

# **How Does Quality Group Work Enhance Multicultural Learning?**

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## **Background**

As library media specialist at Garnet-Patterson Middle School, it was a challenge for me to get involved with this particular project, despite the fact that I saw a need for it. My reluctance to become involved was due to the fact that I only would be teaching a particular group of students for one semester. Therefore, I felt that I would not have enough time with the students to conduct quality research. I thought that this project was more suitable for a teacher who would instruct them for an entire school year. As an educator, I felt that my strength was in the area of library media specialization. I have always had a great passion for investigation and discovery of information. Getting students to a "comfort level," where they know how to approach the library and use its resources effectively for leisure reading and productive research, has been my main goal for many years.

This project motivated me to really think about how I could get my students more involved in the activities I taught them in class. Many of the children came to me with diverse backgrounds and ability levels. There were students who valued learning and worked hard to acquire information to those who lacked motivation and were disinterested in learning new information. Their reading and math scores on the SAT 9 ranged from below grade level to the advanced level. I had students in my classes who were at risk, students who were underachievers, students from a variety of different cultures, and students with special learning needs. I felt that it was important that my class was inclusive; however, I had yet to figure out the best strategies to use to accomplish this and to meet the needs of all of the students. I continued to look for better methods and ideas to address the daily challenges of teaching, especially since our school population was becoming more diverse.

Since the students came to me daily, I thought that I would work on improving the classroom environment. I wanted my class to be relaxing, but well managed. I wanted them to be enthusiastic and excited about learning. I discovered that it was easier to get students on task if I passed out work for them to do as they entered the classroom. To get them more involved in their learning, I had the students develop a task list to help manage the class and gave them more ownership in the class. Once they completed the list, I directed them to identify the date that each individual in the class would perform that specific task. Some of the tasks that the students identified were recording attendance; passing out papers; passing out the folders; pushing the chairs under the tables; serving as group captains or group monitors for a week to facilitate group activities; and distributing pencils and pens to students who did not bring them to

class. Together we developed a statistical chart to plot information to see if the task assignments helped students to remember to bring school supplies to class. Although these assignments did not improve learning per se in my classes, I noticed that it did help students become involved in the managing of the classroom and working together as a class.

I was inspired when I attended Dr. Spencer Kagan's workshop on "Cooperative Learning for Diverse Middle School Learners." The workshop gave me a starting point for my journey towards making my lessons more productive. I decided to take a closer look at the "cooperative learning" methods. As I learned more about this strategy, I became comfortable enough to teach some lessons to see how cooperative learning would work with my students. In a nutshell, "cooperative learning is describe as a successful teaching strategy in which small teams of students of different levels of ability are given a variety of learning activities to improve their understanding of a subject. Each member of the team is responsible not only for learning what is taught but also for helping teammates learn, thus creating an atmosphere of achievement" (Balkcom, 1992). However, to be effective, all cooperative learning tasks must be carefully structured so that:

- Individual students are held accountable for their work;
- Groups are held accountable for the learning of each member of the group;
- The project assigned is an authentic problem (that is, must have a level of complexity which engages the students and cannot be more effectively solved by one student);
- Students are encouraged to talk to work out solutions to problems; and
- Students have a clear understanding of academic and social goals for the lesson (Learning Solutions, 1998).

I chose to use cooperative learning as a model for my students because research has shown that it is "the leading new approach to classroom instruction." Several studies in K-12 classrooms have shown that this is an effective strategy "in very diverse school settings and across a wide range of content areas. Students completing cooperative learning group tasks tend to have higher academic test scores; higher self-esteem, greater numbers of positive social skills; fewer stereotypes of individuals of other races or ethnic groups; and greater comprehension of the content and skills they are studying" (Johnson, 1993). These were the same results that I wanted to achieve with my students.

## Methodology

One of the cooperative learning methods that I selected to use with my students is called "Think-Pair-Share." I liked this strategy because students had to use critical thinking skills when coming up with an answer. "In think-pair-share, the instructor poses a challenging or open-ended question and gives students a half to one minute to think about the question. This is important

because it gives students a chance to start to formulate answers by retrieving information from long-term memory. Students then pair with a collaborative group member or neighbor sitting nearby and discuss their ideas about the question for several minutes. The instructor might wish to always have student's pair with a non-collaborative group member to expose them to more learning styles. The think-pair-share structure gives all students the opportunity to discuss their ideas. This is important because students start to construct their knowledge in these discussions and also to find out what they do and do not know" (Lymna, 1981).

