

Student Work

3-1-1992

Attitudes Towards Cooperative Learning

Cynthia L. Hamm

University of Nebraska at Omaha

Follow this and additional works at: <https://digitalcommons.unomaha.edu/studentwork>

Recommended Citation

Hamm, Cynthia L., "Attitudes Towards Cooperative Learning" (1992). *Student Work*. 2375.
<https://digitalcommons.unomaha.edu/studentwork/2375>

This Thesis is brought to you for free and open access by DigitalCommons@UNO. It has been accepted for inclusion in Student Work by an authorized administrator of DigitalCommons@UNO. For more information, please contact unodigitalcommons@unomaha.edu.



ATTITUDES TOWARDS
COOPERATIVE LEARNING

A Field Project
Presented to the
Department of Educational Administration
and the
Graduate Faculty
University of Nebraska

In Partial Fulfillment
of the Requirements for the Degree
Specialist in Education
University of Nebraska at Omaha

by
Cynthia L. Hamm

March, 1992

UMI Number: EP73920

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI EP73920

Published by ProQuest LLC (2015). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against
unauthorized copying under Title 17, United States Code



ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

Abstract

This study examines the changes of attitudes towards group learning after being exposed to cooperative learning on a regular basis. The population of this study consists of two third grade classrooms of twenty-four children in each room. An attitude survey, developed by the researcher, is used for this study. The survey is a pre-post-post test given in one school year. The first posttest results show an increase in positive attitudes towards cooperative learning. The second posttest results show a statistically significant decrease in positive attitudes towards cooperative learning. Analysis of the survey questions are available in the study. More research needs to be done in this area with a broader population.

DEDICATION

To Betty and Duane Hamm

and Matthew Turco

FIELD PROJECT ACCEPTANCE

Accepted for the faculty of the Graduate College, University of Nebraska, in partial fulfillment of the requirements for the degree Specialist in Education, University of Nebraska at Omaha.

Supervisory Committee

Name

Department

Thomas J. [unclear]

Ed. Admin.

[unclear]

[unclear]

Blaine E. Ward

Ed. Admin.

Chairman

March 12, 1992

Date

TABLE OF CONTENTS

CHAPTER	Page
I. INTRODUCTION.....	7
Statement of the Problem.....	8
Hypothesis to be Tested.....	8
Significance of the Problem.....	9
Assumptions.....	10
Limitations.....	10
Definition of Terms.....	11
II. REVIEW OF RELATED RESEARCH AND LITERATURE.....	12
III. DESIGN OF THE STUDY.....	23
IV. PRESENTATION AND ANALYSIS OF DATA....	27
V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....	32
REFERENCES.....	37
APPENDIX	
A. Cooperative Learning Group Questionnaire.....	42

LIST OF TABLES

TABLE		PAGE
1	QUESTIONS WHICH SHOWED A DECREASED THEN AN INCREASE	29
2	QUESTIONS WHICH SHOWED A CONSISTENT DECREASE	29
3	QUESTIONS WHICH REMAINED STATISTICALLY STATIC	30
4	QUESTIONS WHICH SHOWED AN INCREASE THEN A DECREASE	30

CHAPTER ONE

Introduction

Cooperative learning is an educational term that has become the latest buzz word. In reality, the research on cooperative learning and its effects has been in existence since the 1920's. Deutsch (1949) conceptualized three types of goal structures: cooperative, competitive, and individualistic.

The cooperative situation is where the individual can attain his or her goal, if and only if, the other members of the group can attain their goals. The participants must work together to achieve their group goal. They seek outcomes that are beneficial to all with whom they are linked.

The competitive situation is where the goal of the participant can be attained only if the others can not attain their goal. The participant seeks a solution that is of personal benefit, but is also detrimental to the other participants.

In the individualistic situation, the participant accomplishes his or her goal, but it has no relationship to the other individuals' goal attainments. The participant is concerned only with their own achievement and ignores the attempts of the others.

Recent studies on cooperative learning have indicated an improvement on academic scores and in interpersonal relationships between specific populations. The purpose of this study is to examine the changes of attitudes towards group learning in third grade students.

Statement of the Problem

Is there a significant difference in the attitudes of third grade children toward

group learning after they have been exposed to cooperative learning on a regular basis compared to their attitudes prior to regular exposure to cooperative learning?

Hypothesis to be Tested

There is no significant difference in the attitudes of third grade children toward group learning after they have been exposed to cooperative learning on a regular basis compared to their attitudes prior to regular exposure to cooperative learning.

