Using Social Emotional Skills in Cooperative Groups
to Improve Student Performance

By

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Submitted in partial fulfillment of the requirements for the degree
M.S. Mathematics, Science and Technology Education

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April 2009
Abstract

Student performance may be enhanced socially and academically if all students are given the opportunities to experience social emotional learning (SEL) and cooperative learning by participating in small groups that emphasize SEL skills. Seventy-two eighth grade middle school students registered in one of four eighth grade general science classes participated in this study. Two classes participated in activities that focused on social emotional skills and teamwork at the beginning of the school year. The experimental group performed better than the control group in group assigned projects. Both groups reported working in groups that promoted sharing of ideas, support, cooperation and respect. Cooperative group class arrangement at the onset of the school year facilitated development and use of social emotional skills.
Dedication

This paper is dedicated to my husband, Tom, and children, Patrick, Kevin and Megan. They have shown unending love and support for the time I needed to complete my manuscript and graduate program. They have given me continued encouragement through the challenges, and shared the joys in my accomplishments. I hope I have been a role model for them showing the importance of pursuing your dream and the invaluable gift education can provide.
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Using Social Emotional Skills in Cooperative Groups to Improve Student Performance

Teachers vary with regard to how they approach their student seating arrangements which may drive how teachers implement their lessons. Individual, pairing or small group student arrangements may be found more beneficial depending on the type of lesson. For instance, science labs frequently benefit from pairs or small groups in inquiry type activities that give students opportunities to utilize one another to solve problems.

If students have not regularly been a part of a group, it may take some time for that group of students to adjust to their assigned peers. They may be told just prior to the activity or lab what is expected of their group. This does not provide time to develop the skills necessary to effectively work and problem solve as a group both in science skills and social-emotional skills. Regular class practice and feedback targeting these group skills and expectations may assist in a more effective group experience for both student and teacher. This could help increase the focus on the task at hand, and result in more productive group.

Furthermore, some students may have difficulty working cooperatively in a group due to limited social-emotional skills or preference to work by themselves. Often students have had negative experiences participating in group work where they felt everyone was not equally contributing or experienced personal conflicts among members.

Cooperative groups may be more successful if group assignments and expectations were clearly presented and modeled by the teacher from the first day of school. Discussing, reinforcing and modeling social emotional skills on a regular basis
among groups may provide the basic tools each student needs to be successful in his or her group. If awareness and modeling of social-emotional skills are provided to students in small cooperative groups, students may experience increased personal and academic success compared to those groups that are not provided awareness and opportunity to practice these skills.

This study hopes to determine if focusing on social-emotional skills in a cooperative group setting is beneficial to student performance as measured by on task behavior, increase use of problem solving for class work and group conflict, and performance assessment results. Of particular interest, is the level of problem solving as a group that might emerge with consistent use of social-emotional skills in daily classroom activities.
Literature Review

Cooperative groups can be an effective strategy to enhance student learning in the classroom providing contributions of varied strengths from each member. Some students may not yet have developed the necessary social-emotional skills necessary to be an effective member of their group. These students may not only have difficulty being a productive member of the group, but they may also have difficulty in individual work. This lack of social-emotional skills may manifest as behavior issues in the classroom. The ability to use group interactive skills to solve problems is not just beneficial in the classroom but skills necessary to be a productive colleague in the workplace in the future. If awareness and modeling of social-emotional skills are provided to students in small cooperative groups, students may experience increased personal and academic success compared to those groups that are not provided the awareness and opportunity to practice these skills.

First, social-emotional learning (SEL) will be defined and the various approaches to domains and competencies will be discussed. Many theories have been reviewed from the literature, and have a strong undertone or directly support the importance of addressing these SEL competencies as part of the teacher’s daily classroom routine. Both benefits and constraints for SEL in the classroom are addressed to explore the practicality and importance of focusing on SEL skills for students. Finally, it is important to understand how SEL, groups in the classroom, and cooperative learning can strengthen each other and provide an optimal learning experience for each student. This combination could provide life-long problem-solving and group interaction skills that could be used by students as adults to be successful at work and in the community.
Social Emotional Skills

Social-Emotional Learning

Elias, Zins, Weissberg, Frey, Greenberg, Haynes, Kessler, Schwab-Stone, and Schriver (1997) defined social-emotional learning as “the process through which children and adults develop the skills, attitudes and values necessary to acquire social and emotional competence” (p. 2). Individuals who have developed solid social-emotional skills are emotionally aware and have developed social skills that enable them to problem solve with others effectively (Cohen, 2006). The goal of SEL (Social Emotional Learning) is to be able to integrate emotional, cognitive and behavioral abilities that will facilitate the skills and individual needs of a person to be a productive member of society (Zins, Bloodworth, Weissberg, & Wahlberg, 2007).

The American Psychological Association (APA) recognized the developmental and social factors involved in learning by citing principles targeting these factors in their Learner-Centered Psychological Principles (American Psychological Association Work Group of the Board of Educational Affairs, 1997). The developmental factors influence learning when the individual differences of development of physical, intellectual, emotional and social areas are addressed. Each person has different experiences throughout their lifetime that either create opportunities or place limits on their learning. Social influences on learning include relationships and effective communication with others. Opportunities to be exposed to social interactions can provide development of skills that will assist in developing interpersonal skills that can benefit communication with others. Some children may not be provided a model at home to demonstrate beneficial interpersonal and communication skills. Teachers have an opportunity to model and integrate these skills throughout the day as students interact with one another.
Elias et al.’s (1997) approach to SEL targeted three domains which closely align with the APA. The emotional domain addresses how we manage and express our feelings. It includes mutual respect of feelings in a relationship. The individual is able to identify their emotions so they can control inappropriate responses. The cognitive domain involves the ability to develop healthy relationships by role taking and problem solving among each other. Role taking demands the individual be a productive participant in the group by providing expectations of that role if appropriately defined. Cooperation and the ability to negotiate are within the behavioral domain. The individual is able to appreciate the differences each person brings to the relationship or group. They may not agree with another person but they respect the other person’s ideas and listen to their verbal contributions.

Similarly, CASEL (Collaborative to Advance Social and Emotional Learning) has developed a framework which includes key competencies that should be integrated into the school curriculum from preschool to high school to promote social-emotional intelligence among students. These SEL competencies essential to the CASEL framework are presented in Table 1.

Goleman (1998) addressed emotional intelligence comparative to CASEL with five domains and are categorized as personal competencies or social competencies. Personal competencies focus on how we manage ourselves and include self-awareness, self-regulation and motivation. He stressed knowing your feelings are essential to making good choices. This can be accomplished by learning to control your impulses.
### Table 1

**CASEL’s Key SEL Competencies**

<table>
<thead>
<tr>
<th>SEL Competency</th>
<th>Skills</th>
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| Awareness of Self and Others          | • Ability to recognize own feelings and strengths and weaknesses of dealing with one’s emotions  
                                         | • Ability to put situations into the perspective of others.                                                                             |
| Positive Attitudes and Values         | • Ability to make decisions that promote safe and healthy behaviors.  
                                         | • The ability to accept and value differences of others.  
                                         | • The ability to be a contributing member of community.                                                                                |
| Responsible Decision Making           | • The ability to identify a problem, develop a solution, implement plan and evaluate outcome.                                           |
|                                       | • The ability to set realistic goals.                                                                                                                                                             |
| Social Interaction Skills             | • The ability to actively listen to others, and considering others ideas in pair and group situations.                                 |
|                                       | • The ability to negotiate to resolve conflict and avoid being pressured to act.                                                                                                                   |
|                                       | • The ability to seek help when need for support and assistance is identified.                                                                                                                    |

and moods. A person needs to have motivation and optimism to push past obstacles to goals. Social competencies focus on how we handle relationships and include empathy and social skills. Empathy and social skills need to be incorporated into daily interactions. It is important to be able to develop an awareness of others’ needs and feelings so that an individual can develop the ability to use this awareness to generate desirable responses in others. These social skills include conflict management, ability to influence and effectively communicate, collaboration and cooperation, and leadership skills. The development of these skills allows groups to work toward a shared goal and provide the energy collectively needed to attain that goal.