Before I started using this strategy, I explained to the class that we would be exploring a new process of learning, "Think-Pair-Share." Then I walked them through the steps. I told them that we would try it together as a group so that they could see how it worked. In my initial lesson using this strategy, I had my students do a lesson on "Famous Landmarks of the U.S." I asked the class this open-ended question: "What purpose do historical landmarks serve in understanding the American culture?" I explained that this is the first step called "Think" and gave them about two minutes to think about it. Then I asked them if they had an answer for the question. They replied, "Yes." I asked them if they could share their answer with another person. Again, they confirmed they could do so. I told them we were ready to move to step two, "Pair," and told them to join their pre-assigned groups. I allowed them about 10 minutes to discuss the question in their groups. I then moved them to the third step, "Share." Each group had to share their responses with the entire class. Some of the responses were:

- Group I: Landmarks help people to understand the history of our country.
- Group II: It's a part of the American culture.
- Group III: We use landmarks to show what people have achieved.
- Group IV: Landmarks are for the tourists to see.

I suspect the answers given here would have been less meaningful if the group had not brainstormed. The next step involved each group in researching a famous landmark and using the information to write a report or produce a Power Point Presentation and/or Microsoft Publisher's Brochure. I gave the students a list of landmarks, and each group was allowed to select the landmark that they wanted to research. During their research, the students developed a list of responsibilities that need to be performed in order to complete this task. Each student selected his individual responsibility. Most of the students worked well together and actually seemed to enjoy working with and learning from each other. At the end of the project, I concluded that 85% of the students correctly completed the assignment and showed a remarkable understanding of the lesson. The remaining 15% fell short of completing the assignment by the deadline and asked for additional time.

Another experience, using the think-pair-share method, involved my fifth-grade class. I taught an American Sign Language (ASL) lesson. The open-ended

question was: "Do you think it's easier for deaf people to communicate by using ASL or by lip-reading?" Responses are listed as follows:

- Group I: It is easier for them to communicate by ASL because that is their language
- Group II: They can use sign language interpreters to tell them what hearing people say.
- Group III: They can teach other people sign language to communicate with them.
- Group IV: Sign language is easier; lip-reading is hard

The groups collaborated in order to learn the American Sign Language Alphabet and some of the greeting signs. You could see the students helping and correcting one another. I observed that 95% of the students stood before the class and correctly fingered the spell the sign language alphabet. Five (5) percent of the students made mistakes or did not know all 26-alphabet signs. Upon leaving class, they shared their signs with students passing to other classes.

### Collaborative Team Profile

Our collaborative team members are Queenie C. Foard, Tara Carmichael and myself. Mrs. Foard is the Change Facilitator Administrator at Garnet-Patterson Middle School and is responsible for our school reform model "Connect". She also coordinates the After School Program. However, only Mrs. Foard and I decided to do the surveys together. We have collaborated extensively while gathering the data for the statistical findings in the project.

In order to measure student perceptions of the effectiveness of quality group learning, the survey method was chosen. In determining the validity of the questions to be asked, Mrs. Foard and I used "test students." Additionally, we had the surveys translated into Spanish and a better understanding of the questions facilitated. The students who were chosen were both members of the regular day Language Minority Program as well as participants in the After School Program. This allowed for the inclusion of both recreational and cultural events in the survey questions. The second survey was given in mid-year. We attempted to track the students' perception to a mid-year point. The survey was given in an informal setting in which we explained to the students that we wanted to gather their feedback on how they felt about the group/teams in which they had been placed.

### Data Collection

In order to measure student perceptions of the effectiveness of quality group learning, the survey method was chosen. In order to determine the validity of the questions to be asked Mr. Farmer and I used "test students." Additionally, we had the surveys translated into Spanish and a better understanding of the questions facilitated. The students who were chosen were

both members of the regular day Language Minority Program as well as participants in the After School Program. This allowed for the inclusion of both recreational and cultural events in the survey questions.