Significance of the Problem

Cooperative learning is providing students with a positive learning outcome. Research shows that cooperative learning is a viable tool for all students in all subject areas. It is surprising with all the recent research data that cooperative learning is used in American schools only 7% to 20% of the time. It is likely that most of this small group interaction would not fit the definition of cooperative learning (Johnson, R., and Johnson, D., 1985). Roger and David Johnson do not recommend that all teaching be done in the cooperative method, but it needs to be used more because of the academic and social value that cooperative learning has. Not only has academic achievement improved, but so has interpersonal relationships, students' attitudes towards learning and school, and ethnic relationships.

The proposed study will look at the effects of the students' attitudes toward the use of cooperative learning on a regular basis.

Assumptions and Limitations

There are three assumptions associated with this study.

Assumption 1. The students have not been exposed to cooperative learning in the past.

Assumption 2. The students have had previous work in small groups, therefore providing them with experience that will be the basis of their judgements towards group work and cooperative learning groups.

Assumption 3 The students were candid and honest in responding to the survey. Third grade students are teacher-pleasers and this could have a halo effect on the study.

There are four limitations associated with this study.

Limitation 1. The sample consisted of third grade students.

Limitation 2. The students were tested only for attitudes towards cooperative group learning.

Limitation 3. The students were exposed to cooperative learning a minimum of two times per week for the school year 1990-91.

Limitation 4. There was a time span of four months between the two testing times.

Definition of Terms

Cooperative Learning. An instructional method when a group has positive interdependence and where shared goals link group members. Students are individually held accountable for the material to be learned and the cooperative

skills, where students support one another rather than put one another down (Johnson, R., and Johnson, D., 1987).

CHAPTER TWO

Review of Related Research and Literature

Introduction

Schools have had the responsibility to teach students academics and to help them develop strong social values. Schools over the years have emphasized either one outcome or the other, implying that accomplishing both at the same time is not possible. A large body of educational research is broadcasting a new message. Schools do not have to concentrate on either one goal or the other; they can accomplish both by using cooperative learning processes in the classroom (Krathwohl and Yarger, 1985).

The research on cooperative learning is extensive. Over 187 studies have been conducted in the last 20 years. The research has been conducted in inner-city, suburban and rural schools. It has covered all grade levels, 2-12, and subject areas from math to language arts to social studies to reading. Most of the research has been experimental and has taken place in the real classroom (Krathwohl et al. 1985).

Achievement

Given the general dissatisfaction with the level of competence achieved by students in the public school system, educators may wish to considerably increase the use of cooperative learning procedures to promote higher student achievement (Johnson, D. W., Maruyama, Johnson, R., Nelson & Skon 1981).

In these studies, students whose classrooms were structured cooperatively

have consistently scored higher on achievement tests. They have developed positive social behaviors and values that only cooperative learning could affect (Johnson, D. W. et al. 1981).

Most of the research has come to the same conclusion; academic achievement is improved with the use of cooperative learning. Cooperation promotes higher achievement than does interpersonal competition. These results hold for all subject areas (language arts, reading, math, science, social studies, psychology, and physical education), for all age groups (although the results are stronger for precollege than for college students), and for tasks involving concept attainment, verbal problem solving, categorizing, spatial problem solving, retention and memory, motor performance, and guessing-judging-predicting (Johnson et al. 1981).

Test Taking

Research has shown cooperative learning to be an effective method for test-taking. The students who received cooperative strategy training, particularly for test taking, gave both the study and test-taking strategies the highest evaluations. It was suggested by the researchers that cooperative testing may prove useful as a way of training students for typical real-world situations where co-workers must apply their knowledge and skills to solve problems (Lambiotte, Dansereau, Rocklin, Fletcher, Hythecker, Larson and O'Donnell, 1987).

These same researchers investigated the use of elaborative activities and metacognitive activities with cooperative learning. The findings had educational implications regarding the tailoring of cooperative learning strategies to

instructional goals. If the goal is to learn specific text material, the use of cooperative learning with a focus on the metacognitive activity of the listener helps performance. Whereas if the intent is to facilitate transfer of learning to other material and situations, the elaborative activity of the listener within cooperative learning should be emphasized (Larson et al. 1985).