Theories Supporting SEL

Glasser’s (1998) Choice Theory emphasized that one can only control their own behavior. How people deal with a situation is their choice providing them input to the outcome. Schools tend to focus on knowledge and memorization of facts. Glasser (1998) referred to schooling as focusing on memorization without understanding, whereas education addresses a deeper understanding. Education is about a student being able to use what they learn and improve upon it. They have a choice as to how to embrace their education. Education is more valuable in the real world than schooling. Social-emotional skills are necessary to function as a productive adult in the work place. Therefore, the development of these skills should be a part of any classroom. SEL skills incorporated in education provide skills for a life-long learner by applying what they have learned in the classroom and converting it to application outside of the classroom. Individuals can then effectively communicate and work with others in the community to solve problems.
SEL skills need to be developed with the assistance of teachers and parents. When these skills are developed, students have a base to make good choices that will improve their opportunities for success. O’Neil (1996) noted in a conversation with Daniel Goleman, that the brain development for emotional response is one of the last centers to mature. This gives educators and parents an opportunity to shape this center by helping children to learn to manage anger, manage self and demonstrate empathy by incorporating SEL skills in their daily activities and modeling these skills for them.

Gardner’s Multiple Intelligences (MI) has also been widely incorporated into classrooms. However, Gardner did not see MI as learning styles but how learners respond differently to different information. Learners may respond better using music, arts, math, language, physical movement, natural world, working with others or alone. Even though some ways to learn are easier, students can get better at each intelligence by using the strengths of the other intelligences (Gardner, 1983; Checkley, 1997).

Two of Gardner’s categories of MI are of particular interest in terms of SEL. Interpersonal Intelligence addresses the ability to understand others. This ties in closely with empathy. Intrapersonal Intelligence is the ability to understand yourself by knowing who you are, how you will react in a variety of situations and what you need to avoid; knowing your limits (Gardner, 1983; Checkley, 1997). This closely parallels SEL which focuses on initiating and building the skill of students to have an awareness of self and others to be able to manage behaviors (Taylor & Larson, 1999).

The IQ (Intelligence Quotient) test has long been used to place a number on student intelligence. This, however, focused on the MI of linguistic ability, logical-mathematical ability and special ability. IQ does not measure a student’s intrapersonal or
interpersonal intelligence (Gardner, 1993; Checkley, 1997). These emotional intelligences are more closely linked to life-long success than IQ (O’Neil, 1996).

**Benefits and Constraints for SEL in Classrooms**

When parents and community leaders are asked what they envision is needed for a child to succeed in life, their response focuses on educating the whole child to strengthen character, citizenship and emotional intelligence. Academics are important, but equally important are such attributes that will be used throughout life. These attributes include being a good problem solver and make responsible decisions, developing effective relationships by having the ability to relate to people from other cultures and backgrounds, and the ability to show empathy and respect for others (Elias, 2003; Schonert-Reichl & Hymel, 2007; Taylor & Larson, 1999).

The middle school classroom benefits greatly from utilizing SEL skills. Schools are social places, and learning is a social process, where students must collaborate with other students, teachers and parents (Zin, Weissberg, Wang & Wahlberg, 2004). Middle school students are facing many new challenges that require SEL skills. They face the struggle to manage their behavior amidst extreme hormone and body changes. Increased responsibility and more complicated social relationships demand high competency of their social-emotional skills (Taylor & Larson, 1999; Stern, 1999). Most of these skills need to be learned through interaction with others as well as the support of family and community. However, in today’s society, there is a decrease of interaction due to television, computers and other electronic devices. There is an increased awareness of safety issues so children are less likely to go to each other’s houses. Parents put in more work hours providing less time to model and reinforce these skills. Community activities
are less attended by families. This lack of support from family and community put these students at risk for emotional and behavioral issues (O’Neil, 1996; Stern, 1999).

Cohen (2006) claimed a combination of a positive school climate and solid social emotional competencies are associated with, and predict, personal success. Factors that define a school climate include the structure, environment, order and safety, communication, strength of community, school-home-community connection, student morale and peer norms. Teachers can provide opportunities for students to develop, practice and reinforce their social emotional skills in an environment that provides a sense of order, safety and respect for one another. How a student manages his or her emotions can enhance or create a barrier to learning. Class management issues with students acting out will decrease as they focus on goal setting and self-management techniques (Stern, 1999).

Most programs provided in schools today target specific problem behaviors such as violence, drug use, bullying and early school withdraw. Many of these behaviors cluster together and require the same skills and strategies to address these issues. Increased use of resources is needed to address these behaviors individually. By identifying these behaviors as in need of SEL skill, they can be addressed more efficiently and decrease the risk of these high-risk behaviors (Payton et. al., 2000; Stern, 1999). Ragozzino, Resnik, Utne-O’Brien, & Weissberg (2003) supported SEL in all aspects of student education, as is evident with the following claim. “Improving SEL supports academic missions of schools and ensures their mission of producing caring, responsible and knowledgeable students” (p. 170).
A multi-school project implemented by the Atlanta-based Resolving Conflict Creatively Program (RCCP) utilized SEL techniques. The evaluation of this program after two years revealed improvement in failure rates, drop out rates and suspension rates while school attendance improved. RCCP project also resulted in decrease school violence, increase self esteem and an increased ability for students to help each other (NYU Child Study Center, n.d.).

The primary barrier to widespread implementation of SEL is the continued focus on doing well on state academic tests, especially in high school. There is increasing pressure to raise student state scores, putting the primary focus in the classroom on getting through the curriculum in preparation for tests. State test scores have, and continue to be viewed as an easy measure of success, whereas clear measurable benefits of SEL are difficult to determine and require study over time (Cohen, 2006; Zins et. al., 2004). However, the benefits addressed earlier of SEL can decrease time addressing class behavior issues and the various social issues students face providing more quality instruction time.

Families may feel school values conflict with the family values (Taylor & Larson, 1999). Therefore, communication among parents, teachers and students is key if a school-wide program is to be implemented (Cohen, 2006). Even at the classroom level for general student success, collaboration among the student, family, peers and teacher are necessary. Students cannot learn without support and mentors.

**Groups and Cooperative Learning**

Cooperative learning used in groups is not a new concept, yet many educators continue to struggle when implementing this strategy in the classroom. There is
responsibility on the part of the teacher and each student within their group. Putting a group of three to four students together, if done incorrectly, will not lead to cooperative learning. In turn, cooperative learning may not lead to collaboration (Leonard & McElroy, 2000). Johnson and Johnson (1984) believed cooperative learning should improve the classroom environment as it teaches social skills and improves academic achievement among students. Cooperative learning can facilitate social and emotional growth by creating small learning communities where students have roles in decision making. A safe school climate can provide opportunities in these cooperative groups for student expression of ideas and engaged discussion of the curriculum. Using these developmentally appropriate practices for middle-schoolers can foster positive social relationships (Armstrong, 2006).

Cooperative learning teaches skills to students that will be used in the work place. It encourages each member of the group to be accountable and responsible for the success of the group. Collaborating with group members requires the use of interpersonal and group skills (Tomlinson, Moon & Calihan, 1997). Being familiar with working in groups will provide students the experience they will need in their careers when required to work with colleagues long-term toward common goals to benefit their work place.