During the development of survey questions our test group was given a free response survey. This survey questioned the students on their perception of interaction in a group and their perception of the value of a group learning experiences in terms of what they gained from interaction with the group.

The first closed end survey was called the group reflection survey. It was designed to develop a picture of the students' perception to being placed in a group environment and their perception of interaction amongst members of the group.

The second survey was given in mid-year. We attempted to track the student perception at the mid-year point. The survey was given in an informal setting in which we explained to the students that we wanted to gather their feedback on the groups/teams in which they had been placed.

The third survey was conducted to ascertain their perceptions of the overall group learning experiences. The responses/experiences were recorded for future planning.

The fourth survey posted the actual grades for the first and third grading periods. The survey group was a random choice of every second student in both groups. The purpose the final response/perceptions survey was to add quantitative measurement in order to compare and contrast students' perceptions.

## Data Analysis

The first step of the data analysis was actually our first step in the overall project. We decided to use both the closed-end survey method and the free response method. After reviewing our test questions and answers, we decided to use the closed-end survey method. We designed three to four specific questions to cover the following areas:

- Group cultural perceptions
- Group academic perceptions
- Group social perceptions
- Group interactions

The next step was to gather the students as a group and conduct the survey. After completion, we tabulated the results using the hand/eye method, physically counting the response per student and question. This provided us with a matrix of answers.<sup>1</sup> Afterwards, in testing our hypothesis, we plugged the data into the computer and produced a graph of the survey.<sup>2</sup> The final step was to separate our data into the specific areas, generating and measuring a graph.

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<sup>1</sup> Appendix 1A1

<sup>2</sup> Appendix 1

## Data Analysis II

This section of the data analysis will discuss the results and findings of the surveys. The first survey that was given was the Group Reflections Survey. The survey consisted of eight questions.<sup>3</sup>

The eight questions dealt with the overall student perception of groups. The survey was broken down into two parts, namely the group as a whole and the interaction of members. The results for the group showed that **over 90%** of surveyed students, to a high degree, **agreed** that the group had clear goals in making progress in the group.<sup>4</sup>

The second part of the survey measured the perception of members of the group and how they reacted to one another. The survey showed that **over 90% agreed** that their teammates listened, were helpful, and respected all viewpoints. However, more than **30%** of all students felt some student failed to contribute or participated in group assignments and activities.<sup>5</sup>

The second survey was given during January 2002 and is referred to as the mid-year survey.<sup>6</sup> The survey consisted of twelve questions that attempted to measure the following:

- Cultural perception
- Group academic activities
- Group social perceptions

The cultural perceptions section had three questions dealing with participation in field trips, group vs. individual work, and perceptions of the community. The survey results showed that all agreed that they got more from group activities. Additionally, the survey respondents felt that group activities produced better artistic expressions, with the result that they felt more like a part of the larger, dominant society.

The group academic activities had four questions relating to group academic concerns. It is interesting to note that these findings held a certain similarity. Two questions tested the perception of working in a group. **60% responded positively** while **33%** responded that the results were about **the same**. Could this have been the same 33% who did not fully participate in the group activities, as measured in the perception survey? The other questions showed a higher degree of students wanting to work in a group. The overall perception that this revealed was that, while they like working in a group they were not yet convinced of its value.

The third section of the survey focused on group social activities. It was refreshing to see that “children were children.” When given the choice of organized group in sport activities and organized group study during the After School session, the overall majority chose sports.

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<sup>3</sup> Appendix 1C

<sup>4</sup> Appendix 1A

<sup>5</sup> Appendix 1B

<sup>6</sup> MID YEAR SURVEY Appendix 2

The third survey, Final Group Survey,<sup>7</sup> was a comprehensive survey on all the focal points of the research project. The survey was given to thirty students at the end of May. The final survey consisted of ten questions, which broke down into three major areas of study:

- Group academic perceptions
- Group social and cultural perceptions
- Group interactions and listening skills

The group academic perceptions<sup>8</sup> section consisted of four questions that directly questioned the students' perception of the value of the group learning experience in relationship to reading, writing, mathematics, and science. This section's results denote a marked increase in the level of perceived value from the mid-year survey. The medium score for this section was 89%. **This means 89% of the students agreed that the group experience improve their work.**

The group social and cultural perceptions section<sup>9</sup> consisted of three questions that interrogated the students on their perception of group activities--such as plays and sports in the After School program. The results once again were in the 90% acceptance value of the program.

