

USING AUTHENTIC DISCUSSION
TO PROMOTE PARTICIPATION AND EQUITY

By
Andrea Barranger

An Action Research Project Submitted to the Faculty of
The Evergreen State College
In Partial Fulfillment of the Requirements
for the Degree
Master in Teaching
2015

This Action Research Project
for the Master in Teaching Degree

by

Andrea Barranger

has been approved for

The Evergreen State College

by

(Lester Krupp, M. A.)

ABSTRACT

Authentic discussions are dialogically based interactions where students orient their ideas to each other and participation is student-led. This action research project examined the structures used during authentic discussion that can potentially promote participation and equity. Structures include creating expectations, assigning competence, orienting students to each other, and defining the teacher as facilitator. This qualitative study examines the structures in a fourth-grade classroom that promote participation and increase equity.

ACKNOWLEDGMENTS

I wish to thank the most important people in my life: My dad (Mark), my son (Sequoyah), and my daughter (Aiyanna). Their love, support, and encouragement allowed me to finish this work with grace. My dad, offered support in many ways and I could not have done this without him. My children offered encouragement and love throughout my experience, not to mention countless meals cooked. My friends were absolutely amazing through this process. I could never have done it without them and I will always be grateful for their unconditional support. I would also like to thank my faculty: Sunshine, Lester, and Michi who have supported my learning throughout this process. Finally, I would like to thank my peers in the MiT program for making this experience possible and filling it with laughter and joy. I look forward to collaborating with you as colleagues and keeping a lifetime friendship. I especially want to acknowledge Billy and Dannie for all of your support, friendship, and laughter throughout this process.

TABLE OF CONTENTS

ABSTRACT	III
ACKNOWLEDGMENTS	IV
CHAPTER 1: LITERATURE REVIEW	1
INTRODUCTION	1
PARTICIPANTS AND SETTING	5
DATA COLLECTION.....	6
AUTHENTIC DISCUSSION.....	8
The Value of Questions	10
Orient Students to Each Other’s Ideas	11
Teacher’s Role as Facilitator	12
ASSIGNING COMPETENCE	13
CLASSROOM PARTICIPATION	14
Gender.....	15
Power and Status.....	16
DISCUSSION EXPECTATIONS.....	19
THE TEACHER’S BELIEFS	20
Co-Construction of Knowledge	20
Vulnerability.....	21
SUMMARY.....	21
CHAPTER TWO: METHODS	23
DISCUSSION PRACTICES	23
Observations and Field Notes.....	25
Student Surveys	25
Exit Tickets.....	26
Video and Transcripts	27
LIMITATIONS OF THIS STUDY	28

CHAPTER 3: FINDINGS.....	31
THROUGH THE LENS OF THE RESEARCHER.....	31
ACTION AND PRACTICES	32
Expectations	33
Literacy Seminar.....	35
Teacher as Facilitator	37
FINDINGS.....	39
Student Voice	39
Status	43
Comfort During Discussion.....	48
Orienting Students to Each Other	52
IMPLICATIONS AND FURTHER RESEARCH	55
REFERENCES	60
APPENDIX	64

CHAPTER 1: LITERATURE REVIEW

Introduction

Participation in the classroom increases learning for all students. Oral participation in particular, through group discussions, helps students develop analytical thinking and reasoning skills and increases equity in the classroom (Alder & Rougle, 2005). In many classrooms there is an uneven level of participation among students due to many factors such as power imbalance, status, and positioning. When there is a low level of participation from only a few students in the classroom, the amount of learning that takes place decreases. To increase the learning for all students, a teacher can focus on increasing the participation during discussion.

Gender is another element that affects the participation rate in the classroom. Boys and higher-status students often dominate classroom discussions and in turn benefit the most from those conversations (Anders, Alvermann, & Evans, 1998).

One treatment that can be used to increase the participation of a low-status student is to assign competence. The teacher uses her power as an evaluator to publicly display a strong idea or ability a student demonstrates. This is successful because students tend to believe the evaluations a teacher gives. It also is effective because other students overhear this evaluation and accept its validity. Assigning competence to low-status students increases their participation. Assigning competence to low-status students is one way a teacher can curb and balance the power in the classroom. When low-status students receive public recognition for their contribution to the learning, their efficacy and

achievement increase (Cohen, 1994). Teachers' awareness of the dynamics of power and dominance in a classroom discussion can alter these dynamics and create a more equitable climate. Using authentic discussion is one way to encourage a higher rate of participation and create equity in the classroom.

Educational theorists and researchers discuss the importance of authentic discussion within the classroom. There is much evidence of the value of authentic dialogue and interactive discussion, but it is seldom seen within the classroom (Hadjioannou, 2007). The ideals of democracy and education value the dialogic exchange of ideas, but teachers often do not encourage this in their classrooms (Freire, 2000). Although discussions are an important element for student achievement, they are rare in a traditional classroom (Alder & Rougle, 2005). Dewey (1944) believed that through communicative interaction of people working together, society and education could be improved. Freire (1998) believed that education is an exchange of dialogue between two learners from different perspectives. These interactions can be encouraged during classroom dialogue.

A classroom community exists within a wider sphere of a society that influences the way we interact. The classroom community is shaped by the greater context of the community supporting the school (Hadjioannou, 2007). The classroom is a sample of the greater society. Within the traditional classroom, the most common approach to teaching is an authoritative, teacher-centered style that does not support critical thinking. Teachers give students information, and often students are not given opportunities to co-construct knowledge with their peers (Freire, 2000; Hadjioannou, 2007). However, classroom discussion can be encouraged through interaction between students.

When a teacher creates an environment that encourages discussion and interaction between peers, she is in turn promoting critical thinking.