College students in a science course felt working in groups gave them an opportunity to use group skills that would be applied to real-life situations. Groups provided opportunities to draw on each others strengths and exchanging ideas (Ahern-Rindell, 1998). Similar benefits could be possible in the middle school setting.

Group activities must be structured so that they are not a grocery list of to dos. The group should be working together as a team exchanging ideas and problem-solving
using critical thinking (Vermette, 1995). The group, with the facilitating of the teacher, needs to develop a sense of a mini-community by participating in team building and group process. Ideally, students should care about each other which leads to a desire to help each other. Furthermore, students in a group working together for a common goal may motivate academic achievement of each other rather than perceiving one student excels and decreases the opportunities for other students’ success (Slavin, 1996).

The key to buy in by the students for cooperative grouping depends on how the teacher introduces the process and if the student is able to experience successes within the group. Cooperation and accountability by each member should be emphasized from the first day of class by providing activities that require the participation of all members. Students need to know the expectation of being a productive member of the group. As the teacher circulates to each group to help, observe, evaluate and motivate, it reinforces the message of participation by all. Group roles, reviewing group work and randomly calling on any member also promotes accountability (Vermette, 1995).

Group roles define responsibility and accountability for each member. Leonard and McElroy (2000) conducted a six week study in a suburban middle school. Students in small cooperative groups were required to complete an engineering task. The task was selected to engage students to learn. Each student was given their own role, and one student was required to share his role so all the students could participate in constructing the structure. The group collaborated and each student attempted their roles. The discussion suggests the establishment of group interdependence and individual responsibility was limited sometimes leading to unresolved disagreements. The authors stressed the importance of each member having an equally important and active role in
the group, and that these roles are clearly defined. If each member feels equally important, they are more likely to cooperate and work together to complete tasks. Teachers must also carefully monitor and reinforce the participation of all members.

Arguments and disagreements among a group are not always negative. Listening to or participating in an argument may provide opportunities for learning. Discussions to justify alternative opinions or solutions to solve a problem may facilitate new ideas (Slavin, 1996).

Knabb (2000) developed a strategy that demonstrates the importance of each group member’s input. She provided partial information to each group member as they tried to answer questions. Group members tend to initially work individually. However, they soon realize they cannot independently solve the problems and require information from other members. They soon learn that solving problems requires the participation of each member.

Ahern-Rindell (1998) described a cooperative group in a college science class. The groups were given a problem, develop questions based on their observations, and then work as a group to discover the solution. The teacher’s role as facilitator required providing an appropriate environment for students to learn. The students designed and conducted their own experiment based on the information and knowledge they had been given. She did not tell them how to conduct their experiment. They learned to depend on each other to problem solve. Interacting on a regular basis with the group to solve problems strengthens the need for good communication and importance of cooperation irregardless of the educational level. This model requires teachers to adjust from the role
of lecturer to facilitator. The teacher needs to ensure the students have the knowledge they need to make decisions and apply information.

Forming of groups requires knowledge of each student’s strengths and challenges. They should be diverse and balanced to provide opportunities for developing skills needed for group cooperation, compatibility and problem solving (Slavin, 1996). A high school interviewed their students for input how to create better grouping for lab assignments. Students reported they preferred their teachers create the groups instead of choosing their own groups. The students felt they would be pressured to choose their friends rather than make choices they knew would better benefit their learning. They also reported that when the groups stayed together longer, they learned more (Johnson, Poliner & Bonaiuto, 2005). Groups should remain together long enough to feel comfortable belonging to the group and commitment to the group, and for each member to feel accepted and develop identity in the group (Slavin, 1996). However, Leonard and McElroy (2000) disagreed, and argued that groups should be changed regularly to encourage increased participation. If teachers develop strong relationships with their students, they will be able to gauge when the students are ready for rearrangement of grouping.

Implementing SEL and Cooperative Learning

The link between SEL and cooperative learning was clearly described by Armstrong (2006). As noted earlier, he saw “cooperative learning as a key to fostering positive social relationships” (Armstrong, 2006, p. 131). Curriculum activities should engage students and promote the development of social emotional intelligence
Schools have made attempts at placing awareness on important character traits a student needs to be a positive, productive part of the community. Most schools put up posters or have the trait of the month such as respect, integrity, empathy, etc. There may be a brief discussion of the importance of that trait and what it is. However, the skills are not taught. Social skills training should be a daily part of a student’s routine (Cohen, 2006).

The learning environment needs to provide a caring and supportive classroom encompassing small learning communities. Teachers need to be the role models and facilitators of their students’ social and emotional growth (Armstrong, 2006). Students need to feel they can practice and learn skills where mistakes are viewed as a positive opportunity for further learning. Accomplishments generate positive feedback by the teacher and peers that will build confidence, encourage use of skills and increase proficiency at skills (Fox & Lentini, 2006; Webb & Brigman, 2006).

Teachers and students need to listen to one another and provide encouragement through challenges. Students’ opinions, concerns and input should be honored and respected by each other and the teacher (Armstrong, 2006). If peer and teacher acceptance is experienced even during these challenges, students may be more willing to take risks and push their learning. Teachers may need to initially recruit peer support, prompt students to use these social skills and model this behavior. Students need to be given praise when appropriate behavior or skills are demonstrated (Elksnin & Elksnin, 2005).

Just as there are classroom expectations, there should be group expectations as well. Student roles elicit a feeling of ownership and responsibility to the group. As noted
earlier, roles make each member feel equally important and promote cooperation among the group to complete tasks. Ahern-Rendell (1998) stressed the importance of each member having an equally important and active role in the group, and that these roles be clearly defined. If each member feels equally important, they are more likely to cooperate and work together to complete tasks (Leonard & McElroy, 2000). Group member roles promote interdependence within the group and define clear expectations of each member. Possible roles may include motivator, time keeper or recorder (Knabb, 2000).

Group expectations should incorporate the SEL Competencies so that students can regularly practice these skills and the teacher can assess their use. This is where group work becomes cooperative work. Each person should respect the ideas and feeling of others. This can be done by listening and allowing members to share ideas without negative criticism. Individual contributions should be recognized. Teachers can model these skills for their students by being an active listener themselves and showing appreciation of the uniqueness of each student. Teachers need to demonstrate in every day class interactions how to ask questions and paraphrase concerns. By doing this, teachers are role-modeling active listening and how it provides clarification (Stern, 1999; Johnson, Poliner & Bonaiuto, 2005).

Each group member needs to understand their emotions and how to manage them. Opportunities should be provided for students to reflect on group process and their individual reactions or feelings. Teachers, may at times, need to be the facilitator of conflict negotiation to assist members to argue and come to a decision in a healthy, positive manner. This does not demand great friendships but rather the development of
healthy relationships. Finally, a key component in resolving any issue or promoting growth and maturity within an individual is being able to accept responsibility for one’s actions (Taylor & Larson, 1999; Johnson, Poliner & Bonaiuto, 2005). Again, this may require teacher intervention as this social skill is developing. Students require teacher support to learn how to set goals and solve problems.

At the middle school level, use of these social emotional skills in their cooperative groups require lessons from the teacher that provide opportunities to use these skills and may require prompting and reminding to act upon these opportunities. Students need to be engaged in the curriculum and find it meaningful to them to enhance motivation among the group. Although group activities and projects utilize their social-emotional skills to the greatest degree, it is important to continue to see the individual. There is a need for individual work and opportunity to work independently on basic skills (Checkley, 1997).

