An Investigative Study of How Cooperative Learning Can Benefit High-Achieving Students

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AN INVESTIGATIVE STUDY OF HOW
COOPERATIVE LEARNING CAN
BENEFIT HIGH-ACHIEVING STUDENTS
THESIS

Submitted to the Graduate Committee of the
Department of Education and Human Development
State University of New York
College at Brockport
In Partial Fulfillment of the
Requirements for the Degree of
Master of Science in Education
By
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Brockport, New York
August, 1998
Abstract

This paper was written to represent the findings of the benefits of cooperative learning for high achieving students. During the 1990's there was a major push for supplementing the curriculum with different learning styles. Cooperative learning is one popular example that has been researched a lot to find effectiveness of lesson delivery and benefits for students. Slavin and Johnson and Johnson are among the many advocated for believing that cooperative learning is beneficial in many ways for student development, including high achieving students. The researcher found over and over that what the advocates wrote was substantiated in detail in the research site, by teacher and student responses. Teachers felt that there was a substantial benefit socially and academically when cooperative groups were set up and used correctly and consistently. Students that were surveyed preferred working in cooperative groups to doing independent work. They liked working with peers and helping each other learn. Cooperative learning helps high achieving students to build these life long skills that are essential to survive as a productive member of society.
Acknowledgements

There are so many people that come to mind as I cross a major threshold in my life. People that I would like to thank for enhancing my life in someway, perhaps by saying just the right thing, a simple smile, humor, or having made a memorable statement. Some of this shared wisdom comes from influential members of society, some are very special people that know and love me, and others are the nameless strangers that have had some impact on the decisions that I have made.

I know that it is impossible to encompass everyone for the enlightenment, encouragement, patience, support and strength that they have given me throughout this time in my life, but I would like to try.

I dedicate the popular hit song, Thank You, by Natalie Merchant, to:

My family: Mom, Dad D., Dad S., Cheryl and Kristen, for standing behind me in my decisions, moral support and being my cheerleaders when I needed them. My dear friends, Kenny, Cindee, Randy, for the motivation to get me out of my procrastination mode and the encouragement that kept me going, through thick and thin. Dr. Baker, as a helpful advisor, with words of encouragement, wisdom, and guidance, to accredit me to doing my best work! Dr. Brautigan, who taught me that learning, can be fun, for students of any age, no matter what the curricular area is. And all of the other professors in the education department, who I have had the privilege of taking courses from enhancing my views and knowledge as a young educator. Thank you☺
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Rationale for the Study

Throughout the history of education, there have been many fads of teaching and learning styles being invented, modified, or brought back to the original form. The wonders of these styles are they work for some people but not for everyone. Teachers adapt the essential skills from different styles that work best for them and their students. With the variety of techniques, styles, and personalities that are developing, there is a lack of consistency from year to year.

During the 1990's teachers have become more aware of the students' needs and school districts have changed their mission statements to include giving students an active approach to their learning. One of these approaches is incorporating Cooperative Learning (CL) into education.

This philosophy was established to keep them interested in learning, boost the students self esteem, and teach them the social skills, such as taking different points of view into account, that will enable them to become productive members in our society.
Upon personally reviewing a local school district, in the Rochester area, administration is stressing the importance of teachers to partake in training of learning and teaching styles for implementation in their classroom.

The CL model of teaching is but one of these concepts that have been reborn into the education of students. Cooperative Learning just may be what the education system, the community and employers are looking for in upcoming graduates from the school system. Team players that are willing to work with and help others so that everyone succeeds.

In education there are three types of instruction that educators use: Individualistic (I) where the students work by themselves on the learning task, Competitive (C) where the students work against each other to achieve the goal, that only a few students may attain, and Cooperative Learning (CL) where students work together for a common goal, and everyone learns the same material (Johnson, Johnson, 1991, p. 1: 4, 1:5).

The Cooperative Learning (CL) model brings out a "variable which has been relatively ignored; the need for students to interact with one another as they learn, despite its powerful effects on a wide range of instructional outcomes" (1991, p. iv). There are five main components that must be present in a true CL lesson: Positive Interdependence, Individual Accountability, Group Processing, Social Skills, and Face-to-face Interaction (PIGS-Face). Educators see that Individualistic and Competitive Instruction are prevalent in most traditional classrooms.
There are also teachers that allow their students to use group work, but it is not to be mistaken with CL, unless it incorporates all five of these components.

If there are five main components that are necessary to implement learning, then educators need to provide this learning modality to supplement the education for all students.

**Formulation of Research Question**

When an educator is trained to use CL and then decides to incorporate such lessons into the classroom environment as a method of teaching, they need to see if this method of instruction is going to benefit all students in the class.

Presently, parents, teachers and administrators question the benefits of CL for high achieving students. Since CL is one of the new buzzwords making a big comeback in the realm of education, there are many questions about CL in the classroom and the benefits of such a learning model.

**Statement of the Question**

Once a teacher has committed themselves to adapting the Cooperative Learning model (PIGS Face) into their delivery of content area lessons, they need to assess the effectiveness of this philosophy in their classroom.

The researcher was intrigued with one particular aspect of the controversy of CL, which lead to formulation of this research question. "Do high achieving students benefit from working in Cooperative Learning Groups?"
In this paper the researcher hopes to prove that CL does indeed aid in learning concepts, social skills, and does truly benefit the high achieving students in the classroom setting.

Definition of Terms

For clarification and common understanding of this research, it is necessary to define and explain important terms or concepts, some in which the researcher has created and will be using throughout this study:

1. **Cooperative Learning (CL)** - the instructional use of small groups so that the students work together to maximize their own and each other's learning (Johnson, Johnson, 1991, p.1: 5).

2. **High Achieving (HA)** - the top 33 percent of students (McLeod, Cropley, 1989). HA students are those consistently meet instructional objectives, resulting in 3's on their report card, from the school's 1-3 report card grading system. HA students can usually grasp material the first time, can then apply it and explain it. They are academically well rounded and motivated to learn new material, have a drive to complete work on time, participate in classroom discussions and has leadership qualities. (The researcher and the teachers in the building gave insight as to the make up of HA students that were in the building).

3. **Average** - For the purpose of this research paper will include all students in the classrooms other than the high-achieving students.
4. **Benefits** - Something extra that HA students come away with from the lesson, or promotion of topic interest.


   **P** = Positive Interdependence - Includes mutual goals, joint rewards, shared resources, and assigned role.

   **I** = Individual Accountability - Each person in the group is responsible for knowing all work that group as a whole covered.

   **G** = Group Processing - After each CL lesson/activity the groups need time to discuss how well they are achieving their goals and maintaining effective working relationships among members.

   **S** = Social Skills - Collaborative skills including leadership, decision-making, trust-building, communication, and conflict-management skills.