The educational system is one way society can build critical thinking. Society is built on communication, and therefore teachers could encourage more dialogue within the classroom (Dewey, 1944). Language is the main instrument of learning, and language is the way students gain knowledge. The lack of interactive dialogue within the classroom hinders the acquisition of knowledge and skills that students (especially ELLs or students with disabilities) need for critical thinking. Dialogue in the classroom enables students to increase knowledge gained from each other. Dialogue is the foundation for critical thinking. Through dialogue students are able to reason, ask questions, and question important concepts (Noddings, 2013). Critical thinking is a skill most researchers, theorists, and educators would agree is important for students, yet it is not emphasized in the curriculum. Critical thinking can be introduced into the classroom through authentic discussion.

Authentic discussion in the classroom can also increase equity. In most classrooms, there is an unequal balance of students who participate in discussion. It is important for teachers to find ways to balance the participation rate in the classroom because this will increase learning for all. When students actively participate in discussion, the act of participating transfers knowledge from the outside to within the student (Zull, 2002). This is important for students because if they are just watching but not participating, they often are not deepening their understanding of concepts.

Authentic classroom discussion is a speech genre in which students and teachers articulate ideas and opinions. These discussions may not have a specific

goal but rather a focus on orienting students to each other's ideas. Authentic discussion works well when the teacher can facilitate a discussion but also encourage students to ask questions of each other and revoice or add onto each other's thoughts (Hadjioannou, 2007).

In traditional teacher-centered classrooms, teachers often use an instructional sequence called IRE (initiation, response, evaluation), which leads to shallow discussion and a climate in which students only want to participate if they have the right answer (Freeman & Freeman, 2008). When teachers strictly use the IRE model of teaching, students become concerned with answering the questions correctly instead of learning from the discussion. On the other hand, when a teacher facilitates a group discussion that embraces open-ended questions and a high rate of participation, the level of learning increases for all students (Freeman & Freeman, 2009; Mary Alder & Eija Rougle, 2005).

Often the same few students are involved in group discussion and answering questions (Clarke, 2006). In elementary classrooms, boys tend to dominate classroom discussions and participate more often. This leads to status problems within the classroom, which then affects participation rates and how students answer questions during discussion.

There are many ways a teacher can facilitate classroom discussions that will positively affect the level of participation of all students. By establishing classroom agreements and norms for classroom discussion, and by exploring ways to increase the level of participation for more students, a teacher can increase learning and deepen understanding. When more students participate in classroom discussion, there is also an increase in the equity of learning. A huge component to increasing equity and participation in the classroom is for a

teacher to assign competence to low-status students (Cohen, 1994). This leads to my research question: Will using authentic discussion strategies in the classroom increase participation and equity?

Participants and Setting

The setting of this study was a public elementary school in an suburban area of a middle-sized city. The school had approximately 440 students and is from kindergarten to fifth grade. Around 69% of the students are European America and nearly one fourth of the students are eligible for either free or reduced lunch fares. The student population included of approximately 12% Asian students, less than 1% Native American students, 8% Hispanic, 2% African American, and 10% multiracial students.

The elementary school had above-average test scores compared to state averages. The fourth-grade passing rate for math in this elementary school was 58%, while the rate for the state was 54%. In science, the state passing rate was 34%, but this elementary school exceeded that by achieving 43% passing.

The class size in my class was 26 students, and I had the help of paraeducators and specialists throughout the week. The study took place throughout each day. Whole-group discussions were conducted during math, English language arts (ELA), social studies, science, and art lessons.

The two fourth-grade classrooms were across the hall from each other and the fourth/fifth split was down the hall in another pod. There was some collaboration between myself and the other fourth-grade teacher, but most of the instruction happens in individual classrooms. My classroom is one of the two fourth-grade classes.

The classroom setup included two table groups of five students and four table groups of four students. Within this configuration, students were able to have whole-group discussion or small-group discussion, and they could also work independently or with a partner. My desk was on the side of the classroom near the door but I spent most of my teaching near the front where the projector was set up. I used the projector each day to support my ELLs and students with IEPs. Every student participated in this study during whole-group discussion. I specifically focused on a small group of low-status students.

This school used the new *Bridges* math curriculum. During math lessons, I engaged my students in whole-group discussions using the strategies above to increase participation. Before, during, and after lessons in art, science, and social studies, I created opportunities for whole-group discussions. I used some of the district's curriculum to teach reading and writing in the ELA curriculum. I also used writing journals, literacy seminars and whole-group discussion as a large part of my study. For read-alouds, I carefully selected literature for that would evoke meaningful material for discussions and encourage critical thinking.

The bulk of the data came from the literacy seminars I facilitated every week. Before a literacy seminar, I carefully prepared meaningful material and scaffolded my students to be successful with understanding the content and being prepared to discuss.

Data Collection

I began collecting data in the first week of school and continued through week ten. This research is considered qualitative and I was the teacher-researcher. I used several units of analysis in this study. Included in the data are student surveys from the beginning of the study and the same student surveys in

the last week, video tapes and transcripts, exit tickets after each group discussion, and finally my research observations which include field notes.

I conducted whole-group discussions as my main focal point in this study. The bulk of the data came from a specific type of discussion called Literacy seminar. Whole-group discussions occurred every day through art, science, social studies, or math lessons. I created classroom norms and expectations for students to follow to increase validity of the research. One of my main goals was to encourage a classroom climate that was student led and to facilitate whole-class discussions that welcomed participation. I examined whether assigning competence during whole-group discussion could increase participation and equity within the classroom.

Within this elementary school there had been a new wave of support from the district and the principal to use student-led group work and discussion within the classroom. Within my classroom, there had been a shift in teaching from IRE teaching to student-centered teaching. I continued to encourage student interaction during discussion as well as the community norms within the school that heavily addressed the importance of respect.

Through my research project, I hoped to create more equitable participation within group discussion to maximize learning and conceptual understanding. I did this in various ways including assigning competence, orienting students to each other's ideas, and asking open-ended questions. During this research project, I used authentic discussion as a way to strengthen the talk between students and increase participation.

