

CONFIDENCE, MOTIVATION, PERSISTENCE, AND STATUS:  
CONNECTIONS AND IMPLICATIONS IN A THIRD GRADE CLASSROOM

By

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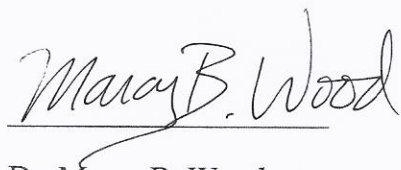
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## Abstract

The purpose of this study was to observe the interactions of students during a group math activity. Also, the study surveyed the different aspects of confidence, motivation, persistence, and status, and how they are interrelated. This research project is important for looking at ways in which confidence influences motivation, persistence and status. It has implications for teachers and how they structure their classroom environment and group work activities.

## Introduction

A common concern for teachers is how to engage students in learning. Teachers may be able to design exceptional lesson plans and group activities, but they also need to ensure that students are actually acquiring knowledge. This can be extremely challenging, especially when students do not feel confident in certain subject areas. When these students are involved in group work, their lack of confidence, combined with status issues, contribute to their lack of motivation and persistence. Confidence, motivation, persistence and status are four completely separate factors that affect students in the classroom, but are they codependent? Can you have motivation and status without confidence; persistence without motivation? These are a few of the questions I asked myself, as I was developing and carrying out my research project. I also looked at how these factors are intertwined, because this interweaving has implications for teachers, especially those who utilize group work in their daily learning activities.

## Literature Review

### **Confidence, Motivation, and Persistence**

My use of the terms confidence, motivation, and persistence draw upon Jere Brophy's (2010) ideas, contained in his book entitled, "Motivating Students to Learn." What I refer to as "confidence," Brophy refers to as "expectancy," which relates to "beliefs about performance attainment" (p. 127). A person with high confidence expects to succeed at a task, and a person with low confidence either expects to do poorly, or is unsure if they will succeed.

According to Brophy (2010), motivation studies have been done that focus on how people react to achievement situations when given a goal-oriented task that they are

required to perform. This early work found that people have a tendency to “approach achievement situations differently” (p. 45). People will either take on a new task and welcome the challenge, or they will try to avoid it. In addition, Brophy notes that later studies confirmed the earlier findings, and added that people with a focus on achievement and success prefer to engage in moderately difficult activities, and even try to develop their skills. On the other hand, people with a focus on failure have a tendency to be fearful of achievement situations, avoid them when possible, and will attempt to reduce the risk of failure, if they are unable to avoid the task. Brophy further states that these early studies on achievement motivation used physical, rather than cognitive activities, and therefore are not useful for drawing conclusions and making suggestions for teachers. However, these findings are helpful when considering how students may approach tasks differently, depending on their estimation of probability to succeed and their motivation to either succeed or avoid failure.

More recent studies shifted the focus away from a person’s *need* to achieve success or avoid failure, based on the makeup of said individual’s achievement motivation, and began to focus on the setting of achievement *goals* (Brophy, 2010). Brophy draws on Dweck & Elliott (1983), who state that “research initially established that effort and persistence are greater in people who set goals of moderate difficulty, commit to pursuing these goals, and “concentrate on trying to achieve success rather than avoid failure” (p. 46). Researchers also began to lean towards the perception that people’s confidence in their ability to succeed was connected to their invested efforts and their ability to control the outcome of their success. In addition, Brophy includes work done by Carol Dweck (1991) and colleagues, who looked at different response patterns of

children in achievement situations, and found a connection between goal setting and how children approach a task. “Children who established *learning goals* focused on learning something new or mastering the task;” however, “children who set *performance goals* were more concerned about gaining favorable judgments of their competence than about learning something new,” and they processed information mainly for the purpose of “assessing their ability” (Brophy, 2010, p. 47, italics in original). Brophy further notes that children who set performance goals, consequently questioned their ability when they came face to face with failure, which in turn, typically led to their loss of confidence.

