THE EFFECT OF TEACHING COOPERATIVE LEARNING SKILLS ON DEVELOPING YOUNG STUDENTS’ GROWTH MINDSET

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Abstract: Some people see difficult issues as setbacks, as problems, as setbacks that will stop them from reaching their goals. Other people see the same kinds of issues as natural challenges of life and approach these problems as opportunities to grow. People like Dweck (2006), Duckworth (2013), and Johnson and Johnson (2013) believe that students can be taught to approach hurdles in life with positive and productive attitudes. They believe that students can learn how to approach issues in their academic in different ways. Student intelligence, talents, abilities, and potential are not written in stone at birth and through strategic effort and perseverance students can change their attitudes and perspectives on difficult issues. In this study we utilized cooperative learning techniques (Johnson & Johnson, 2013) to observe and analyze student data to determine whether or not young students were willing to contemplate their perspectives in relation to working through complex academic challenges. The results indicate that young students are willing and able to change their mindsets from a fixed to growth perspective. The results also indicated that those students who began the process with a positive mindset maintained their positive outlook and approaches to academic challenges. These results engender promise for our ability as instructors to help students learn to be strong willed and approach issues with a mindset to strategically work as hard as they have to learn and become successful.

Keywords: cooperative learning techniques and skills, growth mindset, primary students

Introduction

Every day we see another story in the news related to how people do not understand the important of working together to solve problems. With all of the technological advances we have seen in the world we still appear to
not know how we should treat each other in respectful ways. Our understanding of human interaction has not been able to keep up with our knowledge of technological understanding (Fitzgerald & Laurian, 2013; Glasser, 2006; Johnson & Johnson, 2013). In our quest to be the best test takers in the world we have forgotten about teaching students how to be good people (Wagner, 2008; Zhao, 2012). Instead of viewing our world as a place to beat out everyone else, maybe it is time to look at the world as a place to cooperate (Johnson & Johnson, 2013). In order to help us to move in that direction this study was created to work with young people (first graders) to begin the process as early as possible. Some people do not believe that young people can learn the complex social skills to work in cooperative groups successfully. We believe they can and our observations of some teachers and their young students indicate that young students can and should begin to learn about cooperation, perseverance, a positive work ethic, and how to treat people in positive ways (Roman, 2008, Popa, 2010).

**Literature Review**

**Introduction**

With the understanding that our students will need more high level understandings about how to work in teams and how to solve problems using critical thinking skills in creative ways (Wagner, 2008) we are seeing that cooperative learning has once again become a more relevant techniques in our schools (Johnson & Johnson, 2013). Wagner has interviewed CEOs from around the world and they have told him that creative problem solvers, who are dedicated, and resilient, who understand how to work and communicate with other people are the kinds of people who will succeed in the careers of the future. Caine and Caine (2011) tell us that we should be giving students more responsibility and authority over their own learning if we are serious about students learning those kinds of skills. Sousa (2011) agrees and tells us that the latest research on the brain supports these practices as valid because they assist in the development of the brains of our students. Brain research indicates that in the learning process that the brain changes and grows (Caine & Caine, 2011). Johnson and Johnson (2013) have found that students who work together cooperatively learn more, remember it longer, and also gain more effective social skills and psychological strength than do students who work alone or competitively. Lev Vygotsky (1978) tells us that learning is a social process. In his Zone of Proximal Learning he tells us that students can learn some things on their own. But to learn more they need what he calls a More Knowing Other to help the learning process. This more knowing other can be a friend, a parent, a teacher, a peer, a computer, etc. His point is that
we learn more when we have other people around us who know more than we do.

Cooperative Learning

Since so many people believe collaboration to be a vital skill set for the future success of our students (Wagner, 2008, Johnson & Johnson, 2013), it makes sense that we should be assisting our students by working with them in cooperative groups. Hattie (2009) has developed effect sizes for of at least 150 educational strategies and their effects on student learning. He has determined effect sizes of .59 and .54 for the use of cooperative learning as compared to individualistic and competitive learning. Johnson and Johnson (2013) have found even higher effect sizes (.71 and .90) in their work. In other words, cooperative learning is significantly more effective than either individualistic or competitive learning in relation to student learning. Cooperative learning also incorporates other techniques that Hattie has found to be effective for student achievement: self-reported grades/student expectations (1.44), Piagetian techniques (1.28), providing formative evaluation (.90), microteaching (.88), classroom discussion (.82), feedback (.75), reciprocal teaching (.74), student-teacher relationships (.72), meta-cognitive strategies (.69), and problem solving teaching (.61). Each of these strategies encourages active engagement in students and supports our students in learning the collaborative skills students will need in the future careers and in their personal lives.