   **FACE** = Face to Face Interaction - Close physical proximity, students promote each other's learning by helping, sharing, and encouraging efforts to learn.
Limitations of the Study

This research topic was something very important to the researcher because of personal interest. Obstacles: To make this study representative of the community, the researcher wanted a cross-section of grade-levels 1-5. When this data was compiled, due to the number of HA students in each class being considerably lower than the number of other students in the class, it was impossible to make a comparison based on numbers.

The comparison was based on responses/attitudes shown in the survey responses, within the grade level and reported by homogeneous group of HA students and average students.

Another limitation within this research was selection of the teachers. Many teachers were trained to use cooperative learning (CL) but didn’t feel comfortable to have observations made on their teaching style. The teacher's experiences varied in years as well as amount of the usage of CL in their classrooms on a regular basis. The amount of times that the researcher could actually see and evaluate the method of students using CL and if CL was present, it being used correctly incorporating all of the five components of true CL.

Another aspect to keep in mind is that this research site was a brand new building. Being a school of choice, there were high expectations for teachers to be super educators. Teachers were overwhelmed with settling into a new building, new routines, co-workers, and establishing themselves in a new community.
During the same time, they had the pressure of going through summer training for the new technologies in the building that they were expected to utilize in teaching, starting a new school year, getting to know new students, and being the best educator that they were used to being.

Teachers were required to implement computers and many new technologies of teaching into their lessons, while adding other learning techniques, such as Multiple Intelligence, Mind Mapping, and Cooperative Learning, just to name a few, to their current teaching styles.

Many teachers may have been trained in and used cooperative learning in their classrooms, but due to the stresses listed above, the extent and consistency varied throughout the building. The volunteer teachers and classes, which were selected and used for the basis of this research project were screened for meeting the researcher's guidelines, leading to the information presented in this paper.

Summary

Cooperative learning (CL), though not a new concept to education, is making a popular come back into the classroom environment. There are many opinions and questions that arise, pertaining to the effectiveness of CL lessons and the benefits to high achieving students, which will be discussed in chapter two. Administration advises all teachers to expand their own professional knowledge of alternative teaching/learning styles through participating in professional development courses that the district offers.
Once a teacher participates in the training of choice, they learn how to use alternative teaching techniques and implementation of this style into the curriculum they are currently using. In this particular district there has been a trend of popularity among teachers to partake in the Cooperative Learning training, leading to a rise in modified teaching styles throughout the district buildings. With the importance of educators becoming familiar with CL and use it properly in their classroom, following PIS FACE, the students will learn to be independent thinkers and collaborative group workers. The CL method of teaching is on the rise in this research site.
CHAPTER II

Review of Literature

The Benefits of Education

New York State law mandates a public education for all children, from the time a child reaches the age of five until their sixteenth birthday, when they can choose to continue to further their education. Each state has its own curriculum developed for educators to use for educational implementation in their classrooms to meet the needs of people in that population. There are many purposes of an education: To gain knowledge, the fundamentals, (reading, writing, and mathematics) useful to become a productive member in society, learn social skills, organization and the ability to grow with new experiences.

Slavin (cited in Jules, 1992) "Cooperative Learning (CL) is rationalized as providing the means for students to learn the social skills needed for functioning in the world today." Olafur Olafsson, wrote in Business Week, November 25, 1991, stating that a major need in today's world of work, is for more school and college graduates to be higher order thinkers. CL has great potential for developing these skills in students, through problem solving activities, as well as the benefits of cooperating with each other (Jules, 1992).
"A major concern of all educators is how to challenge the academic capabilities of all students to maximize their intellectual development" (Johnson, Johnson, 1991).

What Cooperative Learning Entails

Cooperative Learning is the new catch phrase. The problem is that it's the phrase and not the practice that is being seen everywhere. Every time two or more students are seated together, it is assumed, incorrectly, that cooperative learning is taking place. The learning takes place only if the stage has been set correctly by an informed teacher. CL doesn't just happen, it needs to be taught. Just as any new skill, new social skills need to be introduced, modeled, discussed, and practiced (Fenton, 1992). That is where PIG'S FACE, as described by Roger and David Johnson (1991, iv) comes into play, as described below.

*Positive interdependence* is providing the students with a reason to work together. Sometimes it is easier to do things by yourself. This is where it is very important for the teacher to provide an incentive for students to want to help one another and work together. The feeling that the group must pull together to survive, "a sink or swim" tactic must be emphasized in the interaction of the group, for example the group would use one book to share the information.
Individual accountability stops a student from sitting back and letting one or two other students do all the work within the group, they must understand that somehow every individual will be accountable and responsible for the material they are covering, for example, they would be individually tested.

Group processing is an active discussion of the groups' sessions that are generally held at the conclusion of a group activity. If time is not given to allow the groups to verbalize what went well and what may need some improvement, it can be detrimental to the development of this CL group.

Social skills are another important objective of a CL lesson. One skill at a time is introduced, and then practice. An example of this would be: Eye contact, using first names, using words of encouragement, taking turns, and talking with "ten-inch" voices.

Face to face interaction can occur only when students really are face to face. Moving desks together and sitting as close to each other as comfortably possible, while keeping eye contact to communicate easier within the group. This creates a comfort level and conducive environment for CL to take place (Fenton, 1992). In order for lessons to be considered CL lessons, all five of these processes must be set in place and practiced.
Forms of Cooperative Learning

Cooperative Learning can take on three basic forms: 1) students may be assigned specific tasks with a larger group goal; 2) students may work together to complete a common group product; 3) students may engage in group activities and be rewarded a grade based in overall group effort and achievement.

Research on CL has revealed that student achievement in the elementary school can be consistently increased when individual learners are rewarded on the basis of the learning of all group members (Silvern, 1990, p. 258).

Disadvantages of High Achieving Students

There are times when high achieving (HA) students are looked down upon in school because of the behavior and attitude that may be seen in the traditional classroom setting. Some of these disadvantages are:

1) HA students use up classroom lessons and materials faster than the class as a whole, causing them extra "free-time" that can lead to attention seeking behavior.

2) HA students hate the drill and repetition that helps others learn the basic facts they already know, leading the HA to feel bored and not challenged.

3) HA students can be perceived to be a troublemaker (speculative, adventurous, high risk-taker, smart aleck) for pointing out the facts: "Why should I write out my times tables if I already know them?" This can lead to socially developmental problems, being called a "know it all", lessening their self worth and confidence.
4) HA students may feel isolated and have difficulty relating to peers, being the first one done and feeling that they don’t fit in with their peers (Alvino, Gourley, 1977).

When an educator keeps HA Jane from getting bored, this situation also helps other students learn, by collaborating with other students. HA students can help others move forward while preparing for leadership roles that are so important in our society’s future (Adams, Hamm, 1992, p.132).

