DETERMINING STUDENTS ATTITUDES TOWARD MIXED-GENDER GROUPS AND SAME-GENDER GROUPS DURING COOPERATIVE LEARNING
Abstract:

The purpose of this study was to determine the attitude students had towards working in same-sex vs. mixed-sex cooperative learning groups. At the elementary level, the students seem to gravitate more towards working with partners of the same sex during most types of group activities. The information gathered in this study will be of use for me in the future when determining how to arrange both guided reading and math groups as well as seating arrangements.

The study was conducted over a period of one week with 35 students in a self-contained classroom. The students were allowed to choose their own groups of either one or two others in order to complete a 20 minute constructed response math activity.

Analysis of the results showed that the students felt very comfortable about their ability to help the group succeed at completing the task when in same-sex groups as well as feeling there would be a limited amount of problems faced during the assignment. In contrast, the survey results were quite different for the mixed-gender groups in that some of the children felt they would not be able to complete the task with their new group and/or they would face problems during the task.

Background Information:

The students that participated in this research project are students at the James Logan School, which has a population of 485 children of which 99% are African American. Logan is a neighborhood school which means the entire population lives within a few block radius of the school building. My class is comprised of 35, fifth grade students between the ages of 10 and 12. The majority of the children in my class come from single parent households or foster care facilities. In terms of the socioeconomic makeup, 100% of the students at Logan are provided with a free breakfast and lunch each day which indicates that most live in low income homes. In order to keep parents abreast of the research that will be ongoing in the classroom, a parent letter will be provided informing them that their child’s name and other sensitive information will not be used in the results. In order to assure this, each student
will be given a reference number that they will be identified by.

**Literature Review:**

In an article for the TLN Teacher Voices website, Carolyn G., one of the team-teachers in a Miami-Dade fourth grade classroom concluded this in a similar classroom based research project: “When we separate the children, the boys have been more focused on the class activities. They have worked better together and asked more questions. The lessons presented are exactly the same...while she does science with one group, I do math with the other. Then we swap groups and repeat the lessons. The girls get along better with each other when they are not in a blended group with boys. They too ask more questions” (TLN, 2006). This is consistent with what I witnessed in my own classroom, where the groups seemed to be more focused on the task rather than with entertaining each other. This held true for the groups made up of entirely girls as well as entirely of boys.

In an article by M. Warrington & M. Younger, (Warrington and Younger, 2003), they wrote that their “study concluded by suggesting that single-sex classes can provide a positive and successful experience for boys and girls...” This study was performed in 31 school across England and in it, they found that in over half of the cases, the results were consistent with what I viewed in my classroom.

**Methodology:**

The study began by asking the students to divide themselves into groups of two or three. I allowed them to separate into groups that they constructed by gave them the limitation that they would need to be with either all boys or all girls. After they found their groups and settled into a place to work, they were given all of the materials that were needed to complete the task. Each group was given a calculator, a task sheet (see addendum A) and a paper to show their work on. They were given approximately five minutes time to look over the task and were then given the pre-task survey sheet. The pre-task survey sheet (see addendum B) surveyed the student’s feelings about their group and how well they perceived their own ability to contribute to the success on the task. The groups were
then given twenty minutes of class time to complete the math task while working in their cooperative groups. When the allotted time for work had elapsed, the groups were asked to come back together as a whole group and instructed to turn in the materials from the activity and return to their original seats. While in their own seats, they were asked to complete the post-task survey sheet (addendum C) in order to assess how well they thought the group worked as well as how well they believed they were able to help the group individually.

The study was conducted again with a similar task (see addendum D) and in groups that were the same size as the first scenario, except that the students were limited to groups containing both boys and girls. Again, they were given materials for the task and then the pre-task survey as well as the post-task survey after the assignment was completed.

**Findings:**

Analysis of the data shows that the students who worked in same-gender groups felt that they were going to perform better than when they were asked to work with members of the opposite sex. Out of 35 students surveyed, 31 responded by saying that prior to the task they felt that the group would perform very well on the activity while only 4 felt that they didn’t think the group would do well and in fact face some problems while working to complete it. After the first task was completed, the numbers showed a very consistent result with what the students perceived the outcome would be. In 29 out of 35 students surveyed, they felt that they were able to help their group succeed at accomplishing the task they were given. The others felt that their group faced only minor problems when completing the tasks.