Johnson and Johnson (2013) have developed the five basic elements of cooperative learning. Interacting with peers and the curriculum in complex ways successfully does not occur by accident. We have to strategically structure the class so that students learn the social skills to be effective team members. The five basic elements give teachers a structure to use as they develop cooperative lessons. The elements of cooperative learning are as follow:

1. Positive Interdependence – We are all in this together and need each other
2. Individual Accountability – Everyone does her/his part and learns all of the material
3. Promotive Interaction – We all support and promote each other academically and personally
4. Interpersonal and Small Group Skills – We all learn the social skills to help build relationships and resolve conflicts in positive ways
5. Group Processing – We each assess ourselves and each other in order to get better

Positive Interdependence is at the heart of cooperative learning. It is the attitude that we are a team and we need each other to be successful. We
work together for each other because we believe that together we are greater than the sum of our parts. Together we can accomplish more than we can each do alone. Teachers can help create this kind of attitude by structuring the learning so students really do need each other (e.g. give separate jobs, assign a group task, limit the materials so students have to share, develop activities in which the students need to discuss and develop better responses, give bonus points for great group work, have students teach each other, etc.). In every formal cooperative group (a group with an assigned task) there should always be three goals: 1. Learn the material so each student can apply the knowledge and skills, 2. Accomplish a group task (e.g. report, presentation, essay, etc.), and 3. Learn the group social skills assigned (e.g. taking turns, encouraging each team member, checking for understanding, synthesizing ideas, developing consensus, negotiating different ideas, debating ideas, developing common ground, etc.).

The second basic element is individual accountability. When we talk about individual accountability we really mean two things: 1. Individual accountability to the group and 2. Individual accountability for one’s learning. Each person has a job to accomplish and in order for the group to be successful everyone has to do her/his job. Each individual should be graded individually on her/his efforts for the group (not graded as a group). Additionally, each individual is responsible for knowing the content being learned. For example, if the group is learning how to create a five paragraph essay, each individual will have to be able to demonstrate her/his writing ability individually. This is true for the group task, individual learning, and applying the social skills being addressed in the activities. One of the goals of cooperative learning is to have students help each other to learn, rehearse, and practice so that each individual can demonstrate competence.

The third basic element is promotive interaction. When students are applying promotive interactions they work together in ways that they all promote or support each other. They support each other academically and they support each other personally. Students should be working closely with each other, sharing materials and ideas, and encouraging and helping each student’s efforts. This means that every student in the class has other students to care about and help her/him. This kind of empathetic cooperation helps students to learn great social skills and it helps every student to understand the curriculum in a real world way.

The fourth basic element is teaching students the interpersonal and small group skills they need in order to be or become great teammates. In addition to the important curriculum goals students should learn the skills necessary for working out group goals, negotiating conflicts positively, communicating effectively, and maintaining strong relationships in school. Students also should be learning leadership skills in their work in the
classroom. The important idea here is to strategically teach social skills to students, and not leave it to chance that the students will gain those skills.

The fifth basic element is group processing. Caine and Caine (2011) explain that Active Processing is critical to deep understanding of both academic ideas and social growth. Group processing occurs when students review and discuss their efforts and their learning with each other. When students plan and publicly commit to learn more or re-learn as necessary they are more likely to follow-through with their plans. In processing students assess what they did well or know or can do proficiently and they discuss areas in need of improvement. This process allows students to make continuous progress and it also demonstrates to them that their efforts to learn matter a great deal.

Whenever a teacher develops a cooperative learning lesson the implementation of these five basic elements into the process is vital for success. If something in the lesson does not work as well as the teacher thought it should, we can usually find what needs to be improved by reviewing the basic elements. Since this is such a complex process it takes time for the teacher and the students to think cooperatively in an intuitive fashion. Thus, it is usually a good idea to begin the process with a small first step. Then as the teacher and students learn more, the teacher can add to the procedures and processes. Once the students gain the basic ideas and skills of cooperative learning the teacher will observe the learning curve taking a much higher path in terms of academic growth and social and interpersonal growth. In the end students will learn more content more deeply and they will have also gained the vital social skills necessary for working in teams (Johnson & Johnson, 2013).