The disadvantages that HA students face in school can be addressed in cooperative learning (CL) lessons. They allow students the social interaction within the group and give all students the chance to bring something to the group. "When students at different levels of cognitive development work together, truth wins out, cognitive development is not reversed" (Johnson, Johnson, 1992).

Cooperative Learning and Student Achievement

Slavin (1991) stated that his personal philosophy of education is that, "all students should be helped to achieve their full potential; Enrichment is appropriate for all students." Cooperative Learning is often offered as one means of teaching the very heterogeneous classes created by untracking and because of the widespread assumption that if homogeneous large groups are bad, then heterogeneous small groups must be good (Slavin, 1988, 1991). Overwhelmingly, research shows that students of all ability levels learn more and have better attitudes (towards others) when they work together as a group (Adams, Hamm, 1992, p.130).
How Should Cooperative Learning for High Achieving Students Be Used?

Overwhelming evidence indicates that ability grouping does not enhance student achievement in the elementary school setting. Alternatives are forms of heterogeneous grouping, mixing ability levels within the group. Situations such as these allow for students to experience learners of all abilities, ethnicity, and socioeconomic status. Cooperative Learning (CL) uses these categories as building blocks for a great deal of task-focused interaction.

Students that work in CL groups have varying abilities, skills, and talents, yet they must work together toward a common goal, whether it includes studying together or completing group assignments (Silvern, 1990).

In any educational setting, CL is not the only method used when teaching, it should not be considered the be-all-end-all technique when teaching HA students (Johnson & Johnson, 1991, p. 24).

David and Roger Johnson (1992) state that when considering how to challenge HA students, CL has to be considered. However, that is not saying that they should always learn in this fashion. They brought attention to these three important factors:

1) HA students should not always work in CL groups, there are times when students should work individualistically and times where they compete to see who is best.

2) These students should not always be placed in heterogeneous cooperative groups and at times segregated for acceleration.
Well structured CL groups are quite different from traditional class groupings and poorly structured cooperative groups. In order to be most effective, cooperation must be structured so that all group members: (a) believe they are responsible for and benefit from each other's learning, (b) promote each other's learning by helping, sharing, assisting, and encouraging, (c) are accountable for their fair share of the work, (d) utilize leadership, communication, decision-making, trust-building, and conflict resolution skills needed to ensure the success of each member, and (e) regularly process how effectively their group is functioning. (PIGS FACE) (Johnson & Johnson, 1991).

Much attention has been on structuring materials and organizing instruction to promote the processing by group members of their collaborative efforts to achieve. Theoretically, empirically, and practically, group processing has been ignored. When members of CL groups discuss how well their group functions and how they may improve its effectiveness has a sizeable and positive effect on student achievement. Members increase productivity by gaining insight and offer feedback to reinforce collaborative skills. Up to three weeks after the end of the unit, achievement gains stayed considerably higher than students whose groups did not process or use individualistic relations between group processing and group productivity. Increased self-efficacy by directing attention to skillful collaborative behavior reducing personal inhibitions or self-doubt (Johnson & Johnson, 1990, p. 395).
The Benefits of Cooperative Learning for High Achieving Students

Over the past fifteen years, David and Roger Johnson, have conducted nine studies examining the impact on HA students of learning individually (I), competitively (C), and cooperatively (CL) in homogeneously high ability groups and cooperatively in academically heterogeneous groups (Johnson & Johnson, 1992).

Whereas there is, a time and place, for competition and individual work, the current research proclaims in bold letters that CL can encourage both academic excellence and healthy affective development. As we move through the last decade of the 20th century, it appears that the ideas and procedures for emphasizing group processes in the classroom have gained legitimacy and acceptance among researchers (Schmuck and Schmuck, 1992, p.13).

Johnson and Johnson’s (1992) findings point to high achieving (HA) students benefiting academically when cooperative groups are carefully structured so that each group member becomes a stronger individual through exchange of ideas and support in the group.

Mastery and retention of assigned material, for HA students, has been found higher in CL settings than in I or C learning situations. HA students gain academically as well as promoting their achievement by conceptualizing information, critically thinking, and developing higher-level reasoning strategies, through CL lessons (Johnson & Johnson, 1992).
Webb (cited in Slavin, 1991) believes that HA students benefit from Cooperative Learning in part because their peers, male and female, encourage them to learn, participate, and learn best by describing their current state of knowledge to others. The conclusions from David & Roger Johnson (1990), are that these and other studies seem clear; HA's gain academically from working with a wide variety of students using these social and educational skills.

Those students in the top third, middle third and lower third, have all gained more knowledge consistently, relative to similar students in control classes, as long as the CL learning program provides group goals and individual accountability (Slavin, 1991).

Slavin (cited in Jules, 1992) has indicated that analysis of thirty-eight studies comparing individualistic (I), competitive (C), and cooperative (CL) methods in classroom teaching. Thirty-three studies reported greater academic achievement for students in cooperative lines. Others found CL develops and enhances student's self esteem, promotes well being, encourages peer academic support and promotes long-term storage of information.

Most HA students will do well wherever they are. However, with the use of effective CL programs, especially those that differentiate instruction within the class HA's are likely to benefit in many ways: learning other methods to problem solve, be more motivated to learn and interested in and like the content better when cooperative group work is the major strategy in the learning activities (Ogan & Rottier, 1991).
Educators of HA students should be in the forefront of the CL movement, insisting on the use of forms of CL known to benefit high achieving students (Slavin, 1991).

**Cooperative Learning and Effects on High Achieving Student Achievement**

Many of the concerns expressed about HA students and CL are based either on misconceptions or on experience with inappropriate forms of CL.

Slavin (1991) writes, First, many educators and parents worry that HA students will be used as "junior teachers" instead of being allowed to move ahead on their own material. This is confusing CL with peer tutoring; in all cooperative methods, students learn material that is new to all of them.

Two conditions are essential if the achievement effects of CL are to be realized. First, groups must have a group goal and second the success of the group must depend on individual learning of all members in the group. Individual as well as group accountability for motivation and success is the key (Slavin, 1988).

CL motivates and increases academic performance. Encouraging active learning by teaching students the effective skills to discovery and problem solving, respect for diversity and differences when working with racial and ethnic acquaintances and friendships for a common goal, and learned respect for mankind, that will last them a lifetime (Adams & Hamm, 1992, p. 5).

**How High Achieving Students Feel About Cooperative Learning**

When Jules (1992) interviewed students, the main focus was on the student insights into Cooperative Learning (CL) and how and why CL seems to benefit students affectively and/or cognitively.
One student, Garth, recalled not liking CL in the beginning because the groups would quarrel about everything. "As time went on, he stated, we learned more skills to get along together. Now I like CL because it makes me understand my schoolwork. I used to get more things wrong and now I ask more questions and am sure of myself."