Authentic Discussion

Discussion in the classroom is a way for students to articulate their ideas and develop a deeper understanding of subject matter. Hadjioannou (2007) describes *authentic discussions* as an opportunity for students to express their own opinions and ideas as well as build off of other students' ideas. When students use this concept of adding to or exploring ideas presented by other students, they develop a more sophisticated understanding. This type of interaction has also been described as *dialogic* (Wells & Arauz, 2006; Juzwik, Nystrand, Kelly, & Sherry, 2008). Monologic discourse positions the teacher as the sole authority in the classroom (Juzwik et al., 2008). Monologic discourse is what Freire (2000) considers the *banking model* in which the teacher seeks to fill the student with knowledge. When students are free to interact with each other during a discussion, they create new meaning as a group (Billings & Fitzgerald, 2002).

In dialogic discussion, decisions made about the importance of topics are shared among the students, and the talk within the discussion reflects this. A community is built when whole-group discussion becomes a norm. Students are encouraged to treat each other with respect and as equal partners with shared roles and ideas (Anderson, Chapin, & O'Connor, 2009). Hadjioannou (2007) asserts that teachers can create a classroom environment that cultivates a more balanced discussion, because "the environment within which language is used substantially shapes the nature of interactions by providing guidelines as to what can be said, how, by whom, to whom, and for what purpose" (p. 272). When teachers utilize open-ended discussion in the classroom, it encourages a higher rate of engagement, learning, and achievement (Juzwik et al., 2008).

Kelly's (2007) research study found that the relationship between levels of achievement and student effort is much weaker when the teacher used IRE-style question-and-answer sessions. In this study, the author used qualitative methods to analyze the effects of dialogue in the classroom and student participation among low-achieving students. Previous research studies had indicated that low-achieving students are more passive and quiet participants. This indicated a disadvantage to students to enter the classroom as struggling achievers.

Kelly (2007) used data previously collected from the Partnership for Literacy study to examine the relationship between student engagement and classroom evaluation during question and answer sessions. The Partnership for Literacy offered data on both the teachers' classroom instruction and on the participation and effort of students. Analysis from recent data on the Partnership for Literacy confirms that students who come into class as struggling readers and writers are less likely to participate in classroom discourse.

Kelly (2007) emphasized the critical component of how low-achieving students are affected by the typical IRE (initiation, response, and evaluation) style of teaching. In this style of teaching, the teacher focuses on eliciting only the correct responses from the students. Low-achieving students in these settings tend to have a low rate of participation and effort.

The data collected in this study was from the National Research Center on English Learning and Achievement (CELA). The Partnership for Literacy study also collected data from two different cohorts in Wisconsin and New York state over a two-year period.

The findings support the author's hypothesis that achievement and student effort are lower because of the effects of IRE-style of teaching. If a teacher values towards instruction that provokes critical thinking, students will be more willing to participate. Students are also more apt to participate when the discussion is student-centered.

The Value of Questions

One of the most critical actions a teacher can take to create dialogic interaction in the classroom is to use open-ended questions that have multiple answers. Teachers should also elicit questions and intellectual ideas from students. A teacher can revoice what a student says to stimulate deeper understanding from the entire class (Cornelius & Herrenkohl, 2004). Teachers can also ask questions that do not have predetermined answers. Martin Nystrand (as cited in Anderson et al., 2009) called these *authentic questions*, through which teachers show their respect for student ideas. Students can increase their knowledge of academic language when teachers both ask more open-ended questions and also respond to students by encouraging them to extend their thinking (Freeman & Freeman, 2009). Some of the best open-ended questions elicit higher-order thinking skills such as evaluation, interpretation, and perspective-taking (Zwiers, 2008). Using probing questions that require students to think critically, the teacher can facilitate a higher level of understanding and evaluation.

Teachers can offer authentic questions that allow for multiple responses, which enable students to use thought and analysis in their answers. When a teacher gives open-ended responses to answers of her students, rather than a yes or no response, she in turn validates their participation in the discussion (Kelly,

2007). A teacher can also encourage her students to ask questions of each other by re-directing a question back to the whole class (Anderson et al., 2009). This validates the importance of student voice and student power in the classroom. To increase students talking with each other, a teacher can encourage students to add onto other students' ideas or ask each other questions. This is especially helpful when students can connect their real life experiences with issues in the conversation (Lopez-Robertson, 2012). A teacher can support students by connecting relevant issues in their own lives and encouraging students to talk with each other.

Orient Students to Each Other's Ideas

During discussion a teacher can encourage all students to respond and build onto each other's contributions (Wells & Arauz, 2006). A teacher's role as a facilitator can be to orient students' ideas to those of other students, and to connect these to students' prior knowledge. It is also helpful to encourage the conversation to fit the current topic or subject during discussion (Berry, 2006). By keeping students focused on the subject and connecting the ideas, the teacher supports the learning environment.

There are many ways a teacher can facilitate interactions between peers during discussion. Teachers can link student's ideas to another student by asking someone to revoice an idea or put it in their own words. Revoicing, or restating an idea, is a way for other students to understand a concept and a way for students who are normally silent to participate (Anderson et al., 2009). As students follow other students' thinking and connect to new ideas, the participation level increases (Berry & Englert, 2005). Students take more

responsibility for their own learning when they work collaboratively within a group discussion (Stevens & Slavin, 1995).

Students should be held accountable for their own learning as well as for the contributions of their peers (Cornelius & Herrenkohl, 2004). A classroom could be set up to support the classroom community that extends one's own thinking as well as the thinking and ideas of others in the classroom (Fuson, Hufferd-Ackles, & Sherin, 2004). Teachers can teach students to be responsible for the learning of their peers by connecting ideas. Through the practice of orienting students to each other's ideas, a teacher encourages a responsibility to help each other and to value the contribution of others (Boaler, 2005).