Brophy’s framework of confidence and expectancy can provide useful insights into how students react to tasks. Accordingly, his layout of the research helped me analyze the data from my own research project. This background knowledge prompted me to search for moments when certain students in the focal group showed confidence, or lack thereof. It also led me to findings regarding the different ways these students reacted to certain tasks, based on their degree of confidence.

Taking confidence and expectancy to the next level ultimately leads us to motivation. Brophy draws upon Maehr and Meyer (1997) to define motivation as “a theoretical construct used to explain the initiation, direction, intensity, persistence, and quality of behavior, especially goal-directed behavior” (2010, p. 3). More specifically geared towards the classroom, Brophy states that “the concept of *student motivation* is used to explain the degree to which students invest attention and effort in various pursuits” (p. 3, italics in original). In addition, he notes that sustained effort and concentration are necessary components of learning, which I have noticed are sometimes

lacking in classrooms. It comes as no surprise, therefore, that motivating students to learn has been a challenge that many school teachers have had to face over the years. Consequently, teachers have tried and tested numerous strategies that are based on motivational theories, in an attempt to achieve their goal.

The views of motivation have evolved over time. They began with behavior reinforcement theories, which were initially based on research done on animals instead of humans. According to Brophy (2010), the earlier views on behavior reinforcement theories focused on *needs* or *drives*, but later shifted towards *reinforcement*, where students receive a reinforcer or prize, for behaving a certain way. One alternative to the behavior reinforcement theories that emerged was the need theories. One need theory that has survived and has remained popular is Maslow's Hierarchy of Needs, which implies that basic needs must be met first, before students can be motivated to learn.

The next theory to surface was the goal theories, which started to move away from needs and focused more on the idea that we sometimes do things because we want to, and not necessarily because we are being pushed, or trying to satisfy some need. As humans, we do not consciously set objectives to help us meet goals for everything we do; however, most human activity is purposeful (Brophy, 2010, p. 5). On the other hand, classrooms do have set objectives and goals. Brophy states that in the classroom, goal theories emphasize establishing supportive relationships and collaborative learning arrangements that encourage students to adopt learning goals (p. 7). What this means for teachers is that learning communities need to be established in the classroom, where students feel secure, comfortable, and valued. In addition, emotional bonds between students and their teachers and peers need to be formed, which in turn will lead to



positive attitudes towards learning. Both of these steps are necessary before teachers can begin helping their students frame their own learning goals. These goals include seeking understanding, overcoming confusion, self-assessing, and reflecting, and ultimately help students meet lesson objectives and class goals. The most recent change of view has been the shift to intrinsic motivation theories, which depict people as pursuing their own agendas— doing what they do because they want to, rather than because they need to (p. 7).

While I acknowledge the benefits of reinforcers and the importance of meeting primary human needs, I am more compelled by the view that humans do things because they either want to, or because they have a purpose for doing it. Unfortunately, not all classroom activities are viewed as enjoyable, students often are not made aware of the objectives they are supposed to be meeting, and tasks sometimes seem meaningless to students. Therefore, I agree with Brophy, when he suggests that it is more feasible for teachers to help their students develop motivation to learn, by teaching them to find learning activities meaningful and worthwhile, and to get the intended benefits from them (2010, p. 11). In addition, Brophy states that teachers can also help their students to frame their learning goals in terms of acquiring knowledge or skills, not just in terms of completing tasks or obtaining particular grades (p. 26-27).

Brophy's expectancy  $\times$  value model of motivation helped me to think about the data of my research, and how confidence, value, motivation, and persistence are intertwined. For instance, when reviewing the video from my research project, I considered the idea of confidence in and the value of an activity both playing a vital role in motivation, and also Brophy's belief that it is assumed that no effort at all will be

invested if either factor is missing entirely (2010, p. 16). It was also helpful when considering the connection between motivation and persistence. Brophy stresses the importance of teachers designing goals and practices that result in student success when they apply themselves, and then making "effort-outcome linkages" when providing students with feedback, so that they will be reassured that their *persistence* will eventually pay off.

