PDS0103
Helping Every Child Succeed

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Module #3: Cooperative Learning

Ecclesiastes 4: 9-12

9 Two are better than one,
  because they have a good return on their labor:

10 If either of them falls down,
  one can help the other up.
But pity anyone who falls
  and has no one to help them up.

11 Also, if two lie down together, they will keep warm.
  But how can one keep warm alone?

12 Though one may be overpowered,
  two can defend themselves.
A cord of three strands is not quickly broken.

Psalm 133: 1-3

A song of ascents. Of David.

1 How good and pleasant it is
  when God's people live together in unity.

2 It is like precious oil poured on the head,
  running down on the beard,
running down on Aaron's beard,
  down on the collar of his robe.

3 It is as if the dew of Hermon.
  were falling on Mount Zion.
For there the Lord bestows his blessing,
  even life forevermore.

3 Instructional Settings in Every Classroom

1. **Competition** – Engaging in a win–lose struggle to see who is best

2. **Individualism** – Working independently on personal learning goals at your own pace and in your own space to achieve a present criterion of excellence

3. **Cooperation** – Working cooperatively in small groups, ensuring that all members master the assigned task/concept

Are we teaching/modeling the way we actually live our lives?
If we are then all three structures are a necessity in today's classrooms.

When teachers want to maximize student learning, increase their retention, and promote the use of higher level of thinking strategies, they would be well advised to use cooperative rather than competitive or individualistic instructional strategies.

Within any classroom, teachers must reach students' hearts if students are to exert extraordinary efforts to learn, and peer relationships are the key to reaching students' hearts.
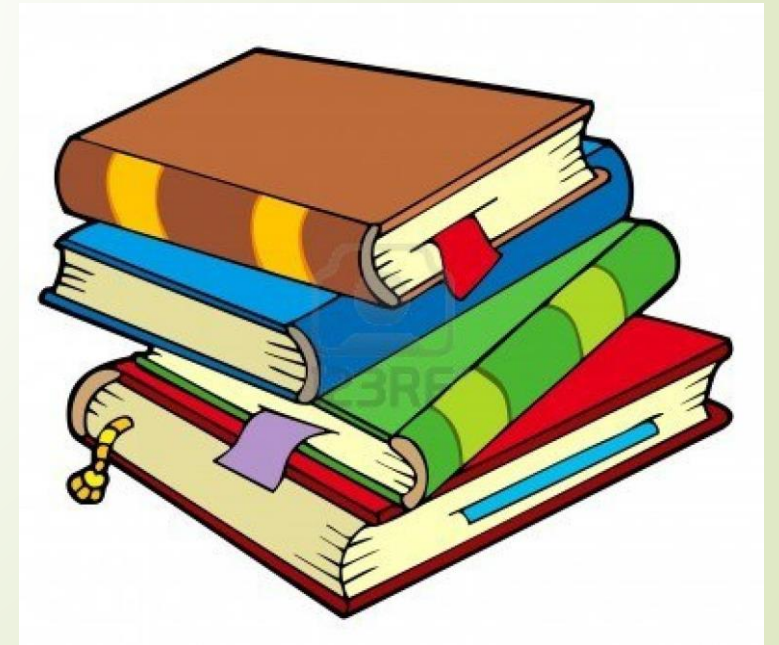
The more students care about each other and the more committed they are to each other's success, the harder each student will work and the more productive each will be.

Cooperative Learning vs. Group Work

Definition of Cooperative Learning

Definition of Cooperative Learning

Students' learning goals may be structured to promote cooperative, competitive, or individualistic efforts. In every classroom, instructional activities are aimed at accomplishing goals and are conducted under a goal structure.

A learning goal is a desired future state of demonstrating competence or mastery in the subject area being studied. The goal structure specifies the ways in which students will interact with each other and the teacher during the instructional session. Each goal structure has its place (Johnson & Johnson, 1989, 1999).

In the ideal classroom, all students would learn how to work cooperatively with others, compete for fun and enjoyment, and work autonomously on their own. The teacher decides which goal structure to implement within each lesson. The most important goal structure, and the one that should be used the majority of the time in learning situations, is cooperation.