Teacher's Role as Facilitator

If a teacher is a dominant force in discussions rather than a facilitator, students in the classroom are not given a chance to develop skills of co-constructing knowledge (Billings & Fitzgerald, 2002; Juzwik et al., 2008). When students are provided with an opportunity to solve problems using co-construction of knowledge, they recognize their importance to the overall discussion and become more active participants (Wells & Arauz, 2006). Students who are able to communicate with their peers in a discussion instead of strictly answering the teacher's questions are given more of an opportunity to take on new perspectives (Thein, Beach & Parks, 2007). Also, a deeper understanding of the topic is created by the group rather than given to the group (Billings & Fitzgerald, 2002). When a teacher provides an opportunity for independent thought by asking questions that do not have a specific answer, low-achieving students are more willing to respond.

To create a natural environment that encourages students to be critical thinkers and learn from each other, a teacher should emphasize what Freire (1998) calls a *problem-posing* method, in which there is a shared learning experience between teacher and students. Teachers who use this interactive style in the classroom create an environment where students orient each other to the ideas of their peers (Juzwik et al., 2008). For a teacher to encourage this interaction during discussion, she offers open-ended questions that do not require a correct response.

Assigning Competence

A teacher has a great deal of power and influence with her students in the classroom. This power can be used to enforce norms, expectations, and the overall climate in the classroom. Another way teachers can use their power is by assigning competence to students (Featherstone, 2011). Assigning competence is “a public statement that specifically recognizes the intellectual contribution different students make” (Cohen, Lotan, Whitcomb, Balderrama, Cossey, & Swanson, 1995).

Assigning competence to students increases both the participation and equity in the classroom. When a teacher assigns competence to low-status students, high-status students take greater notice of the contributions. By assigning competence to low-status students, a teacher also encourages students to become aware of their intellectual contributions to the group. A teacher can assign competence by publicly praising the effort of a low-status student (Crespo et al., 2011). Assigning competence can also be perceived as a way to give students authority. When a student brings in a new strategy or new ideas, a teacher can give the student authority for what she brings into the classroom.

When given authority, students become more invested in their own understanding of the learning (Cornelius & Herrenkohl, 2004). Assigning competence demonstrates both a teacher's commitment to equity and the value that each student adds to the classroom (Boaler, 2005).

Assigning competence also helps to remedy a common source of status problems in the classroom. If a teacher imposes predetermined expectations about students' intellectual competence, these expectations will have negative consequences for students' interactions in discussion. The teachers' prejudgments lead students to create hierarchies, positioning themselves as either high or low status in the classroom (Lotan, 2006). The high-status students participate at higher levels and have a stronger influence on the group discussion. If students are in a whole-class group setting, high-status students tend to assume the role of being more competent than the others. Others perceive high-status students as leaders (Cohen & Lotan, 1995).

Assigning competence enables a teacher to use her power to balance the status and therefore participation in the classroom. When a teacher responds to a low status student by assigning competence, that student tends to believe what the teacher has to say.

Classroom Participation

As students state and discuss their ideas, they in turn learn new knowledge. By stating ideas about concepts within a discussion, students take learning into their own hands and make it their own (Zull, 2012). Students who speak are trying out ideas and deepening their conceptual understanding. When students participate in challenging discussions, they come to trust that they have the capabilities to undertake academic and intellectual conversations (Berry &

Englert, 2005). Students who participate often increase their self-efficacy as they begin to feel more comfortable in the group setting. By verbally exploring their ideas, they in turn are learning concept more deeply.

Participating in a classroom discussion enables students to deepen their understanding and learn new ways of thinking. Increased student participation also allows students to hear multiple perspectives about an idea, which further encourages students to deepen their understanding. If only a few students repeatedly speak out during discussion, the class misses out on the opportunity to learn from multiple students and perspectives. One way to encourage multiple perspectives during discussion is for a teacher to have an awareness of the dominating voices.

Gender

Many times during discussion, the same few students dominate the conversation. Often these students are male, while females remain silent (Evans, Alvermann, & Anders, 1998). When teachers keep in mind the ways students position themselves in the classroom, teachers bring awareness and an opportunity to shift the dynamic (Anders, Alvermann, & Evans, 1998). Many research studies have glossed over the effects gender has on the learning within the classroom. It is an important issue as teachers strive to increase equality within the classroom.

Gender does influence the way students choose to participate in discussion (Anders et al., 1998). Males can often be used to taking the lead in discussion, and therefore females can tend to remain silent or passive. Gender shapes the interactions that happen during discussion in the classroom (Berry, 2006; Clarke, 2006). Clarke (2006) found that boys often spoke for longer periods

of time and girls could be marginalized during discussions (Clarke, 2006). If this dynamic in the classroom does not change, boys continue to act as the dominant group within the classroom.

When males are seen in the classroom as the dominant group, they in turn will have more access to the resources available and will continue to learn more than girls (Anders et al., 1998). With an awareness of an imbalance in gender participation, teachers shift this unequal dynamic and support every student in the classroom.

Power and Status

When a teacher considers the effects of gender and marginalization in the classroom, she encourages students to become empowered and heard. By facilitating discussions with an awareness of power in the classroom, the teacher can encourage all students to participate and therefore empower them as learners (Evans et al., 1998). Encouraging all students to participate in group discussion will shift the power. Teachers can change the social interactions in the classroom, thus changing the relationships of power (Cornelius & Herrenkohl, 2004; Evans et al., 1998). The power dynamic in the classroom is an indicator of a student's status.

In a classroom setting, students naturally settle into positions or relative status along a range from high status to low status (Cohen, 1994). This positioning often causes certain problems, greatly affecting the learning that takes place. Low-status students can be ignored or not given a turn during discussion if a teacher does not intervene or notice the status dynamics (Cohen et al., 1995). A low-status student will remain silent if a teacher does not take steps to change the imbalance. Students consciously or unconsciously assign status to

each other, creating a status hierarchy in the classroom. Some students are assigned status based on their academic ability, some gain peer status because of attractiveness or athleticism, and others gain status based on race or gender (Cohen, 1994).