### **Status**

My use of the term status is based first on my own understanding of its definition, which is the position or ranking of a person, as compared with others. However, I draw on the work of Elizabeth Cohen to further define its use, and how it affects student participation within small group settings. In the 1994 book, "Designing Groupwork," Cohen breaks down status into four groups: expert, academic, peer, and societal. She states that expert status comes from students having high standing in a particular subject. If the task assigned is from that same subject area, then these students are considered experts and typically dominate their group. She further states that academic status is typically tied to reading ability, and even when an assigned task requires no academic skill, "the student who is seen as best in reading is very likely to dominate the discussion" (p. 30). She then explains that peer status is determined by social standing, which can be based on popularity, attractiveness, or athletic competence. Students with higher social standings are also likely to dominate group activities. Finally, societal status is based on "social class, race, ethnic group, and sex" (Cohen, 1994, p. 32). According to Cohen, "most people agree that it is better to be of a higher social class, white, and male than it is to be of a lower social class, black or brown, or female" (p. 32).

While all of these status categories may have an influence on group activities, I will consider only two of them for this project. First, expert and societal status do not appear to be factors in this study. For example, all of the students in the focal group have somewhat similar math skills, thus eliminating any experts. In addition, if societal status were dominant, then the male student would be considered higher status, which is not the case in this activity. On the other hand, I do consider academic status towards the end of my findings, as they relate to a student with a below grade reading level, who appeared to have higher status during the activity, possibly because of her higher confidence. For the purposes of this section and the majority of my findings, I consider peer status to be the most influential factor affecting my study.

Common problems of group work include discussions and materials being controlled by high status students, and also low status students either being ignored, or not actively participating. Also, group members sometimes go along with the ideas of high status students, even when they are wrong. Cohen (1994) addresses these problems in her book, and suggests that teachers prepare their students for cooperative learning, by teaching them the norms and skills necessary for working in small groups. Also, she emphasizes “the necessity for both *individual* and *group* accountability” (p. 66, italics in original), in order to combat the issue of some people sitting back and letting others do all the work, as well as, motivating students to help their group members. She further suggests that developing, training, and assigning different roles to students, is another strategy to help offset common problems of group work. However, Cohen later reminds us that none of these strategies does “anything to change low expectations for competence, the underlying cause of nonparticipation by low status students” (p. 117).

She articulates the idea that “positive expectations for intellectual competence” needs to be created, so that “students can expect themselves and can be expected by classmates to make good contributions to each new assignment” (p. 118). She states that one way of doing this is by designing “a situation where the student who is expected to be incompetent will actually function as an expert” (p. 118).

The information contained in Cohen’s book helped me in the planning of my research project. It also helped me think about whether teacher interventions and “assigning competence” had an effect on the status of the students in my research project. In addition, it was helpful when considering how teachers and fellow classmates can have an impact on students’ motivation.

In my study, I attempt to find answers to the following research questions:

- 1) What are the relationships between confidence, motivation, persistence, and status?
- 2) Do teacher and student interactions have an effect on confidence, value, motivation and persistence?
- 3) Does teacher intervention affect student status during an activity?

### Methods

#### **Site**

The study site for this project was a K-5<sup>th</sup> grade school, Saguaro Avenue Elementary School, located in a residential area of a midsize southwestern city. There were 21 teachers and 3 instructional specialists at this site. The school had a diverse population of approximately 514 students: 48% of students identified as Hispanic, 29% White, 14% African American, 6% Native American or Alaska Native, and 3% as Asian. Ninety-one percent of the students qualified for free or reduced price lunches, and

twenty-seven percent of the student population was classified as English Language Learners. Students attending this school came from across the public school district and the surrounding neighborhoods.

I chose to use this location as my research site because I was already at this school, doing classroom observations for my methods block. I decided to do my study in the same classroom where I was doing my observations, after getting permission from my cooperating teacher and the school principal.