Other peers commented that “CL brings people they might not have associated with closer together. Groups encouraged team members, 'keep it up, good point', allowing shy people to participate and begin to share their views on topics. CL makes us want to learn and share" (Jules, 1992).

Some evidence suggests CL can have different effects among groups of students based on the sex of the student, teacher, and ethnicity, may lead to different CL attitudinal outcomes (Jules, 1992).

Summary

There are three different learning styles that educators use to deliver a lesson: competitive, individualistic, and cooperative learning. Studies indicate that cooperative learning is the most beneficial, though not the only, method of learning for high achieving students to learn. Cooperative learning lessons are made up of five main components, PIGS FACE, which must be in place for student success. Individual accountability and group processing are the two most substantial pieces that enable benefits for high achieving students to take place.
These benefits include: Greater social skills, higher self esteem and peer relations, trust building, utilize leadership roles, decisions making roles, strengthen communication skills, use higher-order thinking skills, and mastery and retention of material. High achieving students respond positively to working and learning in cooperative learning groups.
CHAPTER III
Research Design

Upon developing the many stages of this research the prerequisite was to seek teachers at the research site that had the necessary CL training and were supplementing the student's education by consistently using this method in their classroom. The following steps included: Selecting and interviewing teachers in depth about the extent of their training, philosophy, attitudes and usage of CL, and setting up appointments to observe their students in action with CL activities. After classroom observations attitudinal surveys were given to all students that participated in the CL activity, in order to evaluate their feelings and attitudes about CL. Finally, the researcher gathered all data from teachers and students, through interviews, surveys and classroom observations.

This data would be analyzed to discover if HA students benefit from CL. This research was conducted the second half of the school year, which enabled teachers and students to feel comfortable with the routine of CL and how their teacher used it.

Selection of Teachers for the Study

An eight-question survey was explained and distributed to all staff members at a staff meeting.
Teachers that responded to the survey were then evaluated based on formal CL training, usage on a regular basis, and chose Always-Sometimes (out of an Always-Sometimes-Never scale) (See Appendix A) for the extent in which they used all five necessary components of PIGS-Face in CL lessons. Next, acceptance notices were sent out to the six teachers that qualified for this research purpose (See Appendix B). Appointments were set up with these individual teachers, and they were interviewed with 13 questions to find out personal usage, implementations and feelings of using CL in their classroom as a delivery of content material (See Appendix C). Then the Questions were extended towards HA students in their particular class. Dates were then arranged for the researcher to make observations of the CL lessons in progress and use the nine questions, teachers answered, that were specific to their lesson with expectations and outcomes for the students from their lesson (See Appendix D).

Selection of Students for the Study

Each of the six teachers gave the researcher a class list labeled with high, high-average, average, low average and low.

High achieving (HA) students were selected from the high and high-average group of students, that fit the definition given to HA, in the heterogeneous classes to be the students of focus in CL lesson observations. Classroom observations were then made, using a worksheet titled 'Classroom Observations' for the full lesson period of each activity (Johnson & Johnson, 1991, see Append. E). Observations were made on each student, in CL groups at all grade levels listed for study.
Observations included: group interaction, social skills, sharing of materials, and listening to conversations among the groups. The CL process was observed and notes were kept on the individual students, HA and average, within the group and how many times, and which, students were using the five components of the CL model. Instrument 3:3 Observing Work in Our Class: Form 1 (Schmuck, Schmuck, 1992, See Appendix F).

Research Make-up

Of the six teachers that volunteered for observation of their CL lessons, the grade-level make-up consisted of: One, first grade class, one, second grade class, two, third grades classes (third grade A and third grade B), one, fourth grade class, and one, fifth grade class. There number of HA students in this study was 63, through all grade levels and 135 other students in the make-up of the classes that also were participants in this study. The researcher explained the procedure of the survey to the students.

Students were told that this was anonymous and that their teacher would not see their survey responses, and that they should answer as honestly as possible. Each question was read aloud to each of classes, one grade level at a time. This ensured that the questions were not interpreted differently among classes/grade levels. Some students did ask for clarification on some questions and answers enabled them to answer the survey to the best of their knowledge and for the researcher to clarify clearly for the next group of students taking the survey.
After classroom observations of the CL lessons took place, the researcher surveyed all students that participated in these lessons (See Appendix G).

**Summary**

The selection of teachers was based on the amount of cooperative learning training that they received and the amount of teaching time they spent utilizing cooperative learning groups in their classrooms. The students that participated in this project were selected by their teacher, based on their motivation, participation, attention given to work and provide details, and being an overall well rounded individual. This study was based on observing, 135 students, including the 63 high achieving students, first through fifth graders that participated in cooperative learning lessons.
CHAPTER IV

Data Analysis

The purpose of this study was to see if high achieving (HA) students benefit from cooperative learning (CL) activities/lessons. Research has shown over and over in this paper that CL does benefit HA students in many aspects, however, more successfully with certain main components in place. Of the five components of CL model of PIGS FACE, all are important, although, Group Processing and Individual Accountability are the most beneficial to HA students.

Results From Teacher Surveys

There were two important partnerships in place for the researcher to be able to collect the necessary data. One of which being the teachers that taught using cooperative learning (CL) in their classrooms and two, the students, especially the high achieving (HA) students, who were the main focuses of this research paper. The teachers were surveyed regarding: A) How they felt about grouping heterogeneously for CL lessons? and B) How they felt HA students in their classrooms benefited from CL lessons? Responses are represented here by grade level, with answers to questions A and B respectively.
The first grade teacher responded to the above questions: A) “I feel that it is sometimes important to group heterogeneously at this grade level because of readability among group members.” B) “Leadership, personality, individual drive for doing good work, organization, listening skills, attention skills, and academics are all taken into account and allow different ability levels to bring his/her best talents to the groups.” “They gain patience, appreciation of different abilities, honing of social skills, ability to use the factual information in an application way, pride in ability, enjoyment in the success of a peer group situation.” “One specific goal I stress for myself, observing my students is to focus on positive interdependence and individual accountability.” “This helps prevent “bossiness” or one student “taking charge” and doing all the work on their own.”

The second grade teacher responded: A) “I feel that it is important to group heterogeneously to allow the HA students to be good role models and to allow modeling of “proper” student behavior for students with poor work habits and take away peer pressure that HA students sometimes face.” B) “They have the opportunity to teach each other and hopefully they learn tolerance and patience for students with different abilities.”

The third grade teacher of classroom ‘A’ responded: A) “I feel that grouping heterogeneously gives a wider range of skills to all students, includes peer support, and learning to share with and ask each other for information is an important step in their education.”
B) "HA students social skill abilities improve and students are able to share abilities and learn different styles of other students."