Students can have low-status based on irrelevant or inaccurate assumptions. Status can also be shaped by how students position themselves in the classroom. Positioning happens during conversations when students label another peer's ideas as irrelevant and position the peer as incapable of contributing to the group. On the other hand, a student can invite another student to explain her ideas, therefore affirming the second student's authority and power in the group conversation (Empson, Dominguez, Maldonado, & Turner, 2013).

There have been many research studies indicating that students who are considered high status and more competent in reading and writing are the students who dominate in group work and discussions. Studies have also proven that when academic status in the classroom is left uncontrolled, barriers can arise between students (Cohen & Lotan, 1995). However, a teacher has the power to shift the dynamic in the classroom to create equity. A teacher can do this by assigning competence to low-status students and by discussing the expectations of participation throughout discussions and group work. Cohen and Lotan (1995) investigated how to create a higher rate of participation of lower-status students in the classroom without changing the participation rate of higher-status students.

Cohen and Lotan (1995) used qualitative methods to study whether status treatments could create a higher rate of participation for lower-status students.

The authors used thirteen classes in this study, covering grades two through six, in three schools around San Francisco Bay. Using a student questionnaire, researchers first identified the low- and high-status students in the classroom. To determine the effects of status, the authors chose target students for intensive scoring of their participation during group work. In the target study, the authors observed 61 low-status students and 67 high-status students.

The independent variables were the teachers' use of status treatments. Researchers focused on two kinds of teacher talk: talking about multiple abilities and assigning competence to low-status students. Observers tallied the number of times the teachers in this study talked about multiple abilities and assigned competence to low-status students. Cohen found that the participation rate of low-status students went up and the rate of participation for high-status students stayed about the same.

The results proved the researchers' hypotheses in this study were correct. Using the variable of this study, the authors found that although all students had an equal chance to facilitate, high-status students were much more likely to participate and contribute. When a teacher used status treatments more frequently, there was a significant increase in participation of low-status students. Even though the study focused on assigning competence to low-status students, teachers felt free to assign competence to all students. Status treatments to high-status students did not change their participation rates.

The findings suggest that teachers' use of status treatments can significantly lessen the negative impact of status in the classroom. The authors were able to prove their hypothesis using the data analysis in this study. The rate of status treatments by a teacher had a significant positive effect on participation

of low-status students. Where status treatment was used frequently, the high-status students did not participate more than low status students. Teachers using the status treatments in this study noticed changes in low-status students when they assigned competence.

In this study, multiple methods were used as well as multiple sources of data, which made this research more credible. Observations, interviews, and questionnaires were used throughout this study. There was member check-ins between teachers as well as observers in this study.

Despite the strength of this study, there were weaknesses in the research that affected internal validity. The data used to establish status (the questionnaire) were broad and did not include all information necessary to create the categories used. The questionnaire could have included the students' reflections on their own status and participation.

Discussion Expectations

Assigning competence as a status treatment is an effective way to increase participation in the classroom (Cohen, 1994). Another way to increase participation is for a teacher to establish explicit discussion expectations within the classroom. By creating discussion expectations, a teacher is in turn offering a safe and trusting climate for her students.

Not only can a teacher work on assigning competence and gain an awareness of positioning, but she can also create a classroom climate that encourages participation. One way a teacher can do this is by establishing and following discussion expectations. The expectations can be created as a classroom agreement between the students and teacher and revisited throughout the year.

Explicit rules should be established in the classroom to instill understanding of what is acceptable and what is unacceptable (Hadjioannou, 2007). A teacher should create a structure of rules that are followed without exception, including respectful and kind talk. Another important expectation is that students should listen respectfully to other students when they are talking. Students should also be encouraged and expected to participate in class discussions. A teacher can facilitate a discussion that is highly engaging to the students to motivate the conversation. The students become more engaged when they are discussing issues that pertain to their families and themselves. (Anderson et al, 2009). Discussions within the classroom should be authentic and relevant to students' lives.

The Teacher's Beliefs

A teacher can change the climate of the classroom by first shifting the way she believes students learn. When a teacher believes that students learn best when they orient their ideas to each other, she encourages them to co-construct knowledge. This is an important strategy for creating a classroom that is student-led rather than teacher-led. It is equally important that a teacher believes all students should have an equal opportunity to thrive within the classroom.

Co-Construction of Knowledge

When a teacher orients students to others' ideas, she enacts the belief that students can co-construct knowledge. If the teacher opens questions up for others to answer, provides opportunities for students to revoice or add on, and assigns competence, she validates the power of students in the classroom.

The way a teacher views each student's competency and future success in the classroom influences the achievement for the students. A teacher can shift her

belief system to assume that all students, not just the privileged, can be successful in school. When a teacher believes that all students can succeed, she thereby increases the likelihood of higher achievement (Degani, Vaaknin, & Zohar, 2000). If a teacher does not believe that all students can be successful, she sets up a classroom that allows students to fail.

A teacher's high expectations for all of her students increase the likelihood of success. On the other hand, a teacher's low expectations of her students based on class, status, or race can become a self-fulfilling prophecy, which allows those students to underperform (Milner, 2012). It is important for teachers to balance status and achievement in the classroom by creating high expectations for all students.

Vulnerability

Teachers who create high expectations for every student in the classroom can create a climate in which students know they are cared about. Students allow themselves to be vulnerable and share their own ideas when the environment is set up to nurture a feeling of comfort and belonging (Hadjioannou, 2008). In order to increase the participation rate in the classroom, a teacher needs to develop a strong level of trust.

Summary

Teachers can create this climate by establishing expectations. This can be done in collaboration with the students. These expectations should be revisited throughout the year and before whole-group discussions. The main elements that should be included in these expectations are respect, listening to others, and being open to new ideas.

Setting classroom expectations begins to create a classroom climate that supports a balance of participation and equity for all students. With a classroom built on respect and trust, teachers can use many other strategies to increase participation during discussions. One important way to achieve this is to assign competence to low-status students when they contribute an important idea by publicly displaying this to other students.

