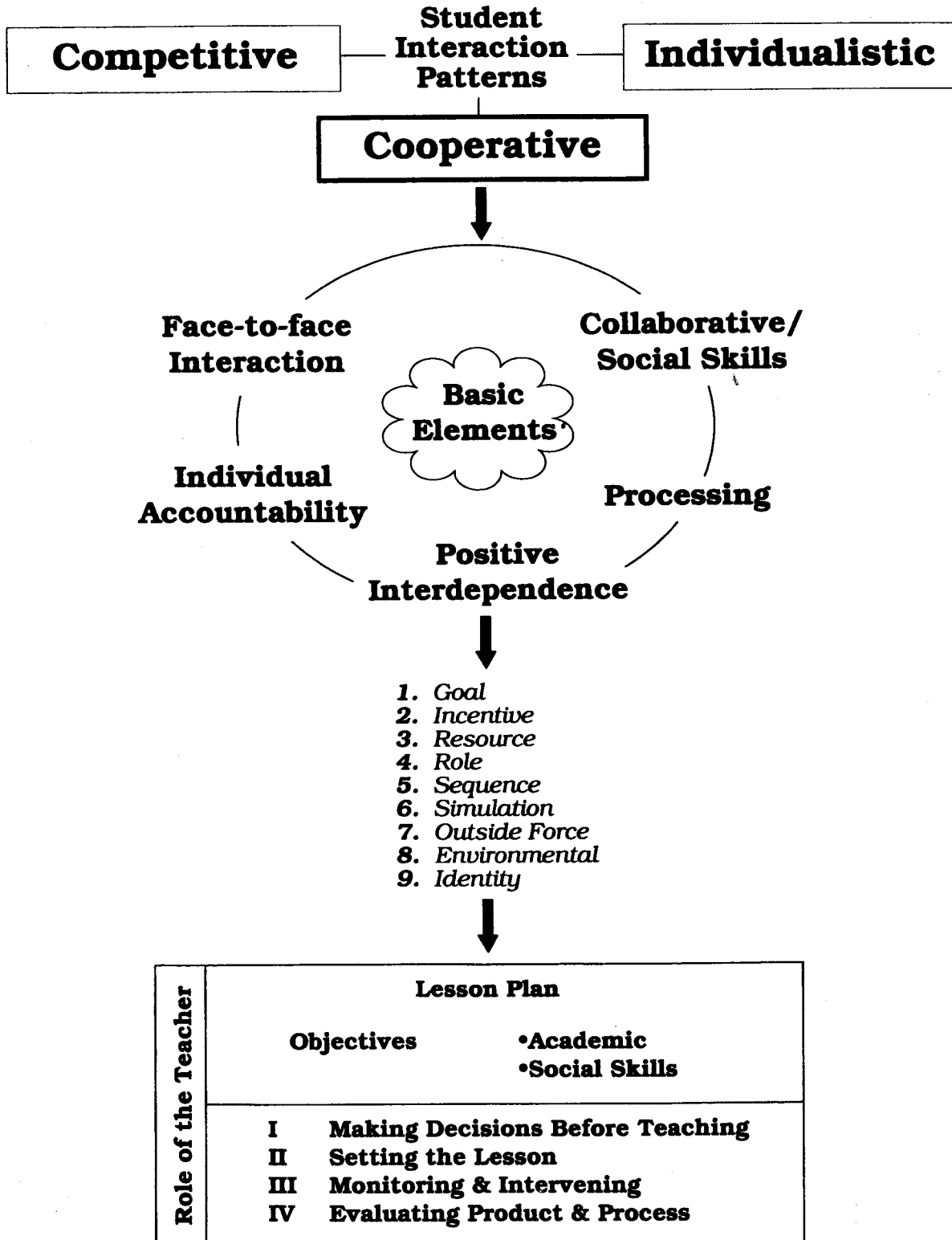
This issue involves the process by which students learn. Knowledge construction, a concept from cognitive psychology, is the idea that learners construct their own networks of knowledge by connecting new information with their past knowledge and interests. Each person is different; we each will come away from the same lesson with different constructions of the ideas presented. Teachers can facilitate this construction work, but the key is what happens in each individual's mind. The use of open-ended questions is consistent with knowledge construction. In this view, collaborative interaction in groups provides students with many opportunities to build and try out their developing knowledge.

Knowledge transmission, a concept from behaviorist psychology, sees knowledge flowing directly from the teacher to the student, just like the teacher is pouring knowledge into the students' heads. What the teacher teaches should go into each learner's head without being filtered by what is already there. Close-ended questions tend to predominate in this type of instruction. The main role of groups from this perspective is to make sure group members master the material transmitted by the teacher.

Issue 4. Loose -- Structured

This issue refers to the extent which teachers believe groups of students will work together well without teacher intervention. Teachers may start by using more structure and as students become familiar with the group process and proficient at working together they eventually, may be looser about structuring group activities and teaching collaborative skills in order to encourage effective group interaction. On the other hand, other teachers feel that they need to be like social engineers, structuring group interaction, or else students will not reap the benefits of working together. The issues discussed above are also heard when some people contrast the terms "collaborative learning" and "cooperative learning". At the same time, it should be pointed out that other educators use the two terms interchangeably.

Cooperative Learning: An Overall Perspective



3 APPLES + 2 APPLES =



"ARE YOU SURE
EINSTEIN STARTED THIS WAY?"