Definition of Cooperative Learning

Cooperation is working together to accomplish shared goals. Within cooperative situations, individuals seek outcomes that are beneficial to themselves and beneficial to all other group members.

Cooperative learning is the instructional use of small groups so that students work together to maximize their own and each other's learning. It may be contrasted with competitive (students work against each other to achieve an academic goal such as a grade of "A" that only one or a few students can attain) and individualistic (students work by themselves to accomplish learning goals unrelated to those of the other students) learning.

In cooperative and individualistic learning, you evaluate student efforts on a criteria-referenced basis while in competitive learning you grade students on a norm-referenced basis. While there are limitations on when and where you may use competitive and individualistic learning appropriately, you may structure any learning task in any subject area with any curriculum cooperatively.

Basic Elements of Cooperation

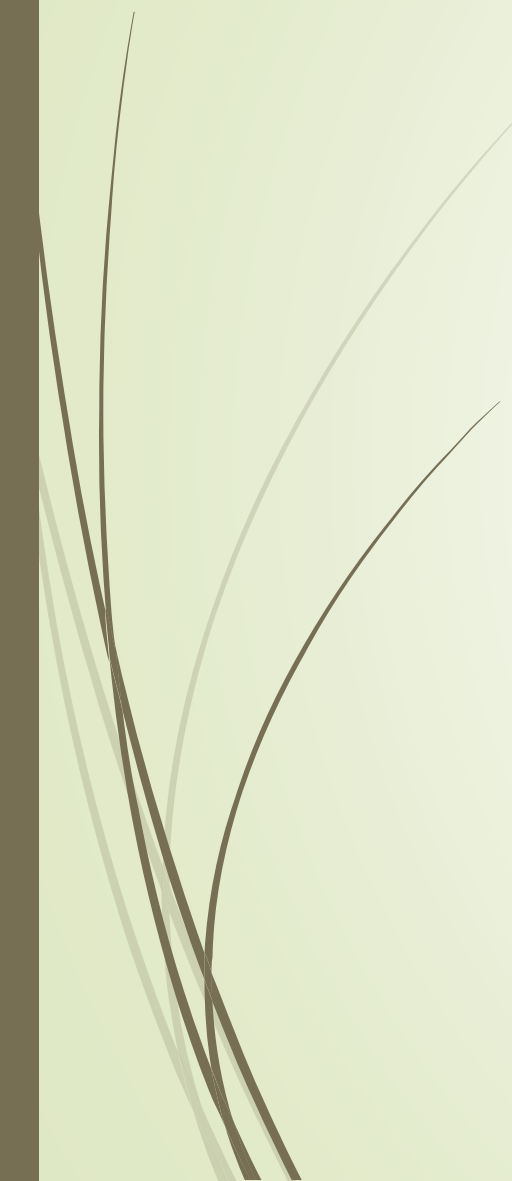COOPERATION

Basic Elements of Cooperation

Not all groups are cooperative (Johnson & F. Johnson, 2009). Placing people in the same room, seating them together, telling them they are a group, does not mean they will cooperate effectively. To be cooperative, to reach the full potential of the group, five essential elements need to be carefully structured into the situation: positive interdependence, individual and group accountability, promotive interaction, appropriate use of social skills, and group processing (Johnson & Johnson, 1989, 2005). Mastering the basic elements of cooperation allows teachers to:

- 1. Take existing lessons, curricula, and courses and structure them cooperatively.

- 2. Tailor cooperative learning lessons to unique instructional needs, circumstances, curricula, subject areas, and students.

- 3. Diagnose the problems some students may have in working together and intervene to increase the effectiveness of the student learning groups.

Basic Elements of Cooperation

1. The first and most important element is positive interdependence. Teachers must give a clear task and a group goal so students believe they "sink or swim together." Positive interdependence exists when group members perceive that they are linked with each other in a way that one cannot succeed unless everyone succeeds. If one fails, all fail. Group members realize, therefore, that each person's efforts benefit not only him- or herself, but all other group members as well. Positive interdependence creates a commitment to other people's success as well as one's own and is the heart of cooperative learning. If there is no positive interdependence, there is no cooperation.

