COOPERATIVE LEARNING
IN THE INTERMEDIATE GRADES:
A HANDBOOK

MASTER'S PROJECT

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by

Deborah Beck
Noelle Frontani
School of Education
University of Dayton
Dayton, Ohio
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Approved by:

Signature of Advisor

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CHAPTER I
INTRODUCTION AND REVIEW OF LITERATURE

Cooperative learning is an alternative strategy of teaching that is becoming more widely used by educators. Based on research, cooperative learning has a positive effect on student achievement, social development, and self-esteem. In elementary schools, cooperative methods that incorporate group goals and individual accountability accelerate student learning considerably. There is agreement that these methods have positive effects on a wide array of affective outcomes, such as intergroup relations, acceptance of mainstreamed students, self-esteem, liking of school and subject being studied, time-on-task, and attendance (Slavin, 1990).

Even though cooperative learning has proven to be a success in the classroom, many teachers are still reluctant to use this teaching strategy successfully. Therefore, a need exists to produce a handbook of activities to aid the reluctant teacher in implementing cooperative learning strategies.

An interest in this strategy exists due to the need for cooperation in the classroom. Cooperative learning creates an environment in which all children are expected and encouraged to explore, develop, test, discuss and apply ideas,
and to construct their own knowledge. Children develop good communication skills, confidence in their ability to learn mathematics, and valuable cooperative problem-solving skills they will need when they enter the work force (Ajoye and Joyner, 1990).

In both educational and work settings, peers have a strong influence on productivity. Greater achievement is typically found in collaborative situations where peers work together rather than in situations where individuals work alone. When a child or adolescent has poor study skills or is unmotivated, cooperative interaction with peers has powerful effects on productivity. The joint success experienced in working together to get the job done enhances social competency, self-esteem, and general psychological health (Johnson and Johnson, 1991).

This investigation will help teachers by providing an accessible handbook of activities. This handbook will aid reluctant teachers wanting to implement cooperative learning in the classroom.

Through the research, we will show that cooperative learning does work. Traditionally school systems are set up in such a manner that teachers lack the knowledge they need to implement a cooperative strategy in the classroom. The handbook will provide information and activities to help the classroom teacher get started.
Cooperative learning is the process whereby small heterogeneous groups of students work together to achieve mutual learning goals.

The five characteristics that pertain to a cooperative learning classroom are:

1.) Positive interdependence- success of individual students is linked with success of whole group,

2.) Promotive interaction- frequent face-to-face discussions and group feedback,

3.) Individual accountability- responsibility to finish all assignments, master all objectives, and make sure fellow group members understand,

4.) The frequent use of interpersonal skills- the application of cooperative skills in decision making, conflict management, and good working relationships among group members,

5.) Engagement in periodic and regular group processing- group takes time out to reflect on how well they are doing together as a group (Ajose et al., 1990).

Despite the fact that cooperative learning has had such a positive effect on learning, many teachers still feel uncomfortable with anything other than whole-class activities (Martens, 1990).

Cooperation is necessary in order for people to function in all aspects of human life. Cooperation is the basis for
family life, economic systems, and legal systems. It is key to our evolution as a species and the heart of the worldwide community of humans.

For the past 45 years, competitive and individualistic goal structures have dominated American education. Students usually come to school with competitive expectations and pressure from their parents (Johnson and Johnson, 1991). In recent years, investigators have found that cooperative learning group approaches to instruction are substantially more effective than methods with competitive or individualistic systems. According to Johnson and Johnson (1986), there is conclusive evidence that cooperative teams achieve at higher levels of thought and retain information longer than students who work quietly as individuals. Therefore, cooperative learning is the most important of the three ways of structuring learning situations (1991).

Traditionally students have been ability grouped or tracked homogeneously at a very early age. Research shows that homogeneous ability grouping lowers self concepts and causes psychological damage among lower-ability students. Ability grouping does not enhance student achievement in the elementary school. It is suggested that desirable attitudes and self-concepts of low ability children may be seriously impaired by homogeneous grouping (Manning and Licking, 1990).

Cooperative learning provides an alternative strategy to
homogenous grouping. Bayer (1990) stated that "Diversity is enriching." The more varied a group, the more likely different points of view will be voiced. Students can relate background knowledge or experiences toward a topic.