By assigning competence to students of low-status, a teacher will also shift the power and positioning in the classroom, which increases the participation and learning of all students. Also, a teacher can use her awareness of the dominance of boys during conversations to address learning inequities.

One way a teacher can shift unequal power and status is to facilitate authentic discussion. Within authentic discussion, a teacher can encourage participation of all students by using open-ended questions, orienting students to each other's ideas, and helping students to ask questions of each other. Keeping all of this in mind during my research, the research question I am using in my study is:

Will using authentic discussion strategies in the classroom increase participation and equity?

CHAPTER TWO: METHODS

Discussion Practices

In the elementary school in which I student taught, I observed how status and privilege affected participation rate in the classroom. Without intervention, many classrooms have a small group of students who answer questions and engage in discussions. Most of time the students who are participating are in the dominant group and have high-status within the classroom (Cohen, 1994). In my research study, I investigated the effects of status treatment on low-status students. My research study also included the effects of using authentic discussion as a structure to balance equity and increase the rate of participation. My study included using strategies and practices to create an environment of safety and trust to encourage a wide range of participation. I used observations and data to establish who the low-status students were. In my study, the status treatment I used was assigning competence to low-status students. By using this treatment, my goal was to boost participation and raise the group's expectation of the low-status students (Cohen et al, 1995).

Through this research study, I hoped to develop greater skills as a facilitator of whole-group discussions. I strove to develop an understanding of how to orient students to each other, how to use responses to encourage dialogue, and how to create a safe learning environment in which my students felt comfortable sharing their ideas. My goal was to learn how to effectively encourage all students to participate, as well as facilitate discussions that scaffolded students to orient their ideas to each other.

I conducted frequent whole-group discussions, and I used status treatments, such as assigning competence, to attempt to increase equity in the

classroom. By attending to status problems in the classroom, a teacher can positively increase the participation rate for all students. Students who participate and contribute to class discussions gain a deeper understanding of the content, as well as develop a higher level of efficacy (Dweck, 2000).

During whole group discussions, I began by reviewing and creating expectations for discussions to enforce a climate of safety and trust. I revisited these before each discussion to emphasize norms for group conversations. During discussions, I reminded students of these agreements to cultivate a climate of trust and respect. Throughout group discussion I encouraged students to revoice their peers' ideas, orient students to each other's ideas, and ask questions of each other. I also attended to status problems in the classroom by being consistent with classroom expectations, and by emphasizing the value and importance of all ideas.

I also used strategies such as quiet gestures as a way to maximize participation. From the very first day of school, I taught the students hand gestures as a way to communicate in a respectful manner. This included a silent thumbs-up against their chest if they wanted to participate in discussion or wanted to respond to a question. Use of this gesture gave the rest of the class an opportunity to continue to think about a response without the pressure of hands waving in the air. This was a strategy I used to facilitate respect as well as increase participation. There were also quiet gestures to communicate agreement with the speaker or the desire to express a different response. During discussion, I would often wait for more students to have their thumbs on their chest as a way to increase participation.

Using all of these strategies during whole group discussion both supported my growth as a teacher and completed my research study to find out whether using authentic whole-group discussion and assigning competence to low-status students could create more participation and equity in the classroom.

Observations and Field Notes

I used my field journal every day to make observations of the classroom dynamic. I observed the interactions between students and how they positioned each other during discussions. I noted in my journal any dialogue, or body language that correlated with peers assigning a status order to each other. I looked at how students ignored or talked over a low-status student and also how high-status students were treated. I watched how low-status students participated or did not participate during discussion and also how high-status students dominated a conversation. During the day when the mentor teacher was in front of the classroom, during small group work, or partner work, I was able to record my observations. I recorded what took place in the moment and any ideas or interesting theories that came up during observations. The observations and field notes supported my overall research by triangulating what I gathered from other data sources. I analyzed this data by coding all patterns I found within my observation notes, as well as comparing it to other data.

Student Surveys

In the first part of the unit, students were asked to complete a survey that focused on questions leading to the status and positioning of both themselves and other students in the classroom. The survey also included their efficacy and confidence in regards to participating in a group discussion. I gave the survey to

learn about how students positioned each other in the classroom and how hierarchies and status ordering were created. The survey also gave me insight into how students' efficacy and confidence grew by the end of the study. I asked short response questions such as:

- Who do think has a high leadership role in the classroom?
- Who do you think knows the answer when the teacher asks a question?

Students were given a similar survey at the end of study. I was able to compare the results to examine how well my strategies increased participation and equity in the classroom. Allowing the largest amount of time between surveys was a way I could more accurately compare the results. I analyzed this data source by comparing the first set of surveys to the final set of surveys. I coded the data to find patterns as well as compare it to other data that shared similar themes. In the second week, I gave a status survey to determine the way students positioned and perceived each other in the classroom.

Exit Tickets

Exit tickets were given to the students 4-5 times a week. I used exit tickets at the end of each classroom discussion to collect data on how position, status, participation and level of confidence shifted throughout the research study. I asked many questions to both gain information about if they participated, why they participated, and what would help them participate more. Some of the questions gave insight as to whether they valued their peers' responses or felt like their peers valued theirs. I asked questions such as:

- When I participate in classroom discussions, I
 - a) Rarely feel listened to

- b) Sometimes felt listened to
- c) Usually felt listened to
- When I have an idea to share
 - a) I often worry about what other people will think of my idea
 - b) I sometimes worry what other people will think of my idea
 - c) I rarely worry what other people will think of my idea

The exit tickets served as a constant check-in to enable me to evaluate the progress of the study and to consider whether any adjustments were needed.

The exit tickets were used side by side with the videotapes. I was able to analyze the videos as well as the exit ticket to triangulate the data.

Video and Transcripts

I recorded video during classroom discussion three times a week and transcribed the footage. I used the videos and transcripts to examine the exact wording of the students as well as to observe the behavior of other students during discussion. I was able to use the data for the video with my surveys, exit tickets, and observations to triangulate my analysis. This was an important method to use in the research because it gave a new perspective to what I thought was happening during discussion.