Basic Elements of Cooperation

2.   The second essential element of cooperative learning is individual and group accountability. The group must be accountable for achieving its goals. Each member must be accountable for contributing his or her share of the work (which ensures that no one "hitch-hikes" on the work of others). The group has to be clear about its goals and be able to measure (a) its progress in achieving them and (b) the individual efforts of each of its members. Individual accountability exists when the performance of each individual student is assessed and the results are given back to the group and the individual in order to ascertain who needs more assistance, support, and encouragement in completing the assignment. The purpose of cooperative learning groups is to make each member a stronger individual in his or her right. Students learn together so that they can subsequently perform higher as individuals.

Basic Elements of Cooperation

3. The third essential component of cooperative learning is promotive interaction, preferably face-to-face. Promotive interaction occurs when members share resources and help, support, encourage, and praise each other's efforts to learn. Cooperative learning groups are both an academic support system (every student has someone who is committed to helping him or her learn) and a personal support system (every student has someone who is committed to him or her as a person). There are important cognitive activities and interpersonal dynamics that can only occur when students promote each other's learning. This includes orally explaining how to solve problems, discussing the nature of the concepts being learned, teaching one's knowledge to classmates, and connecting present with past learning. It is through promoting each other's learning face-to-face that members become personally committed to each other as well as to their mutual goals.

Basic Elements of Cooperation

4. The fourth essential element of cooperative learning is teaching students the required interpersonal and small group skills. In cooperative learning groups students are required to learn academic subject matter (taskwork) and also to learn the interpersonal and small group skills required to function as part of a group (teamwork). Cooperative learning is inherently more complex than competitive or individualistic learning because students have to engage simultaneously in taskwork and teamwork. Group members must know how to provide effective leadership, decision-making, trust-building, communication, and conflict-management, and be motivated to use the prerequisite skills. Teachers have to teach teamwork skills just as purposefully and precisely as teachers do academic skills. Since cooperation and conflict are inherently related, the procedures and skills for managing conflicts constructively are especially important for the long-term success of learning groups. Procedures and strategies for teaching students social skills may be found in Johnson (2009) and Johnson and F. Johnson (2009).

Basic Elements of Cooperation

5. The fifth essential component of cooperative learning is group processing. Group processing exists when group members discuss how well they are achieving their goals and maintaining effective working relationships. Groups need to describe what member actions are helpful and unhelpful and make decisions about what behaviors to continue or change. Continuous improvement of the process of learning results from the careful analysis of how members are working together.

These five elements are essential to all cooperative systems, no matter what their size. When international agreements are made and when international efforts to achieve mutual goals (such as environmental protection) occur, these five elements must be carefully implemented and maintained.

Types of Cooperative Learning

Informal Cooperative Learning

Informal Cooperative Learning

Informal cooperative learning consists of having students work together to achieve a joint learning goal in temporary, ad-hoc groups that last from a few minutes to one class period (Johnson, Johnson, & Holubec, 2008).

During a lecture, demonstration, or film, informal cooperative learning can be used to focus student attention on the material to be learned, set a mood conducive to learning, help set expectations as to what will be covered in a class session, ensure that students cognitively process and rehearse the material being taught, summarize what was learned and precue the next session, and provide closure to an instructional session.

The teacher's role for using informal cooperative learning to keep students more actively engaged intellectually entails having focused discussions before and after the lesson (i.e., bookends) and interspersing pair discussions throughout the lesson. Two important aspects of using informal cooperative learning groups are to (a) make the task and the instructions explicit and precise and (b) require the groups to produce a specific product (such as a written answer). The procedure is as follows…

Informal Cooperative Learning

1. Introductory Focused Discussion: Teachers assign students to pairs or triads and explain (a) the task of answering the questions in a four to five minute time period and (b) the positive goal interdependence of reaching consensus. The discussion task is aimed at promoting advance organizing of what the students know about the topic to be presented and establishing expectations about what the lecture will cover. Individual accountability is ensured by the small size of the group. A basic interaction pattern of eliciting oral rehearsal, higher-level reasoning, and consensus building is required.