Cooperative learning strategies have facilitated initial learning and it leads to positive transfer on a subsequent individual learning task. It appears that it is not the strategy or the pair interaction alone which contributes to the transfer effect, but a combination of the two which enhances an individual's solitary learning following a cooperative experience (McDonald, Larson, Dansereau, and Spurlin, 1985).

Handicapped Students

There has been a concern among educators that handicapped children who are mainstreamed have problems with their peers and academics. Many of these mainstreamed classrooms are being conducted in highly individualistic ways. The research indicates that cooperative learning develops more positive relationships between nonhandicapped and handicapped students. In one of these studies, the researchers found nonhandicapped students chose handicapped peers for a variety of positive joint activities and for friends. Both types of students perceived greater peer academic support, greater peer personal support and caring, greater liking among students, lower feeling of isolation and disconnectedness, and greater desire to achieve for peer and teacher approval. The academic self-esteem of handicapped students was increased by working cooperatively with

nonhandicapped peers. Nonhandicapped students also felt more academic self-confidence and self-worth in the cooperative condition. These results should provide some solace for educators and psychologists who fear that mainstreaming will result in decreases in self-esteem of handicapped students (Yager, Johnson, R., Johnson, D., and Snider, 1985).

Other research has corroborated and extended the previous research on cooperation and mainstreaming by providing evidence that the positive relationships formed between handicapped and nonhandicapped students during cooperative learning activities generalized to unstructured classroom and school situations. Thus, a probable conclusion may be that the greater the cooperation within a learning situation, the greater will be the interpersonal attraction between nonhandicapped and handicapped students (Johnson, R., Johnson, D., Warring, and Maruyama, 1986).

Cultural Differences

Cross-race relations and cooperative learning has been researched and there is a significant improvement of intergroup relationships when cooperative learning has been implemented. When students work in ethnically mixed cooperative learning groups, they gain in cross-ethnic friendships. This research indicates that the effects of cooperative learning on intergroup relations are strong and long-lasting, and are more likely to occur on close, reciprocated friendship choices than on distant or unreciprocated choices. There are no clear patterns indicating more consistent results for some methods than for others. All methods have had some positive effects on intergroup relations (Slavin, 1985).

Practitioners' Observations

The practitioners of cooperative learning have found that cooperative learning groups are effective. Cooperative learning promotes higher achievement, develops social skills and puts the responsibility for learning on the learner. When mainstreamed students are placed in small cooperative groups, their achievement generally increases and their psychological health improves. Augustine, Gruber and Hanson are practitioners of cooperative learning and have a combined twenty-three years of experience using cooperative learning groups. They have seen improvements in all children-learning disabled, mainstreamed and gifted children. "If other educators believe as we do that higher achievement, increased acceptance of differences, improved attitudes toward school, and enhanced self-esteem are valuable goals for all children, then we all need to promote the continued use of cooperative learning" (Augustine, Gruber, and Hanson, 1989-90 p. 7).

Classroom teachers who have used cooperative learning in their classrooms suggested three components that were vital to its success- 1) commitment, 2) pacing and 3) support from others. To make cooperative learning a success in a classroom, the teacher must make a one year commitment to the program. They recommended that it takes two to three years to incorporate it fully into an individual's teaching style. Then cooperative learning should be used up to 60% of the day. Support from others was a vital component. They suggested that a support group for those teachers who are using cooperative learning in their

classrooms be organized within their building or school district (Edwards and Stout, 1989-90).

"Only under certain conditions can we expect cooperative efforts to increase students' efforts to achieve and improve the quality of their relationships with classmates and their psychological health. These conditions are positive interdependence, face-to-face (promotive) interaction, individual accountability, social skills, and group processing. Each of these elements mediates the relationship between cooperation and its outcomes, and they are interrelated. People do not know instinctively how to interact effectively with others. Nor do interpersonal and group skills magically appear when they are needed. Students must be taught these skills and be motivated to use them. If group members lack the interpersonal and small-group skills to cooperate effectively, cooperative groups will not be productive" (Johnson, D., and Johnson, R., 1989-90 p. 30).