Creating groups requires the teacher to be familiar with each student’s strengths and weaknesses. Group members should compliment each other by the different strengths each brings to the group (Checkley, 1997). The challenge of inclusion students may require even greater attention to group formations. Many learning disabilities manifest with social inadequacies as well as academic problems. Kavale and Forness (1996) did a meta-analysis of 152 studies to investigate the issue of social skills deficits among learning-disabled (LD) students. Three out of every four LD students were rated as having social skills deficits by their teachers. Studies are unclear whether academic deficits lead to social skill deficits or vice versa. However, these deficits did appear to manifest as reduced interaction, acceptance and social status. Some LD students have
deficits in verbal and non-verbal skills and struggle with problem solving which may further alienate them from the larger school community. Deficits in language, memory and perceptual skills challenge the ability to learn more positive social behaviors.

Opportunities to regularly practice social skills with non-LD students may be beneficial as opposed to grouping LD students together. Giving opportunities for non-LD students to be grouped with LD students provides situations where SEL skills are even more vital. These situations require empathy, guidance and modeling by the teacher. Some LD students may not benefit from being in a diverse group and may improve comfort level to try these skills if in a group among LD peers.

Group dynamics need to be continually assessed. The curriculum and group interactions should be challenging and interesting to increase motivation to learn and solve problems. Barriers to learning in the group need to be assessed and addressed. Barriers may include boredom and anxiety. If a student is particularly stressed or emotionally overwhelmed in their situation it may obstruct cognitive performance and, therefore, the ability to think (Cohen, 2006). Boredom can lead to off task behavior that disrupts others in the group and squelches the motivation to problem solve.

If a particular grouping does not appear to be beneficial to the members, it is the teacher’s responsibility to recognize this and provide a more advantageous group. The teacher and students should not see this as a failure but an opportunity to reflect on how to improve the process.

SEL and cooperative learning groups can greatly compliment each other in the classroom. Cooperative learning requires the continuous use and development of social-emotional skills for each group to reach their goals. Both opportunities are useful to
students as they prepare to become healthy, positive and productive members of their community. Further challenges to develop social skills in a group setting face the LD population of students. LD students are regularly included in science classes. Cooperative groups focusing on the development of social-emotional skills may benefit both the LD and non-LD student when integrated together in a group. If all students are given the opportunities to experience SEL and cooperative learning by participating in small groups that emphasize these skills student performance may be enhanced both socially and academically.

Summary

Much of the literature referenced structured, whole school programs to promote social-emotional learning with students. Continued focus needs to address what the teacher can do at the classroom level to make students aware of these social-emotional skills, and how they impact their success and the success of others in the classroom. Structuring the classroom as small groups or communities with the intention of cooperative learning within the classroom and providing clear group expectations at the beginning of the school year can facilitate interpersonal and intrapersonal relationships. Incorporating group member roles can further develop a sense of ownership to the group and desire for their group to reach their goals. Finally, as the teacher informally facilitates and models appropriate social emotional skills among a group, this may strengthen the base of these skills for students to use. As they develop their ability to know and manage themselves within a group, the students can eventually function as a successful, productive member that collaborates and problem solves with the group to
accomplish a common goal. As these class goals are met, both the student and the group may experience both personal and academic success in that class.
Methodology

This study focused on implementing small group arrangements with clear group expectations from the onset of the school year to determine the benefits to middle school students. Small cooperative groups provided opportunities to develop the skills necessary to effectively work and problem solve as a group both in science skills and social-emotional skills. This was accomplished with regular class practice and feedback targeting these group skills and expectations with the teacher as a facilitator. By providing a more effective group experience for both student and teacher the intended outcome was to increase the students’ focus on the task at hand, and result in a more productive group.

This study started the beginning of the school year with cooperative groups where group assignments and expectations were clearly presented and modeled by the teacher. Discussing, reinforcing and modeling social-emotional skills on a regular basis among groups provided the basic tools each student needed to be successful in his or her group. Awareness and modeling of social-emotional skills were provided to students in small cooperative groups so students might experience increased personal and academic success compared to those groups that were not provided awareness and opportunity to practice these skills.

This study aimed to demonstrate that focusing on social-emotional skills in a cooperative group setting is beneficial to student performance as measured by on task behavior, increase use of problem solving for class work and group conflict, and performance assessment results. Of particular interest, was the level of problem solving
as a group that might emerge with consistent use of social-emotional skills in daily classroom activities.

*Participants*

Seventy-two 8th grade middle school students registered in an 8th grade general science class participated in this study. These students were divided among four classes. Two of these classes contained inclusion of special education students. Inclusion students in this district were defined as students with a disability that were enrolled in regular classes or mainstreamed with regular education students in selected classes. They were not pulled out for services with their peers for that particular class. A special education teacher or teacher aide was present in that class for support. Otherwise, they participated in the 15:1:1 program with the special education teacher and teacher aid in a class among their peers.

Two classes of students met on even days. Class A was a general science class with a total of twenty students. Seven of these students were inclusion from a 15:1:1 program and one student had an IEP. Nine were males and eleven were females. All students were Caucasian. Class B general science students consisted of a total of 13 students. There were two females and 11 males. The students were Caucasian except for two males who were Asian and one male who was African American. The remaining classes met on odd days. Class C general science class consisted of twenty-one students; twelve males and nine females. All of these students were Caucasian. There were two inclusion students and four IEP students. Class D general science class had eighteen students. There were nine males and nine females. There were three inclusion students and six students with IEPS. Two students were African American and one student was
Hispanic. The remaining students were Caucasian. Class A and B students participated in the control group. Class C and D students participated in the experimental group.

**Materials**

Group expectation signs were only posted and reviewed for experimental group which met on odd days. A Group Question sheet (Appendix A) was given to these classes only on the second day of school. At the completion of the second class, the experimental group were given a Group Expectation Worksheet (Appendix B) which they completed in their groups providing examples and non-examples of the Group Expectations discussed in class as an assessment of their understanding of these expectations. Group role signs were posted on the front of the room after reviewing roles with students in the experimental group only. Folders were given to each group of three to four students. All classes were given folders to put completed assignments in each day of class. Documents were only added to the experimental group for record keeping by group members. These classes received a form to write down the names of the group members and assign the roles to each group member. The pink form (Appendix C) listed the group members where assignments such as homework, ticket outs or labs were handed into folder and recorded by the group secretary. Group Member Evaluation forms (Appendix D) were used to periodically to evaluate group dynamics. Group Evaluations of Projects/Labs forms (Appendix E) were given after group/pair projects were completed. Group Member Evaluation forms and Group Evaluations of Projects/Labs forms were given to all of the classes.

A sign was posted at each group table 1-8 with a phrase that related to Goleman’s (1998) competencies. These phrases were self awareness, managing emotions, empathy,
motivation, social awareness and manage relationships. These phrases coincided with the group expectations.

**Design and Procedure**

Students were randomly assigned to groups of three to four students in all of the classes. Groups were changed at five weeks and assigned new groups. The remainder of the study, student groups were changed every 10 weeks with assigned groups. The classes were reassigned by the teacher based on observations of varied strengths among students. Inclusion students were interspersed among the general education groups except for one group of students in Class A that remained the same throughout the study at the request of the special education teacher due to their particular needs.

Folder use of collecting homework, ticket outs, warm ups and labs were reviewed with all of the classes on the first day of school. A general expectation of mutual respect was also discussed with all of the classes.

The second day of school, students from the experimental group did an activity called *The Gronk* where they had to listen to the person next to them and draw what they imagined this Gronk to look like. The Gronk is an imaginary living thing. This activity was to develop not only listening skills, but also the need to work with another person to complete a common goal.