The third grade teacher of classroom 'B' responded: A) "I group heterogeneously to benefit all of the students in my classroom, if I didn't, lower students wouldn't get anything accomplished and HA students would focus on the 'I' not the 'we' in group work and listen to each other less." B) Social gains are made among HA students and they learn to work with students of different abilities."

The fourth grade teacher responded: A) "I feel that we have multiple intelligence and all students can learn from each other with greater growth from mixed ability grouping. B) "HA students learn to approach problems in a variety of ways, learning to work cooperatively with their peers of lower ability and appreciate their abilities and talents."

The fifth grade teacher responded: A) "Heterogeneous grouping enhances the learning experience and social skills for all of the students in the class." B) "Often, I hear, HA students restating learned material in new ways. When I use CL, most students score better on individual tests and my students' state that they enjoy learning this way!"

Conclusions From Teacher Surveys

All of the teachers surveyed, grades one-five, thought that it was especially important to group students heterogeneously for cooperative learning (CL) lessons and that high achieving (HA) students be befitted from working in mixed-ability groupings.
In conclusion, as Johnson and Johnson stated, when HA students learn in CL groups the following benefits occur: They share knowledge and learn to appreciate working with peers with different abilities and talents (positive interdependence), individual drive for doing well and higher test grades (individual accountability), cooperating and discussing among group members for successful learning (group processing), develop and use better social skills when communicating with peers in groups (social skills), working together on the same task within a group, sitting closely together and utilizing social skills with a focus on the curriculum (face to face interaction). The information above represents all five components of the CL model and that when these teachers used CL in their classrooms, it was beneficial in many ways to the HA students they taught.

Although many of the teachers mentioned social skills as being a major benefit to high achieving students. As the grade levels progressed, higher level reasoning skills, relying on one another for learning new material and restating new material in a different way, were being used among the HA students within CL groups.

Student Survey Analysis

In order to utilize the data more efficiently, the researcher, categorized the survey questions into six categories, (PIGS Face plus a category for attitudinal (A) responses) for easier classification of analysis on how high achieving (HA) students perceived learning in cooperative learning (CL) groups.
Results from student surveys were compiled and graphed analyzing the information of HA students by grade level and then the information of the rest of the class, the ‘average’, students, by grade level to show the conceptual outcomes for potential benefits that HA students noticed from learning through CL lessons.

Student Survey Results

From the student surveys that were analyzed, the researcher has found that students feel motivated to participate and feel accepted within their peer group. Observations that were made, showed that when social skills were established within a group, most students, no matter what ability level, enjoyed working in their CL group and sharing ideas and materials. They enjoyed peer interaction and sharing what they knew with their group, no matter how big or small their input, they were a productive member and contributor to the learning for themselves and their peers.

These graphs represent the responses from the student surveys. The breakdowns on numbers of questions are represented here: positive interdependence (P) six questions, individual accountability (I) two questions, group processing (G) one question, social skills (S) ten questions, and face to face interaction (Face) seven questions and eight, attitudinal (A) questions.
**First Grade HA Results**

There were eight, first grade high achieving (HA) students that were surveyed and these are their responses to the cooperative learning (CL) survey.

*P* results: Questions (Q) 3, 4, 7, most chose always and Q 5 and 6 were tied for always/ sometimes as the most popular choice.

*I* results: Q 23 most chose always and Q 24 always/sometimes responses were tied.

*G* results: Q 31, always was selected most often.

*S* results: Q 9, 10, 11, 13, 14, 15, 16, most students chose always, Q 12, 17 and 19, sometimes was the chosen most often, and Q 8, never was the highest response.

*Face* results: Q 25, 28, and 30, always was the most chosen response, Q 27 and 32, were tie between always/sometimes, and Q 26 and 29, never was the highest response.

*A* results: Q 1, 2, 10, 18, 20, 21, 33, and 34 all chose always most often.

In conclusion, student responses show that they believed they had individual accountability and group processing a lot in their CL lessons, which substantiates the research of chapter 2, that CL does benefit HA students.
Second Grade HA Results

There were nine, second grade HA students that were surveyed and these are their responses to the CL survey.

$P$ results: Q 3, 4, 5 and 7, most students chose always and Q 6 sometimes was chosen most often.

$I$ results: Q 23 students mostly answered always and Q 24 always/sometimes/never were tied.

$G$ results: Interesting response with this group to Q 31, always/sometimes/never were tied.

$S$ results: Q 9, 11, 15, 16, 17 students selected always most, Q 8, 12, and 13 sometimes was selected most often, Q 14 and 19 tied between always/sometimes being the most selected.

$Face$ results: Q 25, 27, 32 students selected always most often, Q 28 and 30 sometimes was selected most often, and Q 26 and 29 never was the most selected choice.

$A$ results: Q 1, 20, 21, and 33 selected always the most, Q 2, 10, and 18 selected sometimes most often, and there was a tie between sometimes/never for Q34.

In conclusion, the student responses were indecisive to many of the questions. Hypothesis could be made that either they do not use cooperative learning on a regular basis or that they did not understand how to respond to some of the survey questions.
Third Grade ‘A’ HA Results

There were thirteen, third grade ‘A’ HA students that were surveyed and these are their responses to the CL survey.

P results: Q 7, was always was selected most often, Q 4 and 5 sometimes was chosen most often, and Q 3 and 6 never was the high response.

I results: Q 23, always was chosen most often and Q 24, was tied between always /sometimes.

G results: Q 31, always was selected most often.

S results: Q 9, 11, 16, and 19, always was selected most often, Q 12, 13, 14, 15, and 17, sometimes were most frequently selected, and Q 8, never was high.

Face results: Q 25, 27, 30, always was selected most often, Q 32 sometimes was selected most often, and Q 26, 28, and 29, never was selected most often.

A results: Q 18, 20, and 21, always was selected most often and Q 1, 2, 10, 33 and 34 were answered sometimes most often.

Conclusions that can be drawn from the student responses are that they use cooperative learning regularly and truly enjoy and believe there is some educational benefit to doing so.
Third Grade ‘B’ HA Results

There were eleven, third grade HA students that were surveyed and these are their responses to the CL survey.

\textit{P results}: Q 4 and 5, always was selected most often, Q 3 and 7, sometimes was selected the most often, and Q 6 was tied between sometimes and never.

\textit{I results}: Q 23 and 24, responses were always high on both.

\textit{G results}: Q 31, sometimes was the highest response.

\textit{S results}: Q 8, 9, 11, 12, 15, 16, 17, and 19 always were selected most often and Q 13 and 14, sometimes were selected most frequently.