Summary

With so many studies, one would assume that a consensus would emerge about the nature and the size of the effects of cooperative learning; and, in fact, the areas of agreement among cooperative learning researchers far outweigh the areas of disagreement. There is a consensus among the researchers on the following points. Cooperative learning promotes 1) positive effect on student achievement, 2) the use of group goals to motivate the groups to work together, earn recognition and rewards, 3) the group's success must depend on the individual learning of all group members, 4) the improvement of interpersonal

relationships between racial and ethnic groups, 5) the social acceptance of mainstreamed academically handicapped students by their classmates and 6) the increases in the student's self-esteem, liking of school and subjects, time on task and attendance at school. There are still some disagreements among the researchers over the following points- 1) what constitutes adequate research concerning the essential elements of cooperative learning, 2) whether cooperative learning is effective at all grade levels and 3) the appropriateness of cooperative learning for higher order thinking skills. Research must continue to test the limits of cooperative learning, to broaden our understanding of why and how cooperative learning produces its various effects. Yet what we know already is more than enough to justify expanded use of cooperative learning as a routine and central feature of instruction (Slavin, Madden and Stevens, 1989-90).

The research has been extensive in many areas of education but one - the child's attitude towards cooperative learning. This research project investigated children's attitudes towards cooperative learning and group work.

CHAPTER THREE

Design of the Study

This study was conducted during the school year beginning in September of 1990 and culminating in May of 1991. The study was conducted in a suburban school district in Omaha. Two separate third grade classrooms, which were taught by this researcher, participated in this study.

Subjects

The population of this study consisted of two third grade classrooms of twenty four children in each room. The two classrooms were structured approximately the same way. Each classroom was an open space classroom, where there was heterogeneous grouping of children for all subject areas. The children were from a school whose community was predominantly white, suburban, middle to upper middle income.

Instrument

An attitude survey was the single instrument used in this study. The survey consisted of fifteen statements and three faces--a (happy) agree face, an (inbetween) neutral face, and a (sad) disagree face.

The process of validating the instrument was through two university professors, a principal, and four colleagues. These people were asked to evaluate the instrument on the basis of clarity, completeness and redundancy. Each person read the survey and made recommendations for changes to refine and clarify the instrument. On the basis of these evaluations, the refined and final

instrument was prepared (See Appendix A).

Procedures

The teacher/researcher received her training in cooperative learning from a qualified and trained instructor from the school district. The primary method of cooperative learning used for this experiment was the Johnson and Johnson method. There were three social skills taught along with a variety of content, primarily in the areas of spelling, social studies and math. The social skills that were taught were: encouragement, using a person's name and disagreeing in an agreeable way.

The students were divided into groups of three and groupings were changed on a frequent basis. For each cooperative learning lesson, the students were either taught a new social skill or they reviewed an old social skill. The teacher instructed the students on how to complete the assigned lesson and how to use their social skills. After each lesson, the students were provided with feedback on their usage of their social skills and on the assignment. Each group was asked to evaluate their use of their assigned social skills and to set a goal for the next lesson. Cooperative learning was utilized a minimum of two times a week.

This research study was a same group pretest-posttest-posttest design. The survey was passed out to each student. The survey was read aloud to the entire group, so that everyone would understand each statement. The students were instructed to circle the face that best described their feelings about each statement. Students were encouraged to answer each statement honestly. The surveys were done anonymously to insure candid responses.

The survey was administered to both classes, three separate times--in September, December and May. Each face was assigned a point value. The (happy) agree face was a positive three, the (inbetween) neutral face was zero and the (sad) disagree face was a negative three. The range of scores could be a positive forty-five to a negative forty-five. The scores were tallied and a t-test was performed between the pretest and the December post-test and another t-test was performed on the pretest and the May post-test.

CHAPTER FOUR

Presentation and Analysis of Data

The data from the September pretest, December posttest and the April posttest were collected and analyzed for a mean and a standard deviation. Each of the two posttests were compared to the pretest and a t-test was completed for each set of data.

On the pretest, the mean was 23.35 and the standard deviation was 2.07. For the December posttest, the mean was 24.35 and the standard deviation was 2.77. A t-test was calculated to compare the participants' responses between the pretest and the posttest. The number derived from the t-test was 1.96, which was not statistically significant.

For the April posttest, the mean was 19.05 and a standard deviation of 2.97. A t-test was used to compare the responses from the pretest and the April posttest. The t-test showed a difference of -3.94, which is statistically significant at the .001 level.

The null hypothesis can be rejected. A t-test was calculated to compare the results of the September pretest and the December posttest. These findings from the t-test indicated there was a slight increase in the children's positive attitudes towards cooperative learning. These findings were not statistically significant.

When the t-test was calculated for the September pretest and the April posttest, the findings indicated a statistically significant difference between the means. The results indicated there was a decrease in the student's positive

attitudes towards cooperative learning by the April posttest.