Groups give children time to think and talk about what they are learning. Students can share experiences and thoughts with classmates. Learning becomes more personal in cooperative learning situations compared to a traditional classroom setting.

According to Slavin's model, heterogeneous groups are carefully formed by the classroom teacher to ensure a mix of abilities, cultural differences, socioeconomic backgrounds, and gender. This type of grouping places emphasis on peer tutoring and the belief that such techniques are important to learning key concepts in reading, math, and other academic subjects (Barbour, 1990). Through this type of grouping, the teacher is able to accommodate diverse interests, learning rates, and learning styles.

Wide agreement among reviewers of the cooperative literature have found that cooperative methods can and usually do have a positive effect in student achievement. Previous investigators have found that cooperative learning group approaches to instruction are substantially more effective than methods with competitive individualistic reward systems in the achievement of computational and recall objectives.
Cooperative learning can be an effective means of increasing students' achievement, but only if group goals and individual accountability are incorporated in the cooperative methods (Slavin, 1990).

Based on a study by Slavin, Madden, and Stevens (1989-90), the effects of cooperative learning on students was positive. In comparison with a control group, students in cooperative learning groups achieved higher on the California Achievement Test in comprehension, reading vocabulary, language expression, language mechanics, and spelling. Cooperative learning children outperformed the control students on organization, ideas, and mechanics on a writing sample. Therefore, cooperative learning does increase the achievement of all students in heterogeneous groups.

Rosenthal and Jacobson (1968) found that students tend to achieve at the levels teachers expect of them, a self-fulfilling prophecy. Students placed in low-ability groups tend to fall progressively farther behind their better-placed peers (Weaver, 1990). Since students are heterogeneously grouped in a cooperative classroom, this enables all students to achieve at their highest achievement levels.

Typically "different" students, such as mainstreamed, minorities, and at-risk, have been in isolated learning environments. This causes negative attitudes from the regular
classroom students toward these "different" students. The effect of intergroup relations on attitudes, social relations, respect, friendships, and acceptance has a positive effect on all types of learners.

Researchers have found that these "different" learners desire a learning experience that demands "group interaction and feedback from peers." Many students are not motivated by teachers or parental approval, but they are concerned about performing well in front of their peers. Due to the cooperative learning environment, the students have extensive group involvement and rapid correction from peers (Watson and Rangel, 1989).

Typically students develop few social skills for working together. They have been taught repeatedly to keep their eyes on their own papers, not to share homework, and to be responsible for their own grades (Schultz, 1989). The cooperative setting involves each student in helping the group work together. Each group member has responsibility for others' learning as well as for their own. They encourage and help each other and convey to one another that learning is important, valuable, and fun (Smith, 1989).

Prosocial behavior is modeled when peers interact. Without peers, many forms of prosocial values and commitments could not be developed. Teachers must structure activities so that peers can work together. By learning to work
together, they practice skills that enhance their social interaction (Peck, 1989).

Social interaction tends to promote a basic acceptance of oneself as a competent person. This reduces the isolation of shy, depressed, disliked, and fearful students (Johnson and Johnson, 1991). Students can explore new topics without fear of being wrong. They are willing to take risks. Students discover that what they have to say is important and useful to others. This interaction between peers develops positive self-esteem.

Cooperative learning experiences, compared with competitive and individualistic ones, promote more positive attitudes toward the subject area, more positive attitudes toward the instructional experience, and more continuing motivation to learn more about the subject area being studied (Johnson and Johnson, 1991). Wheeler and Ryan (1973) did an experiment in social studies classes reporting on effects of cooperative learning, competitive group learning, and individual learning. They found that students in the cooperative learning groups liked their social studies class more than the competitive and control group students did (Smith, 1989).

Cooperative groups will reduce discipline and control problems which will aid in classroom management. Hostility toward authority will tend to lessen when working
cooperatively with one's peers. Student's energy goes toward concern for peers by helping the group achieve rather than disobeying the teacher.

Cooperative learning is structured so students are responsible for their own learning, actions, achievement and successes rather than the teacher being solely in charge. In a traditional setting, the teacher has always been the authority figure. However, in a cooperative learning setting, the teacher acts as a facilitator working with students who are discussing, researching, and evaluating any subject matter.