\textit{Face results}: Q 25 and 27, always was selected most often, Q 30 and 32, sometimes was the highest response, and Q 26, 28, 29, never selections were highest.

\textit{A results}: Q 10 and 21, always was selected most often, Q 1, 2, 18, 20, 33, and 34, sometimes was selected most often.

In conclusion, students feel comfortable using cooperative learning in their classroom and results could lead to possible benefits from these activities.
Fourth Grade HA Results

There were eleven, fourth grade HA students that were surveyed and these are their responses to the CL survey.

P results: This group had no responses for always that were high. Q 4, sometimes was chosen the most, Q 3 and 6, never was selected the most, and Q 5 was tied between always/sometimes, while Q 7 was tied between sometimes/never.

I results: Q 23 and 24, responses were almost always on both accounts.

G results: Q 31, sometimes was selected most often, with never only one response away from a tie.

S results: Q 9 and 17, always was selected the most, Q 11, 12, 13, 14, and 15, sometimes was selected most often, Q 16, the response of never was highest, and Q 8 and 19 were tied between always/sometimes.

Face results: Q 39, always was selected the most, Q 26, 27, and 28, sometimes was selected most often, Q 29 and 32, never was selected most often, and Q 25 responses were tied between always/sometimes.

A results: Q 21, always was the most selected response, Q 1, 2, 10, 18, 20, 33 and 34, sometimes was selected most often.
Conclusions that can be drawn from this group's surveys are that they do not feel comfortable working in cooperative learning groups. This could be for different reasons, such as not having a cohesive group to be using CL with or not having introduced CL correctly. It is doubtful with these responses that HA students in this class would benefit overall from the CL experience.
Fourth Grade HA Students

Positive Interdependence

Group Processing

Face to Face

Individual Accountability

Social Skills

Attitudinal
Fifth Grade HA Results:

There were eleven, fifth grade HA students that were surveyed and these are their responses to the CL survey.

*P* results: Q 5 almost always was the high response, Q 3, 6, and 7, never was selected most often, with Q 4 tied between always/never (quite interesting data).

*I* results: Q 23 and 24, responses were almost always.

*G* results: Q 31, almost always was the highest response.

*S* results: Q 8 and 14, always was selected most often, Q 11, 13, 15, 17, and 19, sometimes was selected most often, Q 9 and 16, tied between always/sometimes.

*Face* results: Q 25 and 32, always response was selected most often, Q 27, 29 and 30, sometimes was selected most often, and 26 and 28, never was chosen the most.

*A* results: Q 21, always was selected most often and Q 1, 2, 10, 18, 20, 33, and 34, sometimes was the most selected response.

In conclusion, this group felt comfortable using CL methods in learning thus could lead to benefits for the HA students in the classroom setting.
The researcher thought it necessary to bring attention to and focus on a few specific questions and responses that HA students gave to them. In question 21, students were asked 'I feel I am a high achiever and I do my best in school.' This is an important question to see where they see themselves in the realm of learning. Of all students, in all grades, that were surveyed almost all of the students responded to always, with the exception of 1 or 2 students per class that chose sometimes or never in one case. The conclusion drawn from this is that these students know that they work hard and want to learn as much as they can from being in school, they will not tolerate what they think is a waste of their time.

Question(s) (Q) 26, 28, and 29, were worded so that the choice of never would be the best choice for a student in a cooperative learning group would select if the student were receiving the full benefit from this concept of learning and sharing information. The Following responses are broken down by HA grade level by question number:

Q 26 'In my group I do all the work'

First grade HA students, never was the highest response.
Second grade HA students, never was the highest response.
Third grade-A HA students, never was the highest response.
Third grade-B HA students, never was the highest response.
Forth grade HA students, sometimes was the highest response with never as a close response.
Fifth grade HA students, never was the highest response.
Q 28 'In my group I feel that no one listens to me'

First grade HA students, always was the highest response.
Second grade HA students, sometimes was the highest response.
Third grade-A HA students, never was the highest response.
Third grade-B HA students, never was the highest response.
Forth grade HA students, sometimes was the highest response with never as a close response.
Fifth grade HA students, never was the highest response.

Q 29 'In my group I do all the talking,'

First grade HA students, never was the highest response.
Second grade HA students, never was the highest response.
Third grade-A HA students, never was the highest response.
Third grade-B HA students, never was the highest response.
Forth grade HA students, never was the highest response.
Fifth grade HA students, sometimes was the highest response.

Conclusions to the responses from these three questions, HA students do not feel that they carry the burden of work and feel that they have say in their learning as does their peers. This is a very important feeling for students to have working in a CL group.
Q 33 asked HA students 'I feel that I learn better when I work in a cooperative learning (CL) group.' The responses to this question were interesting. The first and second grade responses showed almost always as a preference to learning, while the answers to the two third, the fourth and fifth grade classes, sometimes was selected most often with always/never tied with the average of three students choosing alternative methods to learning. Conclusion to these responses is that overall HA students like working and learning in CL groups.

Focus was then brought to the student survey responses on the two most specific areas of CL that researchers mention HA's benefit from: Individual accountability (I) (Questions 23, 'We are responsible for knowing the work we do in our groups' and 24, 'We are tested on the material we learn in our groups') and Group processing (G) (Question 31 'After we finish a group activity, we get to talk about things we did well, or things we need to change'). The responses, always, sometimes, and never, were assessed per grade level and homogeneously, reporting High Achieving and Average students separately.

First grade HA student responses were high in both categories, for I and G, leading to conclusion that these HA students benefited from the effectiveness of CL in their classroom.
Second grade HA student responses represented a mixed feeling among the students. Question (Q) 23, always was selected the most, but Q24, was tied between always, sometimes, and never. Q31, representing G, was also tied between always, sometimes, and never.

Concluding from this class that CL may not have been consistently used within their classroom on a regular basis, may not have a significant impact on HA in this setting.

Third grade A-HA student responses for I, most chose always for Q23 and tied between always and sometimes to Q24 and always was very high representing G. Conclusion is that this class uses CL regularly and teacher allows for G most of the time, but they may not always be tested on the material learned, but still accountable for the information covered, leading to a benefit for HA students.

Third grade B-HA student responses for I were almost always for both questions in the group. Responses for G, however, most student chose sometimes. Conclusion, that there may be a benefit to HA students in this group but without the constant G, not sure of how significant it would be.

Fourth grade student responses for I, were almost always, while for G, sometimes to never rated almost always. Conclusion, there may be a benefit to HA students educationally, but without G on a consistent basis, the group won't grow.

Fifth grade student responses were almost always for I and similarly so with G. Conclusion, that this teacher is comfortable using CL in the classroom and the HA students benefit from CL within the group.
Comparison Responses from the Average students by grade level without conclusions:

First Grade Average: I and G were both almost always.