Growth Mindset

Carol Dweck (2006, 2014) has spent many years studying why some children relish a challenge and why other students run from a challenge. She has developed the concepts of Fixed and Growth Mindsets to explain this phenomenon. A person with a Fixed mindset believes that their intelligence and talent is set. They believe they are either smart or not, or talented or not. Thus, they see a difficult challenge as something that will show that they are not as smart or talented as they hoped they were. Students who have a Growth Mindset look at a challenge as an exciting opportunity to learn more. Their mentality is that they do not yet know something, not that they will not learn something. They do not see a challenge as a negative affront to their intelligence they see the challenge as an opportunity to become more intelligent. When asked what they would do if they failed a test students with a Fixed Mindset indicated that they would probably cheat on the next test or find someone who did worse than they did so they would feel better. On the
other hand students with a Growth Mindset offered that they would find out what they needed to work and get better, and they indicated that they would study harder for the next test (Dweck 2006, 2014).

People with a Fixed Mindset view their intelligence, talent, and personality as being fixed assets that cannot be changed. They believe that they can improve in those areas in which they are already intelligent and talented but not in other areas. Those with a Growth Mindset disagree. They believe they can improve their intelligence and talent through hard work and strategic efforts. So, when engaging in an activity people with a Growth Mindset seek out negative feedback because in order to grow they want to know what they should be working on to improve. Fixed Mindset people seek out confirming feedback so they can verify that they are intelligent or talented. When asked to self-assess this causes students with Fixed Mindsets to give themselves more inaccurate information and scores, while those with Growth Mindsets give themselves more accurate information and scores, especially when it comes to the information they need to help them grow (Dweck, 2006).

Dweck (2006) gives us eight questions that we can use to identify our Mindsets. Once we know what are our Mindsets are in specific situations then we can work to change them. Our Mindsets are not set in stone. We can change them. That means that we can teach our students how to change their Mindsets when they need to do so. Dweck tells us that our intelligence Mindset comes into play for any challenge that involves mental abilities and our personality mindsets come into play whenever a challenge requires our personal qualities to resolve the issue at hand. Dweck’s (2006) questions include:

Intelligence Questions

5. Your intelligence is something very basic about you that you can’t change very much.
6. You can learn new things, but you can’t really change how intelligent you are.
7. No matter how much intelligence you have, you can always change it quite a bit.
8. You can always substantially change how intelligent you are.

Personality Questions

5. You are a certain kind of person, and there is not much that can be done to really change that.
6. No matter what kind of person you are, you can always change substantially.
7. You can do things differently, but the important parts of who you are can’t really be changed.
8. You can always change basic things about the kind of person you are. (Dweck, p. 12-13)
The good news, according to Dweck, (2006, 2014) is that we can change our Mindsets if we want to do so. We do not have to remain stuck in a Fixed Mindset mode unless we choose to do so. Deck’s research (2006, 2014) has shown that students can be taught about Mindsets and how to change them.

Methodology

Introduction

For this study we worked in a first grade classroom and taught students using cooperative groups in order to find evidence of the effects of cooperative learning on students’ Fixed or Growth Mindsets. We taught the students three social skills to use in their group work: 1. Taking turns, encouragement, and working voice levels. Two university students taught the students the definitions of each skill and held class discussions to determine why each skill is important. Students practiced each skill and received feedback from each other and from the instructors. After students had gained a basic level of knowledge and skill using each skill the two instructors introduced a project to the students. Their task was to create a story to be placed in a Big Book. Students were grouped by the topics they chose for their stories. Students were placed in groups of four or five students. Each student wrote one page for their group’s story based on their chosen topic. After completing their stories the students each wrote their page of the story into their Big Book. Students then created a Title page and illustrated their stories with pictures that they either found on the internet or that the students drew.