The data were analyzed by calculating the mean for each question and comparing the results of the pretest, December posttest and the April posttest. There were two questions (# 1, 2) whose means increased from the pretest to the December posttest. The mean for each question decreased from the December posttest to the April posttest, but the mean for the April posttest was still higher than the pretest.

TABLE 1
QUESTIONS WHICH SHOWED A DECREASE THEN AN INCREASE

<u>QUESTION</u>	<u>PRETEST</u>	<u>DEC. POST</u>	<u>APR. POST</u>
1. I like working alone on a project.	0.391	1.565	0.938
2. I like having a job during groups.	0.783	1.63	1.313

Six of the questions (#3, 5, 7, 11, 12, 15) had means that showed a decrease from the pretest to the December posttest and another decrease from the December posttest to the April posttest.

TABLE 2
QUESTIONS WHICH SHOWED A CONSISTENT DECREASE

<u>QUESTION</u>	<u>PRETEST</u>	<u>DEC. POST</u>	<u>APR. POST</u>
3. I feel this way about cooperative learning groups.	1.565	1.043	0.75
5. This is how I feel about the kids in my group.	1.174	0.913	0.875
7. I feel like this when my cooperative learning group is working on an assignment.	1.239	1.239	1.0

11. Cooperative learning groups make my class more interesting.	0.978	0.978	0.313
12. I learn more of my schoolwork in my cooperative learning groups.	0.522	0.263	-0.813
15. I work harder in cooperative learning groups.	0.783	0.326	-0.625

The means remained statistically static for questions #6 and #8 from the pretest to each of the posttests.

TABLE 3
QUESTIONS WHICH REMAINED STATISTICALLY STATIC

<u>QUESTION</u>	<u>PRETEST</u>	<u>DEC. POST</u>	<u>APR. POST</u>
6. I work harder when I work alone.	1.63	1.565	1.688
8. Kids fool around during cooperative learning groups.	0.457	0.13	0.813

The last five questions (#4, 9, 10, 13, 14) had means that showed an increase from the pretest to the December posttest, but the means decreased from the December posttest to the April posttest. The April posttest mean was lower than the pretest mean.

TABLE 4
QUESTIONS WHICH SHOWED AN INCREASE THEN A DECREASE

<u>QUESTION</u>	<u>PRETEST</u>	<u>DEC. POST</u>	<u>APR. POST</u>
4. This is how I feel when I am using a social skill in cooperative learning groups.	1.043	1.5	0.75
9. My cooperative learning group knows what to do.	1.239	1.435	1.063

10. Students are expected to stick to their jobs during cooperative learning groups.	2.152	2.217	1.313
13. I feel everyone in my group shared equally on our assignments.	0.783	0.848	0.313
14. I feel more responsibility when working with my cooperative learning groups.	0.522	0.717	-0.063

CHAPTER 5

Summary, Conclusions and Recommendations

Summary and Conclusions

The purpose of this study was to determine if there was a difference in children's attitudes towards cooperative learning during a school year. An attitude survey was administered three times: September, December, and May. The results of each test gave a mean and a standard deviation. A t-test was performed to compare the responses between the pretest and each of the two posttests.

During the first four months, there was a slight rise in positive attitudes towards cooperative learning. During the next four months, the t-test showed a decrease in the children's positive attitudes towards cooperative learning.

The data were analyzed by calculating the means for each of the questions. These data gave the researcher more information about each individual question. Two of the questions (#1 and #2) showed an increase in the mean, declined slightly in December, but the April mean was still higher than the pretest. Question eight relates directly to attitudes of the group of children towards one child, who had difficulties during cooperative learning groups. Regardless of how much encouragement the other members of the group would give him, he would find a way to undermine the group. The other children became frustrated with this child and eventually this child was not successful during cooperative learning groups. On the April posttest results, there was one student who circled

almost all of the sad faces, which produced a negative thirty. This may have biased the results of the April posttest.

There were five questions (#4, 9, 10, 13, 14) whose means showed an increase during the December posttest, but the mean decreased so it was lower than the pretest mean. Each of these questions dealt with the core of cooperative learning. These skills are the critical piece to making cooperative learning successful. Throughout the school year, there were numerous observations of students applying the social skills learned in cooperative learning. There were also many situations where students showed a preference for working in cooperative learning groups.

There was a concern expressed by the children about having to complete the same survey for a third time. This may indicate that the results were not a true representation of how the children really felt about cooperative learning. Additional research in the area of extended use of the same survey instrument is recommended.