Group reflection enables students to monitor individual and group achievement and behavior. Group members are assigned roles such as organizer, manager, analyst or questioner, recorder, and reporter that change intermittently enabling students to experience a wide range of responsibilities. Each member has responsibility, materials to master, and materials to help others to master (Barbour, 1990).

Even though there is ample evidence supporting cooperative learning, studies show that classes are structured cooperatively only seven to twenty percent of the time (Johnson and Johnson, 1991). This reluctance comes from teachers not wanting to change the traditional classroom. There is a resistance to change on the part of oneself,
teachers, students, parents, and administrators. As with any new approach to teaching, the people involved may lack knowledge for implementing the program.
Cooperative groups work best with groups of four or five students. Cooperative learning can be initiated by designing a seating arrangement in which students can sit together in groups of four or five. Change the seating arrangement from an individual setting to a group arrangement. This makes students feel they are part of a small community.

After the students are comfortable with sitting in a small group arrangement, the teacher can then begin to arrange the students into heterogeneous groupings. The makeup of the group should consist of a combination of the high, middle, and low ability students. The groups should have a variety of cultural differences, socioeconomic background, and gender. The composition of the group should change regularly.

In addition to the regular classroom rules, guidelines and responsibilities for the cooperative groups must be discussed and displayed in the classroom. The following rules are suggestions and should be adapted to fit individual classroom compositions.

1. Your behavior is your responsibility. Students must listen to ideas and contribute to group discussions and projects.
2. Help anyone in your group who asks for help. Students are encouraged to help each other but they should wait until they are asked for help. They should help by showing the correct process rather than just the correct answer.

3. Ask the teacher for help only when all group members have the same question. The teacher will only assist the group if all hands are up with the same question.

4. Praise each other and criticize ideas, not people. Students should understand that their positive actions and comments will be for the good of the group.

The main task of the group members and teacher is to get everyone to participate. Group members should have a specific role for the activity. These roles may vary according to the activity and roles should vary daily. Each group member needs to experience a variety of roles. Teachers can assign each child a number and change roles daily by the different numbers. For example, all the number ones for the day will be organizers, all the number twos will be managers, and so on.

ROLE EXAMPLES:

1. Organizer- assembles the necessary materials and helps the group get started.

2. Manager- focuses the group members on their task by
asking questions. Sample questions might include: "Aren't we supposed to do it this way?" "Are we following the directions the teacher gave us?"

3. **Analyst or Questioner** - checks the group's thinking processes with questions such as: "Is there a pattern?" "How can we tell if we found all the ways?"

4. **Recorder** - keeps a record of the data generated during the discussions or activity.

5. **Reporter** - speaks for the group during the class discussion. If there are only four members in the group, the Recorder should also be the Reporter.

A problem with switching from a traditional classroom to a cooperative classroom is the noise level. There is a natural tendency for the cooperative teams to become too noisy. If the noise level escalates, the teacher must have a way to bring the noise level back down to an acceptable level. Some signals might include: having a bell to ring, switching the lights off, talking to the individual group involved, and having either a hand signal or word phrase the students are familiar with (Slavin, 1990).

"The most effective approach to classroom management for the cooperative classroom is to create a group based positive reward system" (Slavin, 1990). Positive awards, such as the ones listed in the appendix, can be used to help create a
positive atmosphere. The behaviors observed to receive the positive reward could include: quickly coming to full quiet attention, extra peer helping, cooperation with teammates, and attempted or successful completion of the assigned activity. These positive awards should be visibly displayed for others to admire in the classroom.

Before allowing the students to work in their groups, the teacher must first explain the activity to the whole class. Be sure the students understand what they are to do in their groups. After the students are working in their groups, move from group to group observing the cooperative interaction.

The teacher must assume the role of observer. This observer role is often difficult to assume for a teacher that has never tried this process. The teachers should note each groups' ideas, strategies, and work procedures. Help a group that needs it. If it seems that the students do not understand, have them restate what they think they know. Then have the team restate the goal and activity in their own words. If there seems to be trouble with the interaction in the group, discuss the roles of each individual. The students may decide to change some roles to help the group run better. After the groups successful completion of the problem or activity, suggest a related enrichment activity. When all groups are finished, discuss the activity. Have the students share the process they used, their solutions, and a
generalization from the solutions. Some possible questions to ask are: "How did you organize the work in your group?", "Was your method effective?", and "Can you think of a better method to solve the problem?".