Setting and Participants

The study was set in a first grade in a city in Romania that has a population of approximately 200,000 people. There is a diverse population of students in this school both in terms of ethnicity (Romanian, Turkish, Hungarian, Iranian) and in socioeconomic status. This school has a good reputation in the city and this is one of the elementary schools sought out by many parents who want their students to be prepared for one the best high schools in the city.

There were 30 students involved in the study, 19 girls and 11 boys. The classroom teacher functioned as one the observers in the study, as she allowed the two pre-service students to conduct the lessons and activities for
the study. The university professor who was conducting the study also functioned as an observer and assisted the pre-service students when necessary.

**Research Questions**

For this study we worked to answer the following research questions:

This study was based on two research questions:

1. To what extent will cooperative learning affect the social skill achievement of first grade students?
2. To what extent will cooperative learning affect the mindsets of first grade students?

The research questions were based upon our two hypotheses:

1. If we taught students social skills when they worked in their groups they would improve on those skills.
2. As students become more skillful in their group efforts they would maintain or increase their levels of Growth Mindset.

**Study Design**

In this study we employed a mixed methods design, using both quantitative (surveys) and qualitative (observations and teacher interview) data. Students took a pre and post study survey in relation to Cooperative Learning and their Mindsets. Students were also observed by the two pre-service students and the professor prior to and at the completion of the study. The two pre-service students observed the three social skills used on the study (taking turns, encouragement, and working voice levels). The university professor observed the students in terms of their Mindsets. During the course of the study the pre-service students and the professor kept a researcher journal to maintain daily and weekly observations. At the completion of the study the classroom teacher was also interviewed to gather her observations.

**Phases of Inquiry**

The study employed the following phases of inquiry:

1. Pre study observation
2. Pre Surveys
3. Introduce social skills
4. Practice social skills
5. Teach basics of story telling
6. Introduce Small Group Big Book Project
7. Groups complete project
8. Post study observation
9. Post surveys
10. Teacher Interview
11. Data analysis
12. Formulate conclusions and recommendations

**Instruments**

The cooperative learning survey had three sections that each consisted of five questions: 1. personal support in learning from peers, 2. personal support in learning from the teacher, 3. cooperation. Each statement was scored on a Likert scale from 1 – 5 (Always False to Always True). The statements for each section were as follow (Popa, 2005, 2010):

**Personal support in learning from my peers:**
1. In this class my peers like to help me to learn.
2. My peers want me to learn well.
3. In this class the other students care how much I learn.
4. In this class my peers like me the way I am.
5. In this class every colleague is my friend.

**Personal support in learning from my teacher:**
1. My teacher really cares about me.
2. My teacher cares how much I learn.
3. My teacher likes to see the results of my work.
4. My teacher likes to help me to learn.
5. My teacher cares about how I feel.

**Cooperation:**
1. In this class I like to cooperate with other colleagues.
2. In this class we help each other.
3. In this class we learn more when we work together.
4. In this class learning in cooperative groups is better than learning alone.
5. In this class it is a good that we have students help each other in their learning.

The Mindset survey consisted of 20 questions. There were ten statements for fixed mindset and ten statements for Growth Mindset. Students scored each statement on a Likert scale from 1 – 4 (Strongly Disagree to Strongly Agree). The statements for the survey follow:

**Fixed Mindset:**
1. Your intelligence is something very basic about you that you can’t change very much.
2. Truly smart people do not need to try hard.
3. You can learn new things, but you can’t really change how intelligent you are.
4. Only a few people will be truly good at sports – you have to be “born with it.”
5. You are a certain kind of person, and there is not much that can be done to really change that.
6. You can do things differently, but the important parts of who you are can’t really be changed.
7. Some people are good and kind, and some are not — it’s not often that people change.
8. Trying new things is stressful for me and I avoid it.
9. I often get angry when I get feedback about my performance.
10. Math is much easier to learn if you are a male or maybe come from a culture that values math.

Growth Mindset:
1. No matter how much intelligence you have, you can always change it quite a bit.
2. You can always substantially change how intelligent you are.
3. Music talent can be learned by anyone.
4. The harder you work at something, the better you will be at it.
5. I appreciate when parents, coaches, teachers give me feedback about my performance.
6. An important reason why I do my school work is that I like to learn new things.
7. All human beings without a brain injury or birth defect are capable of the same amount of learning.
8. You can always change basic things about the kind of person you are.
9. Human beings are basically good, but sometimes make terrible decisions.
10. No matter what kind of person you are, you can always change substantially.