The third section of the survey tested group interaction and listening skills.<sup>10</sup> The results were very similar to the two other sections.

The overall results clearly demonstrated that multicultural group learning environments definitely provided more community-minded experiences for students and help them achieve at a higher level.

The grade survey was to be the quantitative portion of the study. We looked at

17 students grades and compared their first advisory grades with the third advisory grades.<sup>11</sup> The grades were broken down into science, mathematics, and reading.<sup>12</sup> The results of this study showed that, in the beginning, first quarter grades did not reflect group work, rather the individuals' work. However, by the third advisory, we were able to see how group learning had affected the students' grades. The grades were more consistent. They reflected a true bell curve. This reflected group learning and inferred that all the students were learning the same material at roughly the same level.

## Research Understandings and Insights

It has been well documented that, when ethnically challenged children and special needs children are placed in a group-learning environment, their

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<sup>7</sup> Final Group Survey 2002

<sup>8</sup> Appendix 3A

<sup>9</sup> Appendix 3C

<sup>10</sup> Appendix 3B

<sup>11</sup> Appendix 4

<sup>12</sup> Appendix 4A-4C

achievement levels increase. Cooperative learning also shows an increase of achievements and improvements in positive inter-group relations of students.<sup>13</sup>

We felt that conducting this research and recording results would provide data to promote change at our school. We also felt that the gathered data would provide information for an excellent research paper. How does the student perceive the value of being placed in a multicultural group and faced with the challenge of adapting to a new social and learning environment while meeting the demands of a student academic life? This question was answered.

In order to discuss what we have learned from our research, it is necessary to restate the major areas that were the focal points of the paper. The major areas are:

1. Group reflections of the group in relationship to the student as a member of the group.
2. Group reflections of the student as a member of the group.
3. The perception of group academic learning.
4. Perception of group social and cultural.
5. Perception of the group interaction.

### Implications

I have noticed that most of my students actually like to work together. At first they had to learn to respect the opinions of others while collaborating. Before effective collaboration took place, they insulted one another, referring to one another as being stupid or dumb. I had to work with them in order to help them understand that they had to respectfully listen to the information that others shared. One way that I accomplished this was by making them more conscious of the impact of their negative descriptions on the feelings of their fellow group members. Using this strategy, I shifted their focus from evaluating the other person's response to constructively reaching a conclusion. Ground rules were established and integrated throughout group interaction.

### References

- Balkcom, Stephen. (1992). *Cooperative Learning*. Washington, DC: Office of Education Research and Improvement, 1992. ED 346 999.
- Goldstein, Ellen. (2002). Cooperative or Small Group Learning. NASA Educational Resource Center. Retrieved March 10, 2002 from <http://ccny.cuny.edu/ctl/handbook/goldstein.htm>.
- Johnson, W., R.T. Johnson, and E.J. Holubec. (1993). *Circles of Learning: Cooperation in the Classroom*, 4<sup>th</sup> edition. Edina, MN: Interaction Book.
- Kagan, Dr. Spencer. (1994). *Cooperative Learning*. San Clemente, CA: Resources For Teachers, Inc.
- Learning Solutions.(1998). *Using Cooperative Learning in the Technology Infused Classroom*. Capitola, GA: Learning Solutions, 1998.

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<sup>13</sup> Goldstein, 2002.

Lymna, F. (1981). "The Responsive Classroom Discussion." In Anderson, A.S. (Ed.), *Mainstreaming Digest*, College Park, MD: University of Maryland College.

## Appendices (available upon request)

### APPENDIX

APPENDIX	1A1	SAMPLE MATRIX OF QUESTIONS
APPENDIX	1	GRAPH OF GROUP REFLECTION SURVEY
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