The four roles for each group were discussed so each member of that group could choose a role. If the group only had three members, then that group decided who and which two roles that member would be responsible for. These roles are further defined in Table 2.
### Description of Group Member Roles

<table>
<thead>
<tr>
<th>Group Member Role</th>
<th>Descriptions of Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secretary</td>
<td>• Ensures homework, warm-up, ticket out and any other assignments to be handed in from each group member is in folder and recorded on the Group Daily Sheet.</td>
</tr>
</tbody>
</table>
| Assistant         | • Ensures everyone has binder open, utensil to write with and has hand outs beginning of class.  
                        • Prompts members to work on warm-up posted on the board. |
| Data Tech         | • Records and collects data/drawings for various group assignments.  
                        • Gathers needed equipment and ensures group area clean end of class.  
                        • Hands in group folder into collection bin end of class. |
| Group Coordinator | • Delegates tasks for labs, projects and activities as needed.  
                        • Assists other roles if help needed or absent.  
                        • Make sure tasks meet deadline times. |
Each group member chose their role and recorded them on the group role sheet. The group role descriptions remained posted in class for reference. During the first week of school, students were frequently reminded of what was expected of their role in their group. Prompting of these roles continued daily for three weeks. Periodic prompting continued throughout the remainder of the study. These role titles were also used to call on any group member to report out or respond to a question. For example, “The data technician in your group will report out the answer to question number one to the class after discussing the question with their group”.

General group expectations of mutual respect and equal participation were discussed first day of class for all classes. On the second day of classes for the experimental group only, the teacher and students discussed in depth group expectations that focused on the social emotional competencies of Goleman (1998). The meaning of each of these competencies was discussed in groups and what it meant for the functioning of each group. These competencies were also posted in the classroom as the expectations for each group. Periodic informal reminders of these expectations, especially with change of group, were reviewed and discussed briefly. If a conflict arose within a group requiring teacher intervention, the expectations were referred to in the resolution of that problem. The competencies used for group expectations are clarified in Table 3.

The role of the teacher was also discussed. The teacher was expected to be there to help when the group could not solve a problem among the group members first. If the group could not solve the problem, or were unsure of the process, then clarification with the teacher could be approached. The teacher was there to keep the group on track. If the teacher saw the group approaching a task or problem in the wrong direction, the teacher
Table 3

*Group Expectations*

<table>
<thead>
<tr>
<th>Group Expectation</th>
<th>Description of Expectation</th>
</tr>
</thead>
</table>
| 1. Know Yourself                                     | • What are your strengths?  
• How do you deal with emotional situations? |
| 2. Manage Yourself                                   | • Be honest, flexible.  
• Take responsibility for personal performance and behavior. |
| 3. Strive To Do Your Best                            | • Your goals should meet the goals of the group.  
• Members work together to solve problems to attain goals.  
• We are all in this together! |
| 4. Be Aware of Other’s Feelings and the Needs in Your Group | • Be critical of ideas, not people.  
• Group members should be able to ask each other for help. |
| 5. Use Your Social Skills                            | • Listen to what others have to say even if you disagree.  
• Resolve disagreements – seek teacher together if you cannot come to an agreement.  
• Encourage members with positive feedback.  
• Work together to meet goals. |
could guide the group with some guiding questions. The most important role of the teacher was to provide feedback, both positive feedback and feedback to facilitate growth. If off task behavior was noted, the teacher would remind the group of the task and ask group to restate their goal.

All labs and some class activities were done together within their group. The first project to develop a scientific experiment and present the project using the scientific method was assigned in their assigned groups. The next Biome Project was assigned as a pair, but the students could choose who they worked with.

After each project, the students from all classes completed the Group Project/Lab Evaluation Form to evaluate themselves and each of their group members. They were asked to complete these when alone and return them next class directly to me for confidentiality. The same procedure was used for Group Evaluation Forms where each member could rate their group members and themselves as to their effectiveness as a group member. These were completed at half way points with group and at completion of group before students were assigned to a new group. Throughout this process informal journaling of qualitative observations had been done. Upon assignment of a new group, members selected new roles and documented them on the role sheet. We reviewed the expectations of the group and the expectations of the members to each other at this time. Data from the group evaluation forms, informal observations, and formal and informal assessment grades were collected and analyzed. Informal observations included group dynamics, manageability of class, ability to accomplish tasks as a group, ability to accomplish tasks on time, ability of group to resolve conflicts and the ability of members to demonstrate examples of the social emotional competencies.
Results

The purpose of this study was to determine if focusing on social-emotional skills in a cooperative group setting would be beneficial to student performance. Data collection targeted on task behavior, increased use of problem solving for class work and group conflict, and performance assessment results. Of particular interest, was the level of problem solving observed among the groups and its members with consistent use of social-emotional skills in daily classroom activity.

Quantitative Data Grade Comparisons

Quantitative data was analyzed for whole class trends as well as trends omitting IEP students and computing IEP students only. Quantitative data was collected from primarily Term One grades. Those trends that showed significant differences between control and study group were further reviewed for Term Two. One student from each of the four classes was omitted from the data due to excessive absences from school. Included in the quantitative data were class averages of test grades, quiz grades, unit district test grades, projects, labs, missing homework assignments, term one grades and term two grades as noted in Tables 4,5 and 6.

Comparisons between control classes (Average of Classes A and B) and experimental classes (Average of Classes C and D) demonstrated minor increases in grade averages among Class C and D. Data which included all students (Table 4) showed a significant improvement in project grades for Class C and D. Class A and B averaged 59.1 for Project One and 57.6 for Project Two. Class C and D averaged 69.6 for Project One and 70.2 for Project Two. The same trend continued when classes were compared without IEP students and noted in Table 6.
Table 4

*Grade Averages of All Students by Class*

<table>
<thead>
<tr>
<th></th>
<th>Class A</th>
<th>Class B</th>
<th>Average of Classes A and B</th>
<th>Class C</th>
<th>Class D</th>
<th>Average of Classes C and D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Grades</td>
<td>70.9</td>
<td>76.3</td>
<td>73.6</td>
<td>76.8</td>
<td>77.2</td>
<td>77.0</td>
</tr>
<tr>
<td>Quiz Grades</td>
<td>78.9</td>
<td>84.4</td>
<td>81.7</td>
<td>82.7</td>
<td>82.3</td>
<td>82.5</td>
</tr>
<tr>
<td>Unit District Test</td>
<td>77.8</td>
<td>80.0</td>
<td>78.9</td>
<td>82.5</td>
<td>77.5</td>
<td>80.0</td>
</tr>
<tr>
<td>Project One</td>
<td>65.8</td>
<td>52.3</td>
<td>59.1</td>
<td>75.2</td>
<td>63.9</td>
<td>69.6</td>
</tr>
<tr>
<td>Project Two</td>
<td>65.4</td>
<td>49.8</td>
<td>57.6</td>
<td>70.8</td>
<td>69.6</td>
<td>70.2</td>
</tr>
<tr>
<td>Labs</td>
<td>88.8</td>
<td>84.3</td>
<td>86.7</td>
<td>91.8</td>
<td>82.3</td>
<td>87.0</td>
</tr>
<tr>
<td>Missing Homework Assignment</td>
<td>1.7</td>
<td>1.3</td>
<td>1.5</td>
<td>1.7</td>
<td>2.6</td>
<td>2.2</td>
</tr>
<tr>
<td>Term One Grade Average</td>
<td>85.2</td>
<td>82.7</td>
<td>84.0</td>
<td>90.3</td>
<td>82.7</td>
<td>86.5</td>
</tr>
<tr>
<td>Term Two Grade Average</td>
<td>86.2</td>
<td>84.0</td>
<td>85.1</td>
<td>88.0</td>
<td>84.5</td>
<td>86.3</td>
</tr>
</tbody>
</table>
Table 5