While this goes beyond the scope of this study, the following examples may serve as areas of interest for others to pursue additional research. The children would beg to use their groups to complete many of their assignments. When they were given the option of completing an assignment either on their own or in a group, the students frequently chose to use their groups. It was not unusual to see children organizing their own cooperative learning groups and reminding the other children in the group to use their social skills.

The children transferred their social skills from cooperative learning groups

to other situations, such as the playground, lunchroom and in the classroom during non-academic times. When the students would have a disagreement about a situation on the playground, they would use their social skills of "encouragement" and "disagreeing in an agreeable way" to solve their problems. It was common for the boys and girls to use their social skills in a large group discussion or during other problem solving situations. For example, if a child contributed an idea to the class discussion during a science lesson, other children would make comments such as, "good job" or "that's a great idea."

Recommendations

1. This survey needs to be used with a larger sample of children and across grade levels.
2. Cooperative learning should be used in the classroom on a regular basis. Other researchers have found cooperative learning to be a valuable teaching tool.
3. Social skills are a critical part of cooperative learning. Children need authentic practice and applications of social skills in order to be successful in their lives.
4. Interviews of the children should be conducted to find out about their attitudes towards group learning. These interviews would provide more information about the results of the survey.
5. Further research is needed to explore children's attitudes towards cooperative learning.

References

- Anderson, M. (1985). Cooperative group tasks and their relationships to peer acceptance and cooperation. Journal of Learning Disabilities, 18, 83-86.
- Augustine, D. K., Gruber, K. D. & Hanson, L. H. (1989-90). Cooperation Works! Educational Leadership, 47, 4-7.
- Bohlmeyer, E. M., & Burke, J. P. (1987). Selecting cooperative learning techniques: A consultative strategy guide. School Psychology Review, 16, 36-49.
- Brubacher, M., & Payne, R. (1985). The team approach to small group learning. Highway One, 8, 140-149.
- Deutsch, M. (1949). A theory of cooperation and competition. Human Relations, 2, 129-152.
- Edwards, C. & Stout, J. (1989-90). Cooperative learning: The first year. Educational Leadership, 47, 38-41.
- Johnson, D. W., & Johnson, R. T. (1975). Learning together and alone cooperation, competition, and individualization. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Johnson, D. W., & Johnson, R. T. (1984). Cooperation in the classroom. Edina, MN: Interaction Book Company.
- Johnson, D. W., & Johnson, R. T. (1985). Student-student interaction: Ignored but powerful. Journal of Teacher Education, 36, 22-26.
- Johnson, R. T., & Johnson, D. W. (1987). How can we put cooperative learning

into practice?. Science Teacher, 54, 46-48.

Johnson, R. T., & Johnson, D. W. (1989-90). Social skills for successful group work. Educational Leadership, 47, 29-33.

Johnson, D. W., Johnson, R. T., Holubec, E. J., & Roy, P. (1984). Circles of learning: Cooperation in the classroom. Alexandria, VA: Association for Supervision and Curriculum Development.

Johnson, D. W., Johnson, R. T., Warring, D., & Maruyama, G. (1986). Different cooperative learning procedures and cross-handicap relationships. Exceptional Children, 53, 247-252.

Johnson, D. W., Maruyama, G., Johnson, R., Nelson, D., & Skon, L. (1981). Effects of cooperative, competitive, and individualistic goal structures on achievement: A meta-analysis. Psychological Bulletin, 89, 47-62.

Kagan, S. (1989-90). The structural approach to cooperative learning. Educational Leadership, 47, 12-15.

Krathwohl, D. R., & Yarger, S. (1985). Cooperative learning: A research success story. Educational Researcher, 14, 28-29.

Lambiotte, J. G., Dansereau, D. F., Rocklin, T. R., Fletcher, B., Hythecker, V. I., Larson, C. O., & O'Donnell, A. M. (1987). Cooperative learning and test taking: Transfer of skills. Contemporary Educational Psychology, 12, 52-61.

Larson, C. O., Dansereau, D. F., O'Donnell, A. M., Hythecker, V. I., Lambiotte, J. G., & Rocklin, T. R. (1985). Effects of metacognitive and elaborative activity on cooperative learning and transfer. Contemporary Educational Psychology, 10, 342-348.