### **Participants**

I conducted my study in a third grade classroom. The classroom consisted of 13 students: 10 girls and 3 boys. Their ethnic backgrounds were: 7 Hispanic students, 3 African-American students, 2 White students, and 1 Asian student. The entire class participated in the math activity, but the main focus of my study included four students.

The focal group consisted of:

Ana, a Hispanic girl

Bonnie, an African-American girl

Melissa, a Hispanic girl

Tim, an Asian boy

I chose this group, because there were a number of interesting characteristics present amongst these students. First of all, Tim exhibits Attention Deficit Hyperactivity Disorder (ADHD) tendencies, although he has not been officially diagnosed. He has difficulty sitting still, and typically does his work standing up at his desk. In addition, he normally drifts off into his own "play world," where he plays with pencils, figurines, or anything in his possession. Bonnie lacks self-confidence, and although she is capable of

doing most tasks, she frequently asks for assistance. Melissa is very quiet, responsible, and reliable. She normally completes her work independently and with care. Ana usually works quietly, but struggles to complete her work. She is pulled out of class each morning for extra help in reading, because she reads below her grade level. My findings will primarily focus on Tim, because I find it particularly interesting how he lacks confidence in certain portions of the math activity, but has extremely high confidence in other parts. I am also intrigued by his persistence in the activity, because I have observed him getting off task on numerous occasions.

The students in this classroom are seated at clusters of 4-6 desks, but there are only 3-4 students in each group. My focal group was originally sitting in an oval position, with three students facing one student. I asked Tim to move over into an empty desk during this activity, so that there would be two students facing two other students. Also, Ana is new to this group, because she was recently moved over from another group.

### **Researcher Role**

There were two researchers present in the classroom during the study. For the purpose of this activity, I took on the role of the teacher. I instructed the students on how to play the elimination game (described below), explained its purpose, and provided guidance, intervention, and feedback throughout the lesson. I also acted as an observer during the activity. My honors advisor, Marcy Wood, Ph.D., Assistant Professor in the College of Education, University of Arizona, was also present during the activity. She acted as an observer, while videotaping the lesson. She also took on the role of participant on a few occasions, when she interacted with the students and modeled intervention strategies.

## Math Activity

I chose to use the group math activity, "Find Rosa's Robot," for my math lesson. This activity was adapted from Jan Goodman (1992). Each group of students received six robot cards and four clue cards. Each robot card showed a robot that was slightly different from the robots on the other cards. For example, one robot had a rectangular body, three robots had triangular bodies, and two robots had the body of a right-angle triangle. Each clue card described one feature of Rosa's robot. For example, one clue card read, "Rosa's robot has more than 2 arms - find Rosa's robot" (p. 46). The object of the game was for groups of students to eliminate robot cards, based on information contained in their clue cards. For example, one clue card states, "Rosa's robot has a triangle for a body - find Rosa's robot" (p. 46). The student reading the clue card would eliminate any robot cards that do not have a triangular body, such as robots with a rectangular body. When there is only one robot card remaining, each student is to reread their clue card and make sure that their clue matches the last remaining robot card. After students have solved the problem, each student is to draw a picture of the remaining robot. Then, each group chooses one robot card, and creates a new set of clue cards to match their chosen robot. Each student in the group is required to make at least one clue card. Other groups of students will then play their game, using their new clue cards. The purpose of this activity is to ensure that *everyone* in the group participates, to help students appreciate the strengths of their group members, and to build students' problem-solving skills.

## **Data**

My primary data source was a videotape of the lesson. The videotape was 69 minutes long. The majority of the videotape focused on the activities and interactions of the focal group. I analyzed the data by first viewing the entire video, and then going back and transcribing all interesting interactions, discussions, comments, and physical actions. I transcribed approximately 20 pages of the videotape, and then went back several times, looking specifically at confidence, motivation, and persistence.

## Findings

Some of the things I looked at when reviewing the video from the math activity were the moments in which Tim exhibited or did not exhibit confidence, motivation, and persistence. I approached the viewing of the video in this order, because confidence in and the value of an activity both influence the motivation that is necessary for a person to engage and persist in an activity (Brophy, 2010).