I used an open-coding approach and organized the data into themes that were important to the findings. All of the data from the codes were put into a spreadsheet and analyzed. The coding process I used was grounded data analysis where I generated codes while I analyzed the data. I used situation codes to analyze how the students viewed themselves and how the participants defined the setting. I used process codes to organize any sequence of events,

changes, or entries from one kind of status to another. I also used relationship and social structure codes to categorize patterns of relationships between peers. I analyzed the videos and the transcriptions by coding them for patterns. I triangulated the data by comparing my field notes and exit tickets to the video transcriptions.

Limitations of this Study

The time period in which I conducted this research was short because my student teaching placement lasted only ten weeks. Although this research may be transferable to other settings and classrooms, a longer period of analysis may be needed. In the area of status and participation, I only focused on a narrow area of whole-group discussion during content-area lessons. During my research study, I collected data from ELA discussions, math, Science, and art lessons. This is a good starting point for further exploration of status and participation in other subject areas.

This research is clearly conducted through the lens of the researcher. My role as student teacher was paired with my role as the action researcher. This can potentially threaten the credibility of this study because of personal biases as their teacher. I was able to address this issue by using multiple sources of data as well as member check-ins throughout the research. During the research, I worked with my peers many times to receive feedback on my research study. My peers edited my research, looked for patterns, and watched for any possible biases that may have affected my analysis.

The transferability of this study is strongly based on the multiple content areas it was applied to. This research study can be used in all subject areas for multiple age groups making it easy to replicate. The results throughout this

study were also constant, ensuring a strong level of dependability. Though I was unable to apply this to other classroom settings, I believe it can be easily transferred. Social justice was a main theme embedded in the work I did as well as building a community in the classroom. The learning in this study was accessible to all students and ensured a high level of participation among all students. The transferability of this study could be weakened when applying it to other schools based on the diversity and setting of the school. I offered thick, rich descriptions of the practice I used throughout this study, increasing the transferability of the research. Through my detailed descriptions, I believe teachers could follow my lead and implement this study in their own classroom.

I used both a pre and post survey in my research study to add to my multiple data sources. This data was used to support the other data to lower the level of internal bias as well as to support the patterns and coding derived in my analysis. The surveys were used in addition to my research journal, transcribed videos, and exit tickets to triangulate my data.

The use of my research journal supported the other data sources. It can also weaken the dependability of the research study based on my own personal assumptions and biases. I worked throughout the study to minimize this and pay careful attention to my own assumptions. I was able to strengthen the credibility of this source by comparing my notes to other data sources as well as using reflections of both my notes and teaching practice.

The video transcriptions were extremely valuable as I discovered patterns in my research study. I videotaped my students twice a week for ten weeks and transcribed the videos. With the transcriptions, I was able to code the data and find meaningful patterns that offered a high level of credibility to my study.

With the use of my exit tickets, I was able to compare these patterns to the transcriptions.

The exit tickets were given four or five days each week. I spent more time coding the exit tickets that coincided with the video transcriptions to increase the credibility of this study. After I analyzed the data of the transcription, I followed it with data analysis of the exit tickets for the same discussion. This was also a way I could triangulate multiple sources of data. During the research, I also completed a chart that included the video, the exit ticket, and notes on the discussions. I was able to look across the data and increase confirmability in the process.

Using surveys, a research journal, exit tickets, videos, and video transcriptions throughout my study increased the credibility of my research. With more time, I could have included more data in my research. Throughout this process, I coded my data with different colors and themes to find existing and unexpected patterns. I kept my research question in front of my data as I worked to focus deeply on my intention.

CHAPTER 3: FINDINGS

Through the Lens of the Researcher

My pedagogical perspective throughout this research is well aligned with the educational background I received at The Evergreen State College. During my education at The Evergreen State College, I was very inspired by and focused on the benefit of whole-group discussion. Throughout the Master in Teaching program at The Evergreen State College (TESC), the practices of whole-group discussion were modeled and implemented.

During my practicum in a fifth-grade classroom, I explored what I had learned about using whole-group discussion. Throughout my time in the Master in Teaching program at TESC, I have done a great deal of reflection and learning about effective strategies used in whole-group discussion.

Once I started this study, I did extensive research on the strategies and practices of whole-group discussion in the classroom. Though I did not have a lot of practice in using whole-group discussion, I committed deeply to the practice during this research study.

When exploring my research question as I analyzed my data, I found many recurring patterns in the data. The analysis of the findings provided valuable insight into the practices that increased participation and equity in the classroom.

As I investigated the effects of using various strategies in whole-group discussion to increase participation and equity, I also analyzed my own teaching practices. As both the researcher and the teacher, I gained from this analysis a challenging and invaluable perspective on what was happening during whole-group discussion. In the end, it was a process of how to become a better teacher

and how to use the data I collected to strengthen whole-group discussion in the classroom.

This research study focused on the structures in place during whole-group discussion to promote participation and equity. To be able to investigate my research question, I gathered multiple sources of data. In the beginning of the research study, I used a presurvey at the beginning of the year to collect information about students' prior experiences. This survey included questions to address status, comfort during discussion, self-efficacy, and participation. I compared this data to the postsurvey to analyze changes that occurred throughout the study. Secondly, I used exit tickets after each whole-group discussion to gather data relevant to my research study. Thirdly, I used videos and video transcription to add to the rich data found in the other sources. Finally, I used my research journal and observations to confirm, modify and add to the existing data.

In chapter three, I discuss my findings and analysis from the work I have done throughout the research study.

Action and Practices

When preparing for this research study, I came up with a 10-week plan to implement my study. I used the knowledge I had gained from my extensive research on whole-group discussion and seminars to inform my practices through the study. I began by creating strong expectations with the students for learning in the classroom as well as for whole-group discussions. During whole-group discussions, I facilitated by using many strategies to increase participation and equity, strategies such as orienting students to each other and encouraging

all students to share. After whole-group discussions and seminars, there was always time provided for debriefing.