- Lehr, F. (1984). Cooperative learning. Journal of Reading, 27, 458-460.
- Marring, G. H., Furman, G. C., & Blum-Anderson, J. (1985). Five cooperative learning strategies for mainstreamed youngsters in content area classrooms. The Reading Teacher, 39, 310-313.
- McDonald, B. A., Larson, C. O., Dansereau, D. F. & Spurlin, J. E. (1985). Cooperative dyads: Impact on text learning and transfer. Contemporary Educational Psychology, 10, 369-377.
- Sharan, S. (1980). Cooperative learning in small groups: Recent methods and effects on achievement, attitudes, and ethnic relations. Review of Educational Research, 50, 241-271.
- Slavin, R. E. (1985). Cooperative learning: Applying contact theory in desegregated schools. Journal of Social Issues, 41, 45-62.
- Slavin, R. E. (1987). Developmental and motivational perspectives on cooperative learning: A reconciliation. Child Development, 58, 1161-1167.
- Slavin, R. E., Madden, N, A., & Stevens, R. J. (1989-90). Cooperative learning models for the 3 r's. Educational Leadership, 47, 22-28.
- Yager, S., Johnson, R. T., Johnson, D. W., & Snider, B. (1985). The effect of cooperative individualistic learning experiences on positive and negative cross-handicap relationships. Contemporary Educational Psychology, 10, 127-138.

References

- Anderson, M. (1985). Cooperative group tasks and their relationships to peer acceptance and cooperation. Journal of Learning Disabilities, 18, 83-86.
- Augustine, D. K., Gruber, K. D. & Hanson, L. H. (1989-90). Cooperation Works! Educational Leadership, 47, 4-7.
- Bohlmeyer, E. M., & Burke, J. P. (1987). Selecting cooperative learning techniques: A consultative strategy guide. School Psychology Review, 16, 36-49.
- Brubacher, M., & Payne, R. (1985). The team approach to small group learning. Highway One, 8, 140-149.
- Deutsch, M. (1949). A theory of cooperation and competition. Human Relations, 2, 129-152.
- Edwards, C. & Stout, J. (1989-90). Cooperative learning: The first year. Educational Leadership, 47, 38-41.
- Johnson, D. W., & Johnson, R. T. (1975). Learning together and alone cooperation, competition, and individualization. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Johnson, D. W., & Johnson, R. T. (1984). Cooperation in the classroom. Edina, MN: Interaction Book Company.
- Johnson, D. W., & Johnson, R. T. (1985). Student-student interaction: Ignored but powerful. Journal of Teacher Education, 36, 22-26.
- Johnson, R. T., & Johnson, D. W. (1987). How can we put cooperative learning

into practice?. Science Teacher, 54, 46-48.

Johnson, R. T., & Johnson, D. W. (1989-90). Social skills for successful group work. Educational Leadership, 47, 29-33.

Johnson, D. W., Johnson, R. T., Holubec, E. J., & Roy, P. (1984). Circles of learning: Cooperation in the classroom. Alexandria, VA: Association for Supervision and Curriculum Development.

Johnson, D. W., Johnson, R. T., Warring, D., & Maruyama, G. (1986). Different cooperative learning procedures and cross-handicap relationships. Exceptional Children, 53, 247-252.

Johnson, D. W., Maruyama, G., Johnson, R., Nelson, D., & Skon, L. (1981). Effects of cooperative, competitive, and individualistic goal structures on achievement: A meta-analysis. Psychological Bulletin, 89, 47-62.

Kagan, S. (1989-90). The structural approach to cooperative learning. Educational Leadership, 47, 12-15.

Krathwohl, D. R., & Yarger, S. (1985). Cooperative learning: A research success story. Educational Researcher, 14, 28-29.

Lambiotte, J. G., Dansereau, D. F., Rocklin, T. R., Fletcher, B., Hythecker, V. I., Larson, C. O., & O'Donnell, A. M. (1987). Cooperative learning and test taking: Transfer of skills. Contemporary Educational Psychology, 12, 52-61.

Larson, C. O., Dansereau, D. F., O'Donnell, A. M., Hythecker, V. I., Lambiotte, J. G., & Rocklin, T. R. (1985). Effects of metacognitive and elaborative activity on cooperative learning and transfer. Contemporary Educational Psychology, 10, 342-348.