Second Grade Average: I, Q23 was almost always and Q24, sometimes was selected most often. G, was represented as sometimes the most often as well.

Third Grade-A Average: I, Q23 was almost always, Q24, sometimes was selected most often and G, was represented as Almost always.

Third Grade-B Average: I, for both questions, almost always was selected more often and G, sometimes was selected more frequently.

Fourth Grade Average: I, was almost always was selected, and G, was close with sometimes in the lead, with always and never, tied for responses.

Fifth Grade Average: I, both questions were answered almost always, and G, responses were tied between always and sometimes. (See Appendices H-M)

Summary

Teachers surveyed, found there to be many benefits among using cooperative learning in their classroom. Some of the benefits included better social skills, learning to work with people of various abilities and higher test scores. Students surveyed, most high achieving students surveyed did not believe that they did all the work in their group, most, felt that their ideas were listened to and taken into account for group decisions, and that they participated equally in the group discussions. Overall, most, high achieving students agreed that they liked working with peers in cooperative learning groups, sharing the learning process and that this method learning became more fun.
CHAPTER V
Summary, Conclusions, and Recommendations

Summary

Through extensive research, reading of journals, classroom observations, and surveys among teachers and students, the findings show that when teachers know how to use cooperative learning, utilizing all five components of CL, established by Johnson and Johnson, that HA students within the group will benefit in many ways from this type of learning activity. CL can be a very challenging theory to put into place with all classrooms and should be something that the educator feels comfortable with using, for they are the role model!

The representation of the survey analysis in comparable at this point between HA and Average students within the same classroom. The responses were similar in each classroom from the HA and average students, which enabled the researcher to make the following conclusions:

The students that continually answered similarly with their heterogeneous peers represented that they feel comfortable learning, using the cooperative learning (CL) method.
Student surveys that represented almost always for the individual accountability and group processing questions, shows that their teachers were comfortable using CL as a teaching method to establish a positive environment in their classroom.

The researcher was somewhat surprised at the findings of this study. Expectations of the benefits for high achieving students were there, from previous journals that were read. One specific finding of interest was that the older grade level students were able to state themselves that they noticed benefits from working with peers in CL groups.

Points of interest were with how teachers felt about using cooperative learning and how HA students responded to this learning style. Many of these students were introduced to some form of CL since kindergarten. As they grow and graduate to the next grade level, they notice that to some extent not all teachers will use this method called cooperative learning, differently. Although teachers have different teaching styles and students have different learning styles, conclusions have been made that benefits at many levels take place when students at young ages are exposed to CL and when the teacher feels comfortable using it, and do so fluently, students will notice.

Through extensive research, reading journals, classroom observations, and surveys among the selected teachers and students, lead to the following findings: When teachers know how to use cooperative learning and utilizing the five components of cooperative learning, established by Johnson and Johnson, that high achieving students within the group will benefit from this type of learning activity.
CL can be a very challenging theory to put into place with all classrooms and should be something that the educator feels comfortable with using, for they are the role model!

Chapter I entailed that students need to be more prepared for heading into the real world and ready to work productively as well as cooperatively with coworkers. All students need to be academically challenged, there are times when students should learn with a *competing value*, to see who is the *best*, times when they work by themselves on a task, to do their best, and times to work cooperatively for student to work together on what is best for all of the group members. Cooperative learning is the method that best prepares students with the necessary people skills for the workplace.

In Chapter II, clarification was given to CL (PIGS FACE) and what it entails. Just because students are in a group working together, does not mean that they are using CL. Many points of advocation, were brought out, for the benefits of cooperative learning (CL) for high achieving (HA) students. CL activities seem to help HA students maximize their intellectual development, excel in social skills, and help prepare them to be future leaders of America.

Chapter III brought out the details of the prerequisites for teacher and student participation in this study. Many precautions were taken in the preliminaries to eliminate as many of the biases as possible.

Six teachers were chosen, grade levels one through five, including two third grade classes. There was a total of 63, high achieving, students that were then evaluated in detail, through evaluation of surveys they responded to on how they felt about cooperative learning.
Chapter IV supplied the details and graphs representative of the high achieving student survey responses. Overall, HA students do like learning with their peers and value the experiences they gain through being placed heterogeneously in a group with students they may not have chose to work with at their own will. These experiences are educational and beneficial to students of all abilities on many levels. All students have a talent and something to share with their peers, CL allows them the chance to shine, where as traditional classroom settings may do just the opposite and perhaps stifle great ideas from being shared. Students revealed that they learn better when they are working in CL groups.

Recommendations for Further Study

One recommendation to be made to teachers who would want to further investigate the usage of cooperative learning in the classroom, would be to complete a full-year, study on the reactions/responses to one particular group of students. This would eliminate as much of the inconsistencies as possible; the students and teacher would be familiarized with the routine and benefits might prove to be substantial over time.

Another recommendation would be to make a control classroom of equal numbers of HA and average students in the class and then use teach lessons based on the cooperative learning model to see if the effects of CL are more definitive.
Questions that Arose

Some questions that arose during research and may provide additional focus: 1) Are there times when Cooperative learning is a detriment to the learning of HA students. 2) Is there preferences of whom the students work in groups with have an overall effect on the outcomes of learning? 3) What benefits do average or low ability students, gain from working in cooperative learning groups, and does the group make-up of boys and girls in a group change the learning outcomes? And 3) As the researcher analyzed the data, realization that more questions responding to individual accountability and group processing could have lead to a more definitive survey responses. For example, when student responses were tied among the three choices of a question (always, sometimes and never) leads to some discrepancies. Did the students misunderstand the question? Perhaps, in some lessons they did and others they did not? Only assumptions can be made at this point on these lingering questions. Since the overall responses to the surveys were in favor of cooperative learning, the data was not biased one way or another, though slightly skewed, in respect to the two components of cooperative learning said to be the most beneficial to high achieving students. The misrepresentation of the questioning of the five components did not lead to a significant difference of the positive outcome that cooperative learning truly does benefit the learning of high achieving students.
Commentary

More and more expectations are being put on students in the educational and social realm of life. Teaching students the necessary skills, that were once thought to be the fundamental basics are now expanded to include: usage of technology, how to use computers, and learning a foreign language are a few among the many new skills students are expected to learn in school. With the benefits shown of how cooperative learning techniques teaching students how to work together for the same goal and to help others along the way is a big push towards becoming an adult and being a productive member in the workplace.
References


References Continued


Appendix A
Pre-Qualifying Cooperative Learning Survey

Please answer questions or circle given responses

Name __________________________ Grade __________ # of years teaching ______

1. Have you been trained in Cooperative Learning?     Yes  No

1a. If so, where and how long was the course or seminar?