These are some suggestions for starting a cooperative classroom. The ideas and rules should be modified according to the teacher's needs. Remember to be flexible, take what you can use, and omit the rest.
CHAPTER THREE
COOPERATIVE LEARNING ACTIVITIES

Language Arts

Work in groups to create a poster to advertise a particular school event or story from the reading book.

Create a school newspaper including articles that relate information about WHO, WHAT, WHERE, WHEN, WHY, and HOW to a particular story.

Write recipes to compile into a class recipe book. Students should categorize each recipe.

Work in groups to write questions for an interview with another group or adult. Questions can include survey or questionnaire type. Results can be graphed or charted. Sample topics may include favorite sports, shoes, candy, foods, colors, movies, and TV shows.

Work in groups to cooperatively alphabetize groups of words.

Make up titles of books under each category: fiction,
nonfiction, reference, film, and periodicals.

Write poems in groups to present to the class.

Create an imaginary animal—such as a new species of dinosaur. An illustration along with facts should be included for the presentation.

Create their own cartoons.

Summarize a fairy tale and create a mural to use as the presentation.

Write songs for a story by using a melody from a song they already know and then write their own lyrics to the music. Students can present these to the class.

Write letters to send to a famous celebrity. If possible, find addresses and mail.

Create a directory for the school—maybe using imaginary names.

Write riddles and jokes to compile into a class book.
Draw a life-size favorite character from a book. Inside the body, write the positive qualities about the character inside the structure.

Write mystery stories to bind into a book to share with the class.

Design a business. Groups should decide what product or service is to be provided. Groups can decide the nature and location, advertising, work schedules, fees, work hours, projected profits, and problems.

Discuss problems around the school. Possible solutions should be listed. Students can be encouraged to implement at least one solution.

Research possible job opportunities and careers. Each group can present information on education needed, salary, location, and other benefits.

Display a want-ad bulletin board using local newspapers, large city papers, and magazines. Students can discuss differences between ads.

Create legends of Native Americans about the origins of trees,
rocks, flowers, wind, fire, snow, rain, sunshine, caves, deserts, etc.

Write a description of seeing something new for the first time. What kind of reaction would the person have?

Come up with an invention to make for the classroom. This can be illustrated on poster board.

Invent a "wacky" invention to make and display in the room.

Collect brochures from travel agents, museums, etc. to make a display of activities to do in the area throughout the year.

Create legendary monsters reporting on the origin, physical features, habits, and sightings. Students can include a model of the animals. Groups can write a story about the monster to share with the class.

Write new endings for stories.

Create lighthouses on large paper. Groups can research information about lighthouses.

Play a game of Concentration using prefixes and suffixes.
Students should develop 3x5 index cards with affixes and base words that could be combined together. Partners lay cards face down and take turns trying to turn up the matched pairs. When students match cards, they add the affix to the base word and give the meaning of the new word. The same type of game could be played with addition and multiplication facts.

Pantomime nursery rhymes to present to the class. The audience must guess which rhyme is being acted out.

Write stories to read and share with younger students. Students can use a preprimer word list to write the stories.

Investigate creatures such as trolls, gnomes, elves, and hobbits. Students can illustrate one of the creatures and write a paragraph or story about it. Students can create a new creature.

Groups can put on a TV news show.

Create a dragon and write a folktale about it.

Survey classmates to find different pets. Groups can write questions about the pets' breed, name, age, habits, favorite foods, etc.
Rewrite a folktale and write it as if it took place today.

Invent a new toothbrush, tennis shoe, car, hairbrush, etc. Students should illustrate and label special features.

Work to write a television commercial for a device that is used today. Share these with the class.

Work on watching and identifying birds. Students can chart size, shape, color, beaks, behavior, habitat, etc.

Research different birds and owls and make U.S. maps to show the range where these birds populate the U.S.

Mechanical gadgets can be devised and displayed.

Select a scene from a story and write a script.

Devise a time machine. Include a diagram and instructions for use and any warnings in a booklet. Create travel brochures for time travelers.