Informal Cooperative Learning

2. Intermittent Focused Discussions: Teachers divide the lecture into 10 to 15 minute segments. This is about the length of time a motivated adult can concentrate on information being presented. After each segment, students are asked to turn to the person next to them and work cooperatively in answering a question (specific enough so that students can answer it in about three minutes) that requires students to cognitively process the material just presented. The procedure is:

- a. Each student formulates his or her answer.

- b. Students share their answer with their partner.

- c. Students listen carefully to their partner's answer.

- d. The pairs create a new answer that is superior to each member's initial formulation by integrating the two answers, building on each other's thoughts, and synthesizing.

Informal Cooperative Learning

2.   The question may require students to:

- a. Summarize the material just presented.

- b. Give a reaction to the theory, concepts, or information presented.

- c. Predict what is going to be presented next; hypothesize.

- d. Solve a problem.

- e. Relate material to past learning and integrate it into conceptual frameworks.

- f. Resolve conceptual conflict created by presentation.

Teachers should ensure that students are seeking to reach an agreement on the answers to the questions (i.e., ensure positive goal interdependence is established), not just share their ideas with each other. Randomly choose two or three students to give 30 second summaries of their discussions. Such individual accountability ensures that the pairs take the tasks seriously and check each other to ensure that both are prepared to answer. Periodically, the teacher should structure a discussion of how effectively the pairs are working together (i.e., group processing). Group celebrations add reward interdependence to the pairs.

Informal Cooperative Learning

3.   Closure Focused Discussion: Teachers give students an ending discussion task lasting four to five minutes. The task requires students to summarize what they have learned from the lecture and integrate it into existing conceptual frameworks. The task may also point students toward what the homework will cover or what will be presented in the next class session. This provides closure to the lecture.

Informal cooperative learning ensures students are actively involved in understanding what is being presented. It also provides time for teachers to move around the class listening to what students are saying. Listening to student discussions can give instructors direction and insight into how well students understand the concepts and material being as well as increase the individual accountability of participating in the discussions.

Formal Cooperative Learning

Formal cooperative learning consists of students working together, for one class period to several weeks, to achieve shared learning goals and complete jointly specific tasks and assignments (Johnson, Johnson, & Holubec, 2008). In formal cooperative learning groups the teachers' role includes…

Formal Cooperative Learning

1. Making preinstructional decisions. Teachers (a) formulate both academic and social skills objectives, (b) decide on the size of groups, (c) choose a method for assigning students to groups, (d) decide which roles to assign group members, (e) arrange the room, and (f) arrange the materials students need to complete the assignment. In these preinstructional decisions, the social skills objectives specify the interpersonal and small group skills students are to learn.

By assigning students roles, role interdependence is established. The way in which materials are distributed can create resource interdependence. The arrangement of the room can create environmental interdependence and provide the teacher with easy access to observe each group, which increases individual accountability and provides data for group processing.

Formal Cooperative Learning

2. Explaining the instructional task and cooperative structure.

Teachers (a) explain the academic assignment to students, (b) explain the criteria for success, (c) structure positive interdependence, (d) structure individual accountability, (e) explain the behaviors (i.e., social skills) students are expected to use, and (f) emphasize intergroup cooperation (this eliminates the possibility of competition among students and extends positive goal interdependence to the class as a whole). Teachers may also teach the concepts and strategies required to complete the assignment.

By explaining the social skills emphasized in the lesson, teachers operationalize (a) the social skill objectives of the lesson and (b) the interaction patterns (such as oral rehearsal and jointly building conceptual frameworks) teachers wish to create.

Formal Cooperative Learning

3.   Monitoring students' learning and intervening to provide assistance in (a) completing the task successfully or (b) using the targeted interpersonal and group skills effectively. While conducting the lesson, teachers monitor each learning group and intervene when needed to improve taskwork and teamwork. Monitoring the learning groups creates individual accountability; whenever a teacher observes a group, members tend to feel accountable to be constructive members.

In addition, teachers collect specific data on promotive interaction, the use of targeted social skills, and the engagement in the desired interaction patterns. This data is used to intervene in groups and to guide group processing.