*Grade Averages of IEP Students by Class*

<table>
<thead>
<tr>
<th>Test Grades</th>
<th>Class A</th>
<th>Class B</th>
<th>Average of Class A and B</th>
<th>Class C</th>
<th>Class D</th>
<th>Average of Class C and D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>61.7</td>
<td>---</td>
<td>61.7</td>
<td>52.0</td>
<td>71.3</td>
<td>61.7</td>
</tr>
<tr>
<td>Quiz Grades</td>
<td>70.7</td>
<td>---</td>
<td>70.7</td>
<td>66.4</td>
<td>74.4</td>
<td>70.4</td>
</tr>
<tr>
<td>Unit District Test</td>
<td>64.3</td>
<td>---</td>
<td>64.3</td>
<td>61.8</td>
<td>71.9</td>
<td>66.9</td>
</tr>
<tr>
<td>Project One</td>
<td>59.2</td>
<td>---</td>
<td>59.2</td>
<td>60.4</td>
<td>57.2</td>
<td>58.8</td>
</tr>
<tr>
<td>Labs</td>
<td>92.4</td>
<td>---</td>
<td>92.4</td>
<td>88.9</td>
<td>80.6</td>
<td>84.8</td>
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<tr>
<td>Missing Homework Assignments</td>
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<td>---</td>
<td>2.0</td>
<td>1.4</td>
<td>3.1</td>
<td>2.3</td>
</tr>
<tr>
<td>Term One Grade Average</td>
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<td>82.0</td>
<td>86.6</td>
<td>78.1</td>
<td>82.4</td>
</tr>
<tr>
<td>Term Two Grade Average</td>
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<td>---</td>
<td>81.4</td>
<td>81.4</td>
<td>78.5</td>
<td>80.0</td>
</tr>
</tbody>
</table>
Table 6

*Grade Averages of Students Without IEP’s by Class*

<table>
<thead>
<tr>
<th></th>
<th>Class A</th>
<th>Class B</th>
<th>Average of Class A and B</th>
<th>Class C</th>
<th>Class D</th>
<th>Average of Class C and D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Grades</td>
<td>76.3</td>
<td>76.3</td>
<td>76.3</td>
<td>85.0</td>
<td>80.5</td>
<td>82.8</td>
</tr>
<tr>
<td></td>
<td>85.6</td>
<td>84.4</td>
<td>85.0</td>
<td>89.4</td>
<td>88.4</td>
<td>88.9</td>
</tr>
<tr>
<td>Quiz Grades</td>
<td>86.6</td>
<td>80.0</td>
<td>83.3</td>
<td>89.4</td>
<td>81.5</td>
<td>85.5</td>
</tr>
<tr>
<td>Unit District Test</td>
<td>68.0</td>
<td>52.3</td>
<td>60.1</td>
<td>76.8</td>
<td>68.6</td>
<td>72.7</td>
</tr>
<tr>
<td></td>
<td>87.4</td>
<td>84.3</td>
<td>85.9</td>
<td>94.0</td>
<td>84.3</td>
<td>84.3</td>
</tr>
<tr>
<td>Project One</td>
<td>1.6</td>
<td>1.3</td>
<td>1.5</td>
<td>1.8</td>
<td>2.2</td>
<td>2.0</td>
</tr>
<tr>
<td>Labs</td>
<td>86.7</td>
<td>82.7</td>
<td>84.7</td>
<td>91.5</td>
<td>85.9</td>
<td>88.7</td>
</tr>
<tr>
<td>Missing Homework Assignments</td>
<td>88.9</td>
<td>84.0</td>
<td>86.5</td>
<td>90.1</td>
<td>87.7</td>
<td>88.9</td>
</tr>
<tr>
<td>Term One Grade Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term Two Grade Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Data from each class for IEP students only demonstrated no significant change among the control and experimental classes (59.2:58.8) as seen in Table 5. Test grades computed without IEP students showed a modest improvement in Class C and D average of 82.8 as compared to Class A and B average of 76.3.

Data comparison for IEP students only were very similar in both classes. Class A demonstrated a significantly better lab average of 92.4 as compared to the experimental group of Class C and D at 84.8 (See Table 5).

**Qualitative Data of Group Work**

Qualitative data collected included information provided by students with completion of Group Question Sheet first day of school and two and one-half months after working in groups, Group Evaluation of Members and Group Evaluation of Project/Labs at completion of projects. Responses were similar for all four classes on the initial Group Question Sheet. The most popular response they felt they would experience working as a group would be to provide opportunities to get help from each other. Another frequent response was the sharing of ideas. Students felt that a variety of ideas would encourage each other to think of more ways to problem solve. Using each others strengths could benefit each other as a whole. Many also felt work could be completed faster and, therefore, more could be accomplished. Some responses saw working as a group an opportunity to have fun while getting their work done and getting to know other students.

The most popular challenges reported of working in a group were disagreements among members on an answer or how to do something, not liking someone in their
group, or a member in the group not putting in equal work. A few responses addressed the concern of off-task behavior and talking.

These challenges were seen as being able to overcome by accepting differences, compromising, listening to each person’s ideas and communicating with each other. Some mentioned that they could work together without being friends. Having and sharing roles would possibly encourage everyone to participate.

Students suggested ground rules to support the group. Working together and everyone having a turn to share ideas was the most frequent response of both groups. Other ground rules some students felt were important were staying on task, helping each other and not making fun of others.

Students in Classes A, B, C and D completed the same questionnaire after working in a group setting for two and one-half months. They were instructed to answer the questionnaire based on their group experiences in class. Responses were similar for all classes, however, Classes C and D responses used similar terms that were discussed as group expectations, and displayed as signs on the desk groups such as respect, cooperation, communication, manage myself, be flexible. Class D responses showed they were aware of increased talking among their groups and that this challenge made it important for them to stay focused and not talk off topic. Listening to others, staying focused and decreased off task talking were their main goals to overcome this challenge. They reported the importance of getting task done then having fun. Class C specifically targeted the challenges of arguments and disagreements. They reported importance to overcome this challenge as not arguing back, managing themselves and being flexible.
Class A and B responses were similar to the mainstream responses of Class C and D without a particular targeted benefit or challenge.

Both groups felt the groups had been helpful to get tasks done quicker by dividing the work. Working as a group provided a better variety of ideas and strengths of each member which resulted in a richer group response. All reported having more fun working in a group. A common theme was that there were disagreements and that some members did not participate.

Both groups reported similar ways to overcome challenges which included ensuring input from each member of the group. Assigning tasks and roles helped to overcome some non-participation from some members. Class C suggested if a member is not participating to invite their input.

Both groups reported the importance of similar ground rules. Working together and sharing ideas was the most popular response. Respect for each other and helping each other was also reported as important.

*Qualitative Data Project Group and Pair Work*

Project One Scientific Method Experiment in assigned groups of 3-4 reported similar responses in both the control and experimental group. Majority of students found each member input equally helpful and utilized each other’s strengths and found the experience positive and fun. Those groups who experienced a member who did not participate equally were clear in their reporting why that person did not receive a better review. Some reasons given were that they did nothing for the project, they did not complete their assigned task, and other members felt they had to do more of the work. Students did not report themselves as a poor participant.
Project Two Biome Project, where students worked in pairs of their choosing, all reported similar experiences in both the control and experimental group. Majority of the pairs felt they worked equally on the project and enjoyed working together. There was a significant decrease of one member reporting another member as not doing their share of the work. Many members reported themselves as not doing as much for the project as they should have and praising their partner for the additional work they did.
Discussion

Implementing an awareness of social and emotional skills in a small cooperative group setting provided an environment where students felt they could be a productive participant and receive help and support from one another. This aligns with Johnson and Johnson (1984) who believed that cooperative learning can facilitate social and emotional growth if students have roles in decision making. The feeling of having a safe environment within their group supported student expression of ideas and discussions related to the lesson that day.

The academic benefit was not as evident when analyzing the students’ grades. Both groups achieved similar grades on tests and quizzes. Homework completion was also similar. IEP student performance did not improve with the implementation of awareness of social-emotional skills and cooperative grouping. However, these students were observed frequently offering input to class discussion. They were an equally active participant in their group and engaged with the class as a whole.