## **Confidence, Motivation, and Persistence**

My definition of confidence is what Brophy refers to in his "expectancy  $\times$  value model of motivation," which includes "the degree to which they expect to be able to perform the activity successfully if they apply themselves" (2010, p. 15). During the math activity, Tim lacked confidence in his drawing abilities; his knowledge of certain math concepts, such as shapes and even or odd numbers; and also some of his writing abilities. On the other hand, Tim had very high confidence in his ability to place robot cards in the correct direction, and also in his ability to eliminate robot cards, based on the clues provided. I will be providing evidence for these claims below.



After viewing the video and reflecting on the events that transpired, I found that when a student had low confidence in an activity, they tended to seek out encouragement or reassurance from others. In addition, if they received positive feedback, it seemed to boost their confidence, as well as their value of an activity. The term "value" in this section refers to a verb meaning to appreciate or see worth in (Brophy, 2010, p. 16). During the course of this math activity, I observed Tim seek out encouragement or reassurance from others on four separate occasions. I also witnessed other students in the same group displaying this behavior two times. For example, the following interaction occurred as students worked on drawing their own pictures of Rosa's robot:

Tim: I'm done, mine looks horrible.

Bonnie: Mines [sic] too.

Ana: Let me see, Tim. That looks cute.

Bonnie: Mines [sic] is a hard one.

Tim: That's not it oh it looks kind of great.

Bonnie: You're just saying that.

Tim: No, I'm not.

Bonnie: Yes, huh.

Tim: No, I'm not.

When Tim stated, "I'm done, mine looks horrible," he put himself "out there," which suggests that he had low confidence in his drawing ability. When Ana told him that his drawing "looks cute," I believe that she raised his confidence. In addition, when Ana responded to Tim's comment by saying, "Let me see," she may have increased the

value of the activity. Showing interest in his work suggests that the task was worthy of her attention and therefore valuable.

In addition, Marcy also showed interest in his work in a later incident, when she addressed the focal group:

Marcy: So I was really watching carefully what you were doing and I was noticing that one thing that Tim was doing that seemed really helpful is that he was counting each one of the things, so every time there was a number, Tim was counting those things. So Tim, do you remember how many squares there were on this?

Tim: Twelve.

Marcy: How did you know that?

Tim: Cause I was kinda counting by two's.

Marcy: And you were the very first person to know that there were twelve squares there, which tells me that Tim has a lot of strengths and I think that you could use some of those strengths. So when you do the next task, I know Ms. Narum has another task for you, when you do this other task, you might think about going to Tim because he's got some good ideas. Okay?

I believe that Marcy also raised Tim's confidence when she pointed out his ability to count by two's, and also suggested that the group take advantage of Tim's strengths and listen to his ideas on the next task. Following Ana's compliment and Marcy's public announcement of his strengths, not only did Tim remain engaged in the drawing activity, but he also labeled the squares on his robot with 2, 4, 6, 8, 10, 12, and added color to the background of his robot picture. The fact that neither of these additional activities were a requirement of the assignment, that Tim initially had little confidence in his drawing abilities, and that he normally loses interest in assignments and drifts off into his own activities, suggests that Tim's expectancy to succeed was raised by Ana's reassurance and Marcy's positive feedback, and that he found this activity to be valuable.

This also suggests that teachers and fellow classmates can impact students' motivation, and that there appears to be a strong link between encouragement, motivation, and persistence.