2. Do you use Cooperative Learning in your classroom?    Yes  No

3. To what extent do you incorporate the Cooperative Learning components (PIGS-Face) into your lessons? (Rate yourself 1-5)

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<th>2. Sometimes</th>
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<td>E. Face to Face Interaction</td>
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4. Do you group Heterogeneously for Cooperative Learning groups?  Yes  No

4a. Why/Why not?

5. How frequently do you change the make-up of students in Cooperative Learning groups? Why?

6. Do you feel that *High Achieving* students in your class benefits from Cooperative Learning Activities? Why do you feel this way?

7. Do you give individual grades, group grades, or both?

8. What is the normal Cooperative Learning group size that you use?

2 3 4 ______

THANK YOU! ☺

*High Achieving students are considered students that earn a 3 on report cards and are able to lead a group.*
Appendix B
Acceptance Letter to Volunteer Teachers

Dear

You have been selected from the survey that you filled out on your background and usage of cooperative learning. I am starting to do classroom observations for my thesis. I would like to set up a schedule with times on when I can come into your classroom and observe your students in cooperative learning lessons/activities. I will be looking at the class as a whole, and individual students, including the high achieving students, to see how they interact with one another and relate to the material to be learned. My thesis question is "Does Cooperative Learning Benefit High Achieving Students?" I will be interviewing you before my observation to get the objectives of the lessons and your expectations of how your class will benefit from this activity. After my observations, I will then distribute and administer an attitudinal survey for your students to fill out, on their feelings of working in cooperative learning groups.

From the research that I have gathered, high achieving students are said to be the top 33 percent of students. For the purpose of my thesis, I am defining high achieving students as those that don't find learning challenging. Students that can grasp the material the first time through and then apply it. They may have good study habits that lead to high grades, academically well rounded, motivated to learn new things, have the drive to complete work on time, participates fully in class discussions, and has leadership qualities.

If you have any questions or concerns, please let me know. I look forward to working with you and appreciate you volunteering yourself and your class for my observations.
Thank you.

DeAnna Scotty-Ryan
Appendix C
Cooperative Learning Survey

Name: ____________________________ Date: ____________________________

1. How often do you use Cooperative Learning (CL)?

2. Which subjects do you use it for most often? Why?

3. Did you start your class out with CL in the beginning of the school year?

4. Do you think that your CL has developed better social skills among your students?

5. Which of the five components of CL do you feel are the most important? (Positive Interdependence, Individual Accountability, Group Processing, Social Skills, Face-to-Face Interaction) Why?

6. Do you think that group processing is important? Why or why not?

7. How often do you have your students use group processing in CL groups?

8. How many High achieving students do you have in your class? Who are they?

9. What do you feel makes these students High achievers?

10. Do you think they prefer to work independently or in CL groups?

11. Do you feel that you are "forced" to use CL in a year that is filled with many demands and learning new technology?

12. Do you feel it would be beneficial to have a CL support team for teachers in the building to share ideas, materials and lessons for CL units and usage of other teaching styles?

13. How many years have you been using CL in your delivery of lessons?
Appendix D
Teacher Interview before Observation

Teacher __________ Grade Level ______ Subject Area ______

1. What roles do you plan to use with this lesson?

2. Are these roles that have been introduced previously or new to this lesson?

3. What are the specific social skills incorporated in this lesson?

4. Do you plan a cooperative learning lesson differently than a traditional lesson?

5. How do you determine which lessons you will teach cooperatively?

6. What are the objectives for this lesson?

7. How will you be measuring whether students meet these objectives successfully?

8. Will students be held individually accountable for the material learned? How - tested or verbally?

9. Do you have different expectations for the high achieving students in your class in cooperative learning groups, than for the rest of the students?
Teacher Observed ____________________________

My focus as an observer for this lesson is: ________________________________________________

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<tr>
<th>Subject Matter Obj.</th>
<th>Social Skills Objec.</th>
<th>COMMENTS</th>
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Observer ____________________________ Date ____________________________
Appendix F
INSTRUMENT 3.3
Observing Work in Our Class: Form 1

Direction to Observers: Write down a specific example that you saw of the following behaviors.

1. Showing they are listening

2. Describing a feeling

3. Giving ideas

4. Suggesting how to do something

5. Asking someone for his or her ideas or feelings

6. Building on someone else's ideas or feelings

7. Encourages other students in the group

Questions for Observers:

1. Did everyone talk?

2. Which students participated the most?

3. Did everyone understand what he or she was supposed to do?

4. How would you rate the group's work?
   A. Very good
   B. Good
   C. O.K.
   D. Not so good
   E. Poor

5. Give a reason for your rating.
Appendix G
Name: I am a boy
Favorite Subject: Lama Boy
Grade: I am a girl
Age:

Please draw a face that shows how you feel about each question:

Always (😊) Sometimes (😊😊) Never (😊😊😊)

1. I like to work in cooperative learning groups. 🙁
2. I like to work alone. 🙆
3. I like to be the checker in the group. 🙆
4. I like to be the recorder in the group. 🙆
5. I like to be the reader in the group. 🙆
6. I like to be the time keeper in the group. 🙆
7. I like to be the quiet captain in the group. 🙆
8. I like to work with boys in my group. 🙆
9. I like to work with girls in my group. 🙆
10. I like school. ( )

11. I help other members of my group learn. ( )

12. I like to have others in my group teach me. ( )

13. My group works well together. ( )

14. I ask other group members for their ideas and information. ( )

15. I encourage other members in my group. ( )

16. I like to be encouraged in my group. ( )

17. I get along with my group members. ( )

18. I only like to work with my friends. ( )

19. When I need help I ask a group member. ( )

20. When I need help I ask the teacher. ( )

21. I feel I am a high achiever and I do my best in school. ( )
22. I trust the people in my group. (○○)

23. We are responsible for knowing the work we do in our groups. (○○)

24. We are tested on the material we learn in our groups. (○○)

25. In our group we share the work to be done. (○○)

26. In my group I do all the work. (○○)

27. In my group we listen to each other. (○○)

28. In my group I feel that no one listens to me. (○○)

29. In my group I do all the talking. (○○)

30. In my group we finish our work on time. (○○)

31. After we finish a group activity we get to talk about things we did well, or things we need to change. (○○)

32. When we work in groups we sit eye to eye and close together. (○○)

33. I feel that I learn better when I work in a cooperative learning group. (○○)

34. I feel that I learn better when I work alone. (○○)
Appendix H
First Grade Average Students

Positive Interdependence

Individual Accountability

Group Processing

Social Skills

Face to Face

Attitudinal
Appendix I
Appendix J
Appendix K
Appendix L
Fifth Grade Average Students

Positive Interdependence

Individual Accountability

Group Processing

Social Skills

Face to Face

Attitudinal