Results

Cooperative Learning

The students in this classroom believed that they were cooperative and they believed that their teacher and peers supported them in their learning. The students had higher scores in teacher support and cooperation in general in the pre survey (4.8 and 4.6 respectively) and a lower score for cooperation (3.9). At the end of the study the students maintained high, but slightly lower scores, in teacher and peer support (4.5 and 4.3 respectively). Their score for cooperation rose slightly to 4.1. In all three areas the students scored above four for their feelings of being supported by their teacher, supported by their peers, and cooperation in their class.

Table 1 displays the results of the pre and post observations in relation to the social skill of encouragement. In general the students displayed a growth in helpful social behaviors. The students displayed 86
helpful behaviors in the pre observation and 124 helpful behaviors during the post observation (a 44% increase). Students also displayed fewer non-helpful behaviors in the post observation period. Students displayed 35 non-helpful social skill behaviors in the pre observation and 32 negative behaviors in the post observation. It should be noted that in the pre observation students were working in groups of 2 and in the post observation the students were working in groups of 4 or 5. It takes more social skill ability to work in larger groups than in smaller groups. Thus, the rise in helpful behaviors actually displays a higher level of social ability than the raw scores seem to indicate.

Table 1
Ability to Encourage

<table>
<thead>
<tr>
<th>Observed Category</th>
<th>Smiles</th>
<th>Nods</th>
<th>Say something positive</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>Stage Helpful Actions</td>
<td>35</td>
<td>50</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Non-helpful Actions</td>
<td>18</td>
<td>12</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 2 displays the results for the pre and post observations for taking turns. The results show that students raised their level of helpful behaviors and slightly lowered their levels of unhelpful behaviors from the pre to post observations. The results show that students had 149 observable helpful behaviors in taking turns in the pre observation and 197 observed helpful behaviors in the post observation (a 32% increase in helpful behaviors). Students displayed 45 non-helpful behaviors in the pre observation and 36 non-helpful behaviors in the post observations (a 20% decrease).

Table 2
Taking Turns

<table>
<thead>
<tr>
<th>Observed Category</th>
<th>Wait for person to finish</th>
<th>Looks at the speaker (e.g. raises hand)</th>
<th>Makes a sign (e.g. raises hand)</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>Etapa Helpful actions</td>
<td>19</td>
<td>24</td>
<td>29</td>
<td>39</td>
</tr>
<tr>
<td>Non-helpful</td>
<td>12</td>
<td>9</td>
<td>16</td>
<td>0</td>
</tr>
</tbody>
</table>
actions

From the notes of the two pre-service students and the professor, people noted the positive attitude displayed by the students in learning about cooperation. Students developed their own items to place in T charts to demonstrate what taking turns and encouraging other students looks like and sounds like. For the voice level skill the instructors noticed at the beginning of the process that the noise level in the room would rise as students became more engaged with their groups. So, they decided to teach the students about work level voices. As the instructors were walking around to observe each group the students would verbalize what they needed to do in order to keep voices at a work level (the mechanical stage of skill development). The instructors also indicated that they were intervening less and less as the process continued, indicating to them a growth in student skills and efforts.

Growth Mindset

In the pre-study Mindset Survey there were 20 students (69%) who scored in the Fixed Mindset with some tendencies toward Growth Mindset thinking. There were 9 students (31%) who scored in the Growth Mindset with some tendencies toward Fixed Mindset thinking. In the post survey there were 11 students (39%) who scored in the Fixed Mindset with some tendencies toward Growth Mindset thinking. There were 16 students who scored in the Growth Mindset with some tendencies toward Fixed Mindset thinking. One student scored in the Growth Mindset range (61% of the students scored in the Growth mindset areas). In other words there was a 30% decrease in Fixed Mindset thinking that was transferred to Growth Mindset thinking during the course of the study.

Table 4 displays the data from the pre and post observations for the Mindset actions of the students. In the pre observations there were 58 observable Growth Mindset actions. During the post observations there were 88 observable Growth Mindset actions (an increase of 52%). In the pre observations there were 18 observable Fixed Mindset actions, and in the post observations there were 5 observations of observable Fixed Mindset actions (a 72% decrease).