Without encouragement or reassurance from others, a student's confidence level may remain the same, or possibly be lowered, and the value of the activity may be diminished. For example, during this math activity, Tim said "That's not a triangle," referring to the right-angle triangle on the robot card. In this instance, Tim's entire group disagreed with him when they told him "it *is* [a triangle]," which did nothing to boost his confidence. In addition, Melissa redirected the group from Tim's question, immediately pushing the activity forward by saying, "Read yours, Tim," referring to his clue card. I believe that Tim's confidence level was lowered here, because there was no further objection from him regarding the shapes. Also, when I read one of the clue cards to the group, "Rosie's robot has an even number of squares," Tim replied "I don't get it." He voiced his lack of confidence here, but either no one heard him, or everyone ignored him, and the activity moved forward. The fact that no one responded to Tim this time, including *me*, may have given him the impression that this particular clue was not an important or valuable part of the task. Therefore, he did not persist in his questioning, which suggests that the value of this small piece of the activity was lowered for him. When he did not understand the clue and no one heard his comment, or they simply ignored him, he was also left in the position of "not knowing." This may have also lowered his expectancy to succeed, and therefore, he chose not to pursue this part of the activity. In addition, after Tim wrote his own clue card, Melissa told him to change the word "has" to "had," which he did, even though "has" was correct. Although Tim was

not seeking out reassurance or encouragement in this instance, Melissa's interest in his clue card increased the value of the activity. I believe that Tim viewed Melissa's input as encouragement, and he willingly made the changes, due to his partial lack of confidence in his own grammatical writing skills.

From this experience, I also found that when Tim had very high confidence in and valued a particular activity, he did not seek reassurance from others and, in fact, ignored the input and opinion of others. For example, after Ana set up the robot cards in the middle of the group, Tim tried to rotate one of the robot cards in the direction he felt was correct. Ana removed the cards from his reach, and I intervened by telling her to put them in the middle, so everyone can have access to them. Once the cards were placed back on the desk, Tim again rotated the one robot card in the direction he felt was correct. This suggests that he was very confident about the direction in which he was placing the robot card, and also that he appreciated the importance of all the clue cards facing the same direction, when playing the game. He was also confident in the elimination of a robot card that he felt should be eliminated, even though Ana disagreed with him. Ana read her clue card and eliminated the wrong card. Tim repeated her clue out loud and eliminated the correct robot card, but Ana told him "No, this eliminating," referring to the card she wanted to eliminate. Rather than objecting verbally, Tim simply put Ana's eliminated card back where she picked it up from, and he eliminated the correct card, without her realizing it. Again, this suggests that Tim had high expectancy for and valued this part of the activity, and felt that it was worthwhile to "get it right." In addition, he did not seem to value Ana's opinion, and in fact, completely ignored it.

In summary, students with low confidence tend to seek encouragement or reassurance from others. When they receive positive feedback, their confidence and value of an activity may be raised; however, if they do not receive reassurance or encouragement, the opposite may occur. Also, when a student has high confidence and values an activity, they typically do not seek reassurance from others, and may even ignore the opinions and input of others.

### **Status**

Another thing that I looked at when reviewing the video, was the issue of status. What I mean by status is a person's ranking within a group of other people, based upon perceptions of competence. When I talk about the status hierarchy within the classroom, I am referring to "status ordering," which Cohen defines as "an agreed-upon social ranking where everyone feels it is better to have a high rank within the status order than a low rank" (1994, p. 27). I will begin this section by describing the status hierarchy of the group, as I interpreted it.

Based on my observations from the video of this math activity, Ana and Melissa both seemed to have higher status than Tim, for several reasons. First, Ana and Melissa dominated and controlled the materials. Melissa grabbed materials out of Tim's hand on two separate occasions. In addition, Ana pulled the robot cards towards her when Tim tried to rotate one of them, and she also instructed Bonnie to not let Tim touch the cards. Also, when Tim realized that the number of squares listed on his clue card did not match the attributes on the last remaining robot cards, he tried to correct it, but Ana grabbed his pencil and the clue card sheet away from him and began erasing his clue. It was at this point that Ana also called Tim "a dummy." Next, Ana and Melissa both disagreed with

Tim when he said, "That's not a triangle," and continued on, without bothering to explain why they disagreed with him. Also, Melissa told Tim not to sit in a particular chair, and it wasn't until she discovered that I told him to sit there that she backed down and let him stay there. In addition, Melissa told Tim to change a word on his clue card, which he did, even though he was right and Melissa was wrong. Finally, I also noticed that when Tim attempted to grab materials from their hands, he was usually unsuccessful. All of these observations suggest that Tim had a lower status than Ana and Melissa.