Formal Cooperative Learning

4. Assessing students' learning and helping students process how well their groups functioned. Teachers (a) bring closure to the lesson, (b) assess and evaluate the quality and quantity of student achievement, (c) ensure students carefully discuss how effectively they worked together (i.e., process the effectiveness of their learning groups), (d) have students make a plan for improvement, and (e) have students celebrate the hard work of group members.

The assessment of student achievement highlights individual and group accountability (i.e., how well each student performed) and indicates whether the group achieved its goals (i.e., focusing on positive goal interdependence). The group celebration is a form of reward interdependence. The feedback received during group processing is aimed at improving the use of social skills and is a form of individual accountability.

Discussing the processes the group used to function, furthermore, emphasizes the continuous improvement of promotive interaction and the patterns of interaction need to maximize student learning and retention.

Cooperative Base Groups

Cooperative Base Groups

1. Cooperative base groups are long-term, heterogeneous cooperative learning groups with stable membership (Johnson, Johnson, & Holubec, 2008). Members' primary responsibilities are to (a) ensure all members are making good academic progress (i.e., positive goal interdependence) (b) hold each other accountable for striving to learn (i.e., individual accountability), and (c) provide each other with support, encouragement, and assistance in completing assignments (i.e., promotive interaction). In order to ensure the base groups function effectively, periodically teachers should teach needed social skills and have the groups process how effectively they are functioning.

Cooperative Base Groups

2.   Typically, cooperative base groups are heterogeneous in membership (especially in terms of achievement motivation and task orientation), meet regularly (for example, daily or biweekly), and last for the duration of the class (a semester or year) or preferably for several years. The agenda of the base group can include academic support tasks (such as ensuring all members have completed their homework and understand it or editing each other's essays), personal support tasks (such as getting to know each other and helping each other solve nonacademic problems), routine tasks (such as taking attendance), and assessment tasks (such as checking each other's understanding of the answers to test questions when the test is first taken individually and then retaken in the base group).

Cooperative Base Groups

3. The teacher's role in using cooperative base groups is to (a) form heterogeneous groups of four (or three), (b) schedule a time when they will regularly meet (such as beginning and end of each class session or the beginning and end of each week), (c) create specific agendas with concrete tasks that provide a routine for base groups to follow when they meet, (d) ensure the five basic elements of effective cooperative groups are implemented, and (e) have students periodically process the effectiveness of their base groups.

Cooperative Base Groups

4.   The longer a cooperative group exists, the more caring their relationships will tend to be, the greater the social support they will provide for each other, the more committed they will be to each other's success, and the more influence members will have over each other. Permanent cooperative base groups provide the arena in which caring and committed relationships can be created that provide the social support needed to improve attendance, personalize the educational experience, increase achievement, and improve the quality of school life.

Integrated Use of All Three Types of Cooperative Learning

These three types of cooperative learning may be used together (Johnson, Johnson, & Holubec, 2008). A typical class session may begin with a base group meeting, which is followed by a short lecture in which informal cooperative learning is used. The lecture is followed by a formal cooperative learning lesson. Near the end of the class session another short lecture may be delivered with the use of informal cooperative learning. The class ends with a base group meeting.

The Most Common Mistakes Teachers Make With Cooperative Learning – And What To Do About Them

The Most Common Mistakes Teachers Make With Cooperative Learning – And What To Do About Them

- Group size too large!
- Not preparing students to work in cooperative groups.
- Not teaching students appropriate interaction skills.
- Letting students choose their own groups.
- Not doing cooperative activities often enough.
- Not planning cooperative lessons with care.
- Assuming that students can handle complex tasks.
- Emphasizing paper or project completion as a group goal.

- An unclear learning goal.
- Assuming that students will magically figure out how to work successfully together.
- Not building positive student relationships.
- Not carefully monitoring the groups while they are working.
- Giving group grades.
- Using Jigsaw with material that is too difficult for individuals to learn.
- Not eliciting parent support.
- Assuming that cooperative learning and group work are the same and that doing it well takes not training.

Tips on Assessing Cooperative Learning

Closure to Module #3

1. Final reflections
2. Individual Implementation plans
3. School-wide plans