Of significance, however, were the project grades. Project One had required assigned groups of 3-4 to design and complete a scientific experiment. This project required much out of class coordination and communication among members to complete. The experimental group grade average for the project was 10.5 points higher than that of the control group. Possibly the group activities, such as *The Gronk*, at the beginning of the year focusing on SEL skills and team work could have played a role in the comfort level of working together. Cohen (2006) stated that those who have developed SEL skills enable them to problem solve with others. The first project required the creation and implementation of a scientific experiment. It would have been
necessary for the group to use problem solving skills to have a successful outcome. Both
groups reported the experience as positive and fun. Majority of both groups found each
member participated equally and each had their own strengths to offer to the project.
Both groups equally had students in the group that were reported as not participating
equally or completing the task assigned them. Students tended to report other students’
lack of participation rather than their own in this project.

Project Two displayed similar results. This project allowed students to choose their
own partner. The experimental group averaged 12.6 points higher for their grade. More
students in the control group did not complete or hand in their projects on time. Of
interest, was the evaluation report of the project. Both groups reported similar responses
from Project One, however, the partner was more likely to report not doing their share of
the work, and praising their partner for the additional work that they did. There was no
reporting of the other member not doing their share. Johnson, Poliner & Banaiuto (2005)
had reported students prefer teachers create the groups as opposed to choosing their
groups. Students knew they were likely to choose their friends which might not be the
best choice for learning. Similarly, students working as friends may not want to cause
conflict in their friendship and readily take up the majority of the responsibility to
complete the task and maintain a friendship. When friendships are so crucial to maintain
and the importance of being liked is key, a friend may not honestly criticize another
friend especially in middle school.

Slavin (1996) described formation of groups requiring teacher knowledge of each
student’s strengths and challenges. The groups should be balanced and diverse to
develop skills of group cooperation, compatibility and problem solving. Overall, student
groups cooperated with one another and stayed on task. IEP students mixed with general education students in a group interacted well and all participated. The one group of self-contained IEP students appeared to provide support for each other well. Being in this homogenous group gave the self contained IEP students the self-confidence to offer class responses in class discussion. This was noted for both groups.

The experimental group had assigned roles for their group as noted in Table 2. For example, the role of secretary required daily collection of homework and class assignments. The secretary then recorded them on the assignment sheet. The roles gave some students a purpose and direction in their group, especially the quieter students or self contained students. The roles also provided direction for each group member during a group activity or lab. The control group did not have these defined roles, and sometimes lost time and stimulated some argument who was responsible for completing various tasks. This was supported by Knabb’s (2000) view that group member roles promote interdependence within the group and define clear expectations of each member. The roles may have also played a part in the cooperation among these groups. Leonard and McElroy (2000) noted that if each member feels equally important they are more likely to cooperate and work together to complete the task. This, too, could be a factor of the increased grade success of the experimental group over the control group with the two projects. Elias et al. (1997) discussed a cognitive domain to SEL where the ability to develop healthy relationships requires role taking and problem solving among each other.

The experimental group had been working with role assignments on a daily class basis. This responsibility of role may have played a part in the success of the project where each was expected to take on a role. The control group had not been required to
have a role in their groups. Taking on a role for just a project may not have provided the
time and understanding of ownership of that role to be productive.

The overall responses on the Group Question sheet reported student satisfaction
with their groups. Responses indicated they felt comfortable in their groups where they
could share ideas and receive support when needed. The creation of this positive group
dynamic required group expectations and guidelines that were set from the first day of
school. By assigning groups, rather than having students choose friends, set a precedent
that these guidelines and expectations support the need to work with a diverse group and
require social skills for the group to be effective.

Establishing group expectations and guidelines from the first day of school may
have decreased off-task behavior for group activities and labs. Groups were usually on
task and did not require disciplinary actions during any lab or group activities.
Reminders were sometimes required to get group on task but the groups readily did so.
Since groups were used for all classes, this can only be compared to the previous year
when students were put into groups only with activities and labs. Usually these students
sat in desk pairs. When first assigned into a group, time was spent socializing requiring
frequent reminders to return to task. Some student behaviors would result in disciplinary
action. Setting guidelines and expectations for groups just prior to activity did not allow
time for students to internalize these behaviors and skills.

Students in the group settings this year readily internalized the important social
skills as evidenced by their Group Question sheet responses. Recurrent themes of the
need for cooperation, respect of each other, completion of work, acceptance of
differences, and the importance of communication were incorporated into their daily class
activities. The control group also demonstrated these abilities but used less of the exact vocabulary to describe it. This not only benefited the group, but the class as a whole. Teacher observations noted less off task behavior. The group was given an assignment to complete and if one member was off task, often another member would redirect them. The teacher did need to redirect whole groups at times but the groups were accepting and respectful of this and resumed their task. All four classes received no lunch detentions or administrative referrals unlike the previous year where lunch detentions and administrative referral had needed to be implemented.

Disagreements were reported by both groups, but did not result in inappropriate class behaviors. Most student responses were not clear if the disagreement decreased their productivity or if disagreement was part of a normal group process of sharing different ideas. However, there were student responses that suggested this to be a normal part of the group process. One student reported she learned to agree to disagree. Many students suggested compromise as important which would also suggest a positive use of social skills to come to a group conclusion. An emotional domain to SEL is described by Elias et al. (1997) that addresses how we manage and express our feelings. As the student is able to identify their emotions, they are able to control inappropriate responses which enhance mutual respect in the group. Furthermore, the ability of the students to appreciate differences among group members yet still be able to negotiate and cooperate with each other demonstrates the strength of their behavioral domain as was described by Elias et al. (1997).

After approximately five weeks majority of groups inquired as to when seating would be reassigned. This request was presented respectfully and did not single out one
member. Students would request if a particular student might be put in their group. If the request was appropriate based on behavior and strengths, it was considered. Seat changes were respected with few complaints to the new members. If a comment was made, a reminder of respect to each other was made by the teacher and resulted in no further issues.

Groups remained together for ten week blocks. As reported by Slavin (1996), this provided enough time together to feel a sense of belonging and commitment to the group. Some groups continually strengthened where all members appeared visibly valuable. In other groups, some members eventually appeared more passive and allowed other members to direct the work unless the teacher assigned that particular member a role. This was supported by Leonard and McElroy (2000) who claimed that groups should be changed regularly to encourage increased participation of all.

Slavin (1996) and Leonard and McElroy (2000) both agreed that there is no formula for a perfect cooperative group as to assignments or length of time they are together. Group assignments and group changes were based on the teacher’s continual assessment of the strengths and needs of each individual student. The student mix may change from year to year, so must the approach of how the groups are managed. The teacher needs to have an awareness of the dynamics of each group and its members, and be available to facilitate the group to stay on task and manage behavior.

Providing cooperative learning groups a foundation of social emotional skills to use as guidelines and expectations for each member can make the experience more personally fulfilling. Member roles further provide a purpose for each member of the group. This can lay the foundation of group members to feel important to the group and allow each
member to be an active participant. Being active in the smaller group provides the support needed to learn through making mistakes in the process of accomplishing class expectations and being an active part of the larger class community. The safe environment is first developed within the small group setting, and then expands to the classroom as a whole. As noted by Fox & Lentini (2006) and Webb & Brigman (2006), accomplishments generate positive feedback by teacher and peers that build confidence, encourage and increase proficiency in the use of skills.