Bonnie also appeared to have lower status than both Ana and Melissa. For example, Melissa told Bonnie to come tell me that they were done, and Bonnie immediately followed her directions. But Ana disagreed with Melissa, and Bonnie immediately turned back towards the group. This suggests that both Melissa and Ana had higher status than Bonnie.

Bonnie was the only person in the group who seemed to have lower status than Tim. During the activity, Tim took the pile of clue cards from Bonnie's desk, and later grabbed a clue card from her hand, without any resistance from Bonnie. This might simply be the result of her passive personality; however, it suggests that Tim had a higher status than Bonnie.

My findings for this section are that the status of students did not change during the activity, even when there were interventions made by teachers. Towards the beginning of the lesson, Marcy, who already knew that Tim had lower status, pointed out to the rest of the group that Tim was the first person to know how many squares were on the robot card. When she questioned Tim, she discovered that he was counting by two's. She then announced this strength to the rest of his group, and told them that he had "a lot

of strengths,ö that they should use his strengths, and that they should think about going to him for ideas in the next task. Shortly thereafter, however, Melissa told Tim to change the wording on his clue card, which he did, even though his wording was correct, and her wording was incorrect. This suggests that Marcy's intervention had no effect on Tim's status, because Melissa was telling Tim what to do, rather than asking him, and he made the change without even questioning it.

Later in the activity after the students had finished writing their own clue cards, Ana did not allow Tim to have access to the robot cards. When Ana was controlling the materials, I intervened by telling her to keep the materials in the center of the group so that everyone had access to them. I was implying that everyone had the *same* right to handle the materials in this activity. However, later in the activity, Ana again took materials from Tim, when she grabbed the clue card sheet from him and began erasing his clue. This suggests that my intervention had no effect on Tim's status, because Ana still felt that she had the right to control materials.

In addition, Marcy intervened and questioned Ana about why she was changing Tim's clue card, when he was already in the process of making the correction:

Marcy: So, I'm not sure why you're erasing and writing when it's Tim's clue.

Ana: I know, but he changed it.

Marcy: Okay, but he was in the process of changing it, so when you do that, you take away Tim's work, and what you tell me is you don't think he's smart enough to do this. Do you think he's not smart enough to complete this one?

Ana: No.

Tim was then able to correct his own clue card. However, later in the activity, Ana still did not accept Tim's strengths or opinions, when he eliminated the correct robot card and

she insisted on eliminating the incorrect card. Consequently, Tim ended this activity with the same low status that he began with. This suggests that the interventions by the teachers had no effect on his status.

I also found from this activity that students with lower status sometimes resist the status position of other students in the group. For example, Melissa had a higher status than Tim, but when she told him he could not sit in a particular chair, he stood up to her and remained in the chair, because I had told him to go sit there. Also, Ana had higher status than Tim, but he disagreed with her positioning of the robot cards. When he tried to rotate one of the cards 90°, she pulled all of the cards back towards her and collected them into her hands. Even though he told Ana that he was not trying to take them, just turn them around, she still told Bonnie to make sure he didn't get the cards. After I intervened and she put the cards back down on the desk, Tim still disagreed with her placement of one of the cards and tried to turn it 90° again. This suggests that he was resisting her higher status position, and felt that he had the right to make changes to what she had done. In addition, Tim disagreed with Ana's decision to eliminate one of the robot cards. After reading her clue, Ana handed Tim the card she wanted to eliminate, because he was holding the pile of eliminated cards. However, Tim repeated Ana's clue out loud, and then picked up a different robot card to eliminate. Ana verbally disagreed with his decision, when she said "No, this eliminating," referring to the card she picked. Tim did not respond to Ana verbally this time, but instead put the card that Ana handed him back down face up and picked up the card he thought should be eliminated, and then put it in the elimination pile, without her noticing. This again suggests that he was



resisting her higher status position, and felt that he had the right to make decisions for the group. However, this time he chose to resist quietly.