- Lehr, F. (1984). Cooperative learning. Journal of Reading, 27, 458-460.
- Marring, G. H., Furman, G. C., & Blum-Anderson, J. (1985). Five cooperative learning strategies for mainstreamed youngsters in content area classrooms. The Reading Teacher, 39, 310-313.
- McDonald, B. A., Larson, C. O., Dansereau, D. F. & Spurlin, J. E. (1985). Cooperative dyads: Impact on text learning and transfer. Contemporary Educational Psychology, 10, 369-377.
- Sharan, S. (1980). Cooperative learning in small groups: Recent methods and effects on achievement, attitudes, and ethnic relations. Review of Educational Research, 50, 241-271.
- Slavin, R. E. (1985). Cooperative learning: Applying contact theory in desegregated schools. Journal of Social Issues, 41, 45-62.
- Slavin, R. E. (1987). Developmental and motivational perspectives on cooperative learning: A reconciliation. Child Development, 58, 1161-1167.
- Slavin, R. E., Madden, N, A., & Stevens, R. J. (1989-90). Cooperative learning models for the 3 r's. Educational Leadership, 47, 22-28.
- Yager, S., Johnson, R. T., Johnson, D. W., & Snider, B. (1985). The effect of cooperative individualistic learning experiences on positive and negative cross-handicap relationships. Contemporary Educational Psychology, 10, 127-138.

APPENDIX A

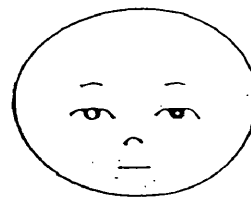
COOPERATIVE LEARNING GROUPS

Sad, Dislike
or Not Agree

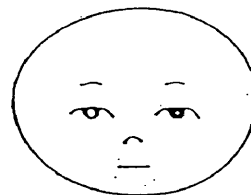
Neutral
or
In-between

Happy, Like
or Agree

1. I like working alone
on a project.



2. I like having a job
during groups.



3. I feel this way
about cooperative
learning groups.



4. This is how I
feel when I am
using a social
skill in cooperative
learning groups.



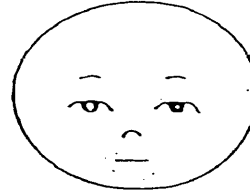
Sad, Dislike
or Not Agree

Neutral
or
In-between

Happy, Like
or Agree

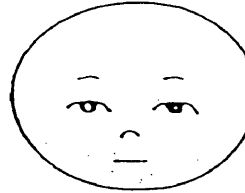
5. This is how I feel

about the kids in
my group.



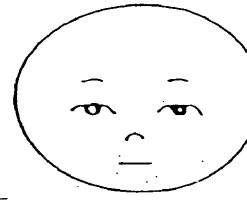
6. I work harder

when I work alone.



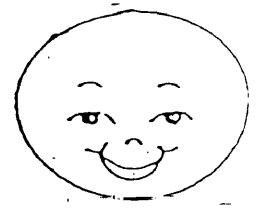
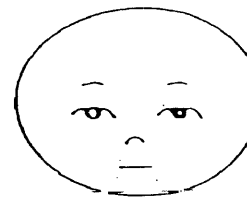
7. I feel like this

when my cooperative
learning group is
working on an
assignment.



8. Kids fool around

during cooperative
learning groups.



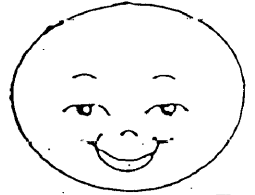
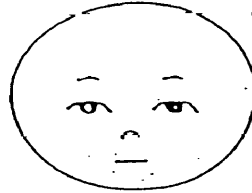
Sad, Dislike
or Not Agree

Neutral
or
In-between

Happy, Like
or Agree

9. My cooperative

learning groups knows
what to do.



10. Students are expected

to stick to their
jobs during
cooperative learning groups.



11. Cooperative learning

groups make my
class interesting.



12. I learn more of

my schoolwork
in my cooperative
learning groups.

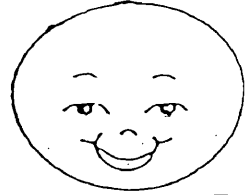


Sad, Dislike
or Not Agree

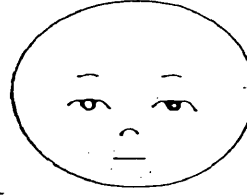
Neutral
or
In-between

Happy, Like
or Agree

13. I feel everyone in
my group shared
equally on our
assignments.



14. I feel more
responsibility when
working with
my cooperative
learning groups.



15. I work harder
in cooperative
learning groups.