Analysis of the mixed-gender groups shows that there were more students who felt that either they wouldn’t be able to help their group succeed or they would face problems while completing the task. 17 out of the 35 students surveyed responded by saying that they felt their group would have some conflict while working together. When asked if they felt that they would be able to help their group succeed, the same 17 students and an
additional student said they didn’t think they would be able to add substance to the discussion and class work.

**Summary/Synopsis:**

This research project was an amazing insight into something that I have seen everyday in my classroom but failed to really observe. Using the results from this survey, I will look more closely into how my guided math and reading groups are compiled and how my classroom can be arranged in a way that is more conducive to positive learning. In addition to the formal observation that was conducted by collecting the data sheets, I performed informal observations of how the groups interacted and how their attitudes seemed to be during the assignment. I noticed that the same-gender groups worked quietly and attempted to hide their work from the peering eyes of members of other groups. While in the mixed-gender groups, there seemed to be a lot more talking about things other than the assignment they were assigned. Additionally, the noise level of the room during work was noticeably louder and the percent of the tasks completed and the accuracy of the work was lower than when the groups were same-sex. These informal observations are all possible springboards to similar research that I feel would be interesting to conduct in order to attempt to understand how the gender grouping not only affects attitude but also academic success.

**References:**

1. Brown, Barbara, LaPage, Jenness, Pyle, Joyce, McCaslin, Mary, Tuck, Dorothy, & Wiard, Amy (1994). Gender Composition and Small-Group Learning in Fourth-Grade Mathematics. 94 no.5, 467-482.

2. Friend, Jennifer (2006). Research on Same-gender grouping in eigth grade science. Research in Middle Level Education. 30 no.4, All.


5. Workman, Mary Burke (1990). The Effects of Grouping Patterns in a Cooperative Learning Environment on Student Academic Achievement. ERIC #: ED319617. All.

Addendum A:

1. Clara wants to buy $112.00 worth of CDs. She gets $2.00 a week for helping pull weeds. How many weeks will she have to work to get the CDs?

2. Chad buys lunch every day at school for $1.35. How much does he spend on lunch in 4 weeks?

3. Jed wants to go to summer camp for a week. One week of camp costs $157.00. He gets $5.00 a week for allowance and $3.00 each week for mowing. If he uses both his allowance and the money he earns for mowing, how many weeks will it take to pay for summer camp?
Addendum B:
Pre-task Survey

Name:
Group Number:

Answer each question by circling the number that shows how you feel.

Your choices are:
1. Not good at all
2. Ok
3. Good
4. Excellent

Survey questions:

1. How well do you think your group will do on this task?
   1 2 3 4

2. How do you feel about your ability to help your group succeed?
   1 2 3 4

3. How well do you think your group will cooperate during this task?
   1 2 3 4

4. How do you feel about working in groups during activities like this?
   1 2 3 4

5. What, if any, problems do you think your group will face during this activity?

6. What do you think will be the best part of working with this group?
Addendum C:
Post-task Survey

Name:
Group Number:

Answer each question by circling the number that shows how you feel.

Your choices are:
1. Not good at all
2. Ok
3. Good
4. Excellent

Survey questions:

7. How well do you think your group worked on this task?
   1  2  3  4

8. Do you feel like you were able to help your group succeed?
   1  2  3  4

9. How well do you think your group cooperated during this task?
   1  2  3  4

10. Did you like doing this activity as part of a group?
    1  2  3  4

11. What, if any, problems did your group face during this activity?

12. What was the best part of doing this activity as part of a group?
**Addendum D:**

1. Maria broke a window playing baseball. A new window costs $97.00. If Maria gets $6.00 a week for allowance, how many weeks will it take her to pay for the new window?

2. Shanita wants to start collecting trading cards. Her goal is to have 550 cards. If she collects 22 cards each week, how many weeks will it take to reach her goal?

3. Tony is starting a rock collection. If he collects 7 rocks a week, how many weeks will it take him to collect 119 rocks?