From this activity, I learned that teacher intervention does not necessarily have an effect on the status hierarchy within the classroom. Teachers can point out strengths of other students, and they can try to minimize the hoarding of materials, but at the end of the day, the status ordering may remain the same. I also learned that low status students will sometimes resist the high status position of other students, especially when their expectancy to succeed is high. These findings suggest that there may be other factors, besides teacher intervention, that can have an impact on status.

### **Relationship**

There appears to be a relationship between status and confidence. Students with higher status appear to have higher levels of confidence. These students do not question their abilities, and they are very confident in their decisions throughout the activity, even when they are wrong. Melissa and Ana argued about whether they were done with the activity, because they were both high status students in this group and were both confident they were right. Ana also remained confident in her decision to eliminate one of the robot cards, even though Tim disagreed with her, and her decision was wrong. On the other hand, Tim and Bonnie had lower status, and they also had lower confidence in their drawing abilities. For example, they both publicly announced their dissatisfaction with their own drawings. Tim also had low confidence in his knowledge of even or odd numbers, when he said, "I don't get it." In addition, Tim had low confidence in his own writing skills, when he changed the wording of his clue card, based on Melissa's instructions, even though his wording was originally correct.

It also appears that students with higher levels of confidence, in turn, have higher status. Before this activity, I would not have described Ana as a high status student, based on prior limited observations of her in another group. However, she did appear to have high status during this math activity and in this particular group of students. I feel it is important to mention here that I showed Ana how to play the elimination game the day before this activity took place, and she was one of my models for teaching the remaining students how to play the game. During the activity, I observed her directing the other students in her group, on what to do next. This suggests that her high confidence from knowing how to play the game, may have affected her status in this particular activity and with this group of students.

I also found it interesting that students with lower status sometimes use the higher status students to build up their confidence. For example, when Bonnie and Tim expressed their dissatisfaction with their drawings, Ana reassured Tim, and then Tim reassured Bonnie. However, when it comes to reinforcing another student's higher status, the reassurance comes from the opposite direction. For example, at the very end of the lesson, Bonnie reinforced Tim's higher status, by telling the *entire* class about his ability to count by two's. Then, Tim reinforced Melissa's higher status, by acknowledging her to the class and thanking her for helping their group.

The relationship between status and confidence appears to be substantial. Students with high status appear to have high levels of confidence, and students with low status appear to have low levels of confidence in at least one area. In addition, when a student who was previously considered low status has high confidence in a task, they

may challenge the status of higher students, and their high level of confidence may even have an effect on their status.

### Conclusion

Status is certainly an important factor that teachers need to consider when planning to do group work in their classrooms. However, this study suggests that students and teachers have more of an impact on students' confidence and the value that is placed on an activity, than on the status hierarchy in the classroom. In addition, while teachers can get students involved in an activity with reinforcers, they cannot motivate students to engage in *learning*, if they do not first address the issue of confidence. Therefore, the focus needs to be on raising the confidence level of students and providing them with meaningful learning activities.

If teachers help build confidence in low status students, it will not only increase their motivation and persistence, but may also give them the power to resist the high status of other students. Also, helping students to become 'experts' may even have an effect on their status over time. In addition, if teachers help their students focus on achievement and success, rather than failure, by creating positive and supportive classroom environments, it will encourage students to develop their own learning goals. Teachers can also help students learn how to find the value and importance of learning, which can have a huge impact on how they approach new learning activities.

There is clearly a relationship between confidence, motivation, and persistence. There also appears to be a strong connection between confidence and status. What we do not know is whether confidence *alone* is a strong enough force to have an impact on status. We also do not know if teacher intervention over long periods of time can have a

genuine effect on the status hierarchy in a classroom. Whether peer interactions have more of an effect on students' confidence than teacher interactions do, is another question to which we currently do not have an answer. These uncertainties might be good areas of inquiry for future researchers.

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