It appears learning to work together in a cooperative group, given group guidelines and expectations, benefited the development of social emotional skills among the group member. This intervention did not necessarily require a formal program so much as an awareness of these skills by the students, and an awareness of their students by the teacher. Despite the reinforcement of the SEL competencies listed on Table 1 in activities at the beginning of the school year, periodic discussion, and reminder with the experimental group, both groups have demonstrated an ability to effectively interact in small cooperative groups using these social emotional skills.

Academic success was not affected by the use of SEL and cooperative groups. To better assess how cooperative groups play a role in academics, the control group should be seated individually utilizing more independent work, and the experimental group in groups of three to four students with group problem-solving work. Unfortunately, it is not realistic to either change the physical lay out of the classroom daily or provide lesson plans in two different formats.

Respectively, comparing the classroom arrangement of last year in pairs to groups of three to four students this year, there was a significant decline in negative class
behavior issues. There had been no lunch detentions or administrative referrals.

Homework completion was improved from the previous year. Unit District Test Grades had also improved for the general education population but no change for the IEP students. Therefore, as further research, comparisons of similar data from this year to last year may provide further support for implementing a similar class structure next year.
Conclusion

Goleman’s (1998) five domains of emotional intelligence were evident among both groups. Students demonstrated awareness of self and others, positive attitudes, responsible decision making and social interaction skills. Of further interest, would be to continue collecting data for the remainder of the school year particularly on academics. Additional time may first be necessary to be comfortable with cooperative groups. Proficiency of social-emotional skills used in these groups takes time to develop. Once proficiency is attained, improvement of grades could gradually follow, particularly for the self contained IEP students who must initially work hard at attaining these social-emotional skills. Social and emotional benefits were observed for the students with IEP’s. Further investigations are needed to see what interventions can be implemented within the cooperative group to facilitate this group’s improvement of academic success. This trend may show a need to develop strong SEL skills before impacting academic improvement.

The report of disagreements should be explored. Disagreement can provide opportunities for sharing of ideas and practice of social-emotional skills. If addressed correctly, the ability to disagree, listen and grow from the experience can be a life long strength. Although, it appeared groups had positive outcomes despite disagreement, it would be beneficial to further explore the reports of disagreement among group members, how they resolved the conflict, and if the resolution was positive or negative.

Social-emotional skills are important for developing effective student interactions among cooperative groups. Initiating and facilitating cooperative groups by the teacher appears to reinforce and strengthen the social-emotional skills students need to be
productive citizens as teenagers and adults. Although academic grades may not show an improvement in the short term, cooperation and respect among group members is evident. A safe learning community is developed within the classroom over time which could be beneficial to students’ academic success in the long term. Further research long term to track potential academic impact of this class design is encouraged. Targeting adjustments to the class design and increasing differentiation among the group activities and labs may also reveal academic as well as social benefits with IEP students, especially those who are otherwise self-contained.
References


NYU Child Study Center. (n.d.). *Social and emotional learning: What is it? How can we use it to help our children?* Retrieved October 4, 2008 from
http://www.aboutourkids.org/articles/social_emotional_learning_what_it_how_can_we_use_it_help_our_children.


Appendix A

Group Questions

Name: ____________________________                          Date: ___________

Group Questions

Directions: Please answer questions by your self.

1. What benefits do you see about working as a group instead of by yourself?

2. What challenges/problems do you see about working as a group instead of by yourself?

3. What have you done in the past to limit the above problems or challenges?

4. What important “ground rules” are needed to make a group work well together and all equally participate?

5. If you had a job, what important qualities do you think are important for you to be successful?
Appendix B

Group Expectation Worksheet

Name: ________________________                                           Group # ______

Group Expectation Worksheet

Directions:
- Give one positive example (example) and one negative example (non-example) of a situation using each expectation.
- Each person in group take one expectation and make an icon for it.

1. **Know Yourself**
   - What are your strengths?
   - How deal with emotional situations?

Example:_________________________________________________________________________________________
Non-Example:_________________________________________________________________________________________

2. **Manage Yourself**
   - Be honest, flexible.
   - Take responsibility for personal performance and behavior.

Example:_________________________________________________________________________________________
Non-Example:_________________________________________________________________________________________

3. **Strive to do your best**
   - Your goals should meet the goals of the group.
   - Members work together to solve problems to attain goals.
   - We are all in this together!

Example:_________________________________________________________________________________________
Non-Example:_________________________________________________________________________________________

4. **Be aware of other’s feelings and needs in your group**
   - Be critical of ideas, not people!
   - Group members should be able to ask each other for help

Example:_________________________________________________________________________________________
Non-Example:_________________________________________________________________________________________

5. **Use your social skills**
   - Listen to what others have to say (even if you disagree)
   - Resolve disagreements – seek teacher together if cannot come to agreement
   - Encourage members with positive feedback.
   - Work together to meet goals

Example:_________________________________________________________________________________________
Non-Example:_________________________________________________________________________________________
## Appendix C

### Group Daily Sheet

<table>
<thead>
<tr>
<th>NAME</th>
<th>Homework 11/12/08</th>
<th>Ticket out 11/12/08</th>
<th>Lab: Photosynthesis 11/13/08</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Jane Smith</td>
<td>x</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2. Adam Jonnes</td>
<td>o</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3. Mary Snow</td>
<td>A</td>
<td>A</td>
<td>X</td>
</tr>
<tr>
<td>4. Leslie Thomas</td>
<td>x</td>
<td>x</td>
<td>X</td>
</tr>
</tbody>
</table>
Appendix D

Group Member Evaluation Form

Name: _________________________                           Date: ______________

Scale:  1=never   2=a little   3=somewhat   4=almost   5=always

NOTE: 1’s and 5 are extreme. Giving a “1” means that the behavior was not met at all. A “5” indicates that it could not have been better. Use these sparingly to make them meaningful. Be caring and thoughtful with your evaluation.

<table>
<thead>
<tr>
<th>Name of person in -&gt; group</th>
<th>Myself</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Encourages others to offer ideas, give feedback, participate.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Handles conflict in approved ways.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Is prepared and keeps focused on task.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Interacts with patience, tolerance, respect, and caring.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Makes others feel like they belong to the group.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Helps others have fun and enjoy group work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Provides contributions to required group classwork.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appendix E

Group Member Evaluation for Project/Lab Form

Group Member Evaluation for Project/Lab  Group #______

Name: _________________________                           Date: ______________

Scale:  1=never   2=a little    3=somewhat    4=almost     5=always

NOTE:  1’s and 5 are extreme. Giving a “1” means that the behavior was not met at all. A “5” indicates that it could not have been better. Use these sparingly to make them meaningful. Be caring and thoughtful with your evaluation.

<table>
<thead>
<tr>
<th>Name of person in -&gt; group</th>
<th>Myself</th>
<th>__________</th>
<th>__________</th>
<th>__________</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Encourages others to offer ideas, give feedback, participate.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Handles conflict in approved ways.</td>
<td></td>
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<tr>
<td>3. Is prepared and keeps focused on task.</td>
<td></td>
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</tr>
<tr>
<td>4. Interacts with patience, tolerance, respect, and caring.</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>5. Makes others feel like they belong to the group.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Helps others have fun and enjoy group work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Provides contributions required to finish lab/project</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OVER->
Explain why you gave 1's, 2's or 5's below: 

______________________________________________________________________

_____________________________________________________________________________

______________________________________

Using the scale below answer the following questions:

1=not at all   2=not very happy  3=OK but could be better  4= happy  5=awesome happy

How happy are you with the quality of the product produced by your team?

1  2  3  4  5

How happy were you with this experience working with your group?

1  2  3  4  5

How happy were you with your own contribution to the project/lab?

1  2  3  4  5

Describe one thing you learned by doing this activity:

______________________________________________________________________

_____________________________________________________________________________

______________________________________

Describe one thing you might do differently if you had this to do again.

______________________________________________________________________

_____________________________________________________________________________

______________________________________