Table 3
Growth Mindset Observations

<table>
<thead>
<tr>
<th>Observed Category</th>
<th>Perseverance</th>
<th>Hard work</th>
<th>Ask for help</th>
<th>Help other</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage</td>
<td>Pre</td>
<td>Pos</td>
<td>Pre</td>
<td>Pos</td>
<td>Pre</td>
</tr>
<tr>
<td>Growth Actions</td>
<td>26</td>
<td>31</td>
<td>18</td>
<td>24</td>
<td>9</td>
</tr>
</tbody>
</table>
The notes from the instructors aligned with these results. They saw students were on task for longer periods of time when working on a task, and they noticed that students were asking for and accepting help from each other more often (instead of seeking out the instructor right away when a problem arose). Instructors also noticed that they were hearing more positive self talk when students were working on a challenging task (“I can do this”. “What should I try next.” “This is fun.”).

Teacher Interview

The classroom teacher observed the lessons and activities developed by the in-service students. During the process she made observations and gave suggestions. She also used some cooperative learning activities with her students during the times that the class was not directly working on the project. At the completion of the project the teacher was interviewed about her observations. The teacher noted that, At the beginning they did not use their social skills well, but as time went on they became more proficient. Now they accept and respect each other in their groups. The teacher also noticed that, “…those students who tended to not participate now are more engaged even in the traditional lessons. She also indicated that her students had new friendships within the class during the study. Finally, she said, Slowly but surely I am seeing that the students are learning how to persevere longer in class.

Discussion

We had two main objectives in this study: 1. To find out how first grade students would respond to formal cooperative learning concepts, specifically learning small group social skills in their work. 2. To find the affects that this work would have on the Mindsets of the students. The results indicate to us that young students do indeed want to learn important social skills. Given support, practice, and feedback the students in this study were for the most excited and proud of their progress. This is a complex process and it takes longer than eight weeks to develop such complex skills but the progress we saw was very encouraging. It was also fascinating to see the growth in the Mindsets of the students in a short period of time. This is just the beginning of the process for these young students. We are more convinced now that if we begin while the students are young they will learn the pro social skills necessary to be good teammates in and out of school. We are also very convinced that Growth Mindset principles and skills can be
successfully taught to students of all ages. Young students can begin to master the social skills and Mindset skills to prepare them for life, and we believe that we should begin as early as possible to give students these important concepts and skills. We agree that these skills are going to be even more essential for our students in the coming years (Wagner, 2008, Pink, 2006, Caine and Caine, 2011). We also agree with Dweck (2006) and Duckworth (2013) that students can and should learn how to persevere and work hard throughout their lives if they want to be successful. People who are going to get the best jobs in the future are going to be those who understand how to work together positively, who know how to problem solve, who can think critically and creatively, and how know how to treat other people (Wagner, 2008; Pink, 2006; Zhao, 2012). Johnson and Johnson (2013) tell us that learning how to work together in positive ways is important to the future success of our students. As we look at what is going on around the world today, we believe it probably is important to the peace of our world. Learning how to cooperate may just be the right way for us to begin to change our world.

Limitations

This was small study and the data was very interesting and useful for us, but the results cannot be generalized beyond our study. We also intruded into a classroom in which the students were not familiar with us or we with them. That obviously caused some disruption in their regular work as we got used to each other. The teacher and the students were very gracious and they quickly gained trust if our interactions with them. But since this was a relatively short study (8 weeks) this was a limitation for the study. The use of the two pre-service education students was very useful in most aspects of the study, but their relative lack of experience in the observation process took time and practice to get them to become proficient. We should have used practice observations to do this training prior to the beginning of the study. Lastly, we had three people in the classroom plus the teacher observing the process. Classrooms in general do not have that luxury of practice. So, results may have been different if we had used just one person in this process.

Recommendations for Further Study

We have three basic recommendations based on the result of our study. The first recommendation is that because we are convinced that young people can learn well the concepts of Cooperative Learning and Growth Mindset that further studies should be implemented to gather more data of how to work with young people. Second, we believe that studies need to be implemented with larger groups and over longer periods of time in order to
create data that can be generalized. Finally, we recommend that more research be accomplished with the goal of finding more developmentally appropriate ways to help young students work on their Growth Mindset skills, especially when working in cooperative groups.

References