Create a new comers guide for a specific grade. Include holidays, maps, entrances, exits, schedules, and any other
important information.

Create and arrange a treasure hunt for other classmates.

Create posters for a state fair or for another festival that is popular in the community.

Math

Make shopping lists for a grocery store. Students must buy items under categories such as frozen foods, paper goods, cleaning products, meat, produce, etc. Students should have a specific amount they can spend. They can use grocery ads and calculators to make their purchases.

Choose a different product to investigate, such as cereal, toothpaste, sneakers, shampoo, or peanut butter. The guidelines are as follows: Choose the product to research, list the brands you will investigate, list what you will investigate about each brand (size, weights, ingredients, special advertising claims), and decide where and how to collect information (supermarkets, discount stores, pharmacies). Students should list their findings in a chart.
Design magic tricks or number puzzles.

Buy items from a store catalog. Give each group a specific amount to spend and time to make the decisions. Have the groups discuss how they arrived at their decisions. Was everyone pleased with the items purchased? How was a final decision made?

Social Studies

Explore various states or countries and write a report. Reports can include customs, culture, geography, etc. All information gathered should be compiled onto a book. Group reports can be shared with the class. Displays can be made from important information learned from the research.

Create maps using poster board or salt clay.

Create an "imaginary city" using a map key and scale on poster board. Include scenic attractions, bizarre creatures, and fascinating points of interests. Brochures can accompany the maps.

Make comparative charts using populations of different cities,
Choose from their Social Studies book a subject relating to government. Groups should write letters to the agencies requesting more information and a brochure.

Make maps of part of the U.S. to depict a particular legend.

Write legends about natural landmarks on their state or another state. A poster depicting the landmarks should be included during the oral presentation.

Pretend they are a family making a long journey to another place or country. They must decide what to take with them on this journey.

Discuss and list survival skills necessary for the Arctic regions, jungle, etc.

Find the state birds, flowers, or animals for the 50 states and draw them on an outlined map of the U.S.

Make log cabins or houses to make a village scene on a large piece of paper. Students must decide where they will locate and draw other important features of the village.
Give groups a magic pot or container. The purpose of the pot is to improve life in the city. Students are to list ways to improve the community.

Write a job description listing responsibilities of that job.

Give groups a magic pot or container. The purpose of the pot is to improve life in the city. Students are to list ways to improve the community.

Write a job description listing responsibilities of that job.

Give topics to the students to research and hold debates. Such topics might include the environment, endangered animals, life on other planets, etc.

Science

Research particular animals. Students can answer such questions as: What does your animal eat? Where does it live? Who are the natural enemies? Are there any threats from human beings? A chart can be made to include headings such as Food, Habitat, Life Span.
Look through books and classify vocabulary according to the species of animals, plants, kinds of rocks and minerals, and chemicals.

Design a shelter for a specific wilderness environment. Students must consider climate and natural resources. Such environments might include the desert, jungle, polar, forest, or mountain regions. Models can be made and displayed to describe unusual characteristics of the shelters.

Compare animal life in two different regions using charts and graphs.

Whale reports can be completed in groups, choose from grey, right, humpback, killer, sei, etc. Include information on size, eating habits, habitats.

Research endangered species and make a display for the class. Students can make a map showing the location of the endangered species. A poster can be an informative way to present the information.

Find all the uses for animals such as pigs, cows, buffaloes.
Groups can collect rocks and categorize them according to different rock types.
CHAPTER IV
SUMMARY AND RECOMMENDATIONS

Evidence from research shows that cooperative learning does have a positive effect on student achievement and social growth. A reluctance to use cooperative learning exists due to teacher unwillingness to change and lack of knowledge. Teachers need to be patient and flexible when organizing and managing a classroom. This process will give students and teachers time to grow and change. The activities can help enrich a students learning experience. Frustration may occur, but teachers should remember that this is part of any change process. The results from the cooperative learning experience will be rewarding.
(Slavin, 1990)
A FIRST RATE TEAM!

(Slavin, 1990)
Congratulations!

A NUMBER ONE TEAM!

SUPERTeam OF THE WEEK

(Slavin, 1990)
Team

did a GREAT JOB this week

Date

TEAM

did a GREAT JOB this week

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(Slavin, 1990)
BIBLIOGRAPHY