Expectations

In the beginning of the school year, I helped facilitate a discussion about building a community of learners. Students shared their ideas of what attributes were important to have in a classroom of learners. Together we created a list of expectations. We created another list of expectations specifically for our work together during discussions. This included participation during discussion, active listening, holding back and speaking up, allowing all ideas into the conversation, and paying attention to the speaker. These expectations were reviewed before each discussion. The role of expectations in the effectiveness of these discussion was an important finding in my study and a critical element for having success in whole-group discussion. From spending so much time reviewing and working on the expectations the class created, one of the positive consequences was the ripple effect of the students implementing them without the direction from the teacher.

I implemented these expectations throughout my research study. One example of this is how often I would stop a conversation and ask if everyone had a chance to speak. In doing so, I was deliberately modeling how to stop and recognize when voices were not being heard and how important it was to hear from everyone. I would often ask students to count to 10 and think quietly, while looking around to see who had not spoken yet. Below is an example showing how I facilitated a group discussion, taken from a video transcript of one of the first discussions:

Teacher: Okay, stop here. What's happening right now, without making any comments about our literary seminar? Too many things are happening right now; we're talking over each other because we're excited. But also, can you look around and make sure all voices are heard right now?

This was a common strategy I used throughout the first half of my research study. I often stopped a discussion and asked students to look around for people who had not yet shared. By using this strategy, I tried to encourage a higher rate of participation as well as an awareness of equity within the class discussion. I also posed the question, "Were all voices heard during literacy seminar?" as a reflective question for the whole group. The ripple effect of this strategy was that the students came to use this on their own. In the end of my of the ten weeks, students made references to more students talking during reflection. Students also used this strategy during literacy seminar by stopping and looking around or by asking students who had not spoken if they wanted a turn. During a reflective discussion in week six after a literacy seminar, a couple of students reflected on the value of increasing student voices:

Isaac: I agree with Arun because most people, they didn't get to share last time. Everybody that didn't share had more ideas, and they really thought about it.

Jon: A lot of people shared but if they didn't get the answer right, it doesn't really matter if they did or not. It's just that they all had great ideas and it doesn't matter what you say. You shouldn't yell, you can just do a disagree sign (A reference to a hand gesture that indicates disagreement).

In the above exchange between the two students, there is evidence of how important it was to include all students as well as to listen respectfully. This became an important development throughout my research. Students often referred and enforced the expectations during discussion, including being respectful, listening to others, and including all voices into the conversation.

Literacy Seminar

One of the biggest components of my research study was work done during literacy seminars. Literacy seminars happened once a week and on the previous day, we prepared for them as a class. I scaffolded my students to prepare them for each literacy seminar, following a procedure I developed. The day before literary seminar, I prepared the students by reading the literacy material as a group. This often was a poem I chose with a social justice theme, such as *Okay, Brown Girl, Okay* by James Berry (Paschen & Raccah, 2005). When I could find an audio recording of the poem, we also listened aloud. When students listened to the literary poem the second time, I handed them the written version that often included a visual aid. I asked the students to draw pictures, take notes, and underline either sentences they liked or words and phrases they did not understand. When they were finished with their notes, they worked with a partner to come up with questions they had for the group regarding clarity of the literacy material. This was followed up with whole-group discussion.

Once the students were pretty comfortable with the material and their questions were answered, I assigned homework. The homework included reading the material to a family member, discussing it, and answering a couple of questions to prepare for seminar the following day. A homework question might be:

- What is the author's perspective or what is the author trying to say?

By giving students opportunities to discuss with their peers as well as a family member some of the ideas needed for literacy seminar, I strengthened students' preparation to participate and feel comfortable.

The following day, I asked students to have their homework on their desks as well as the notes they took on the literacy material from the previous day. I asked students to take out their writing journals and answer their own homework question. Once they completed this task, they turned to a neighbor and discussed what they wrote or asked any questions they still had. Following partner work, I asked a few students to share out some examples to the whole group. All of these steps scaffolded students' engagement to prepare them for participation in the literary seminar.

Before the literacy seminar began, I asked the students to review the expectations. My intention during this review was that the students themselves listed the important practices needed to have a successful seminar. During this time, I made sure that ideas were brought up that included practices to encourage participation and equity during discussion.

The literacy seminar was divided into two circles, an outside circle and an inside circle. The inside circle included only chairs placed side by side, while the outside circle had chairs and desks to support students' writing. I sat in the inner circle, and my position in the circle varied from week to week. I was there to facilitate the discussion, and I placed myself wherever there was an open spot. I carefully chose each group based on gender and status, and by paying close attention to those who share the most. Students knew where to sit by finding

their clipboard with their homework on it, and they quickly sat down. When students sat in their designated places, they brought a pencil, homework, and the text on a clipboard. The inside circle used the text to provide examples, while the outside circle had an observation sheet to take notes on the conversation.

During the literacy seminar, only the inner circle spoke about the topic, while the outside circle took notes and wrote down any questions they had. I facilitated the discussion in the inner circle and occasionally contributed to the dialogue. My task was to monitor the expectations around respect, encourage critical thinking, make sure all voices were being heard and guide students back to their original questions.

After each literary seminar, we debriefed as a class and discussed what went well and what needed improving. This was an opportunity for students to each have a voice in evaluating each discussion. We sat in a large circle and each student was able to share.

Teacher as Facilitator

Some important elements during the whole-group discussion and seminars were some of the strategies I used while facilitating discussions. From the beginning of school year, I would often rephrase what a student said or ask students if they wanted to add onto another student's comment. Through modeling, I encouraged students to orient their ideas to each other instead of always looking to me. This became an important theme in my research study as I noticed the students taking on this role without me. Here is an example of how I modeled one of these strategies:

Teacher: Who can repeat what I just said in their own words? Jon?

Jon: You said you want people who didn't share that much to share, and other people can take breaks.

Teacher: Okay. Anyone want to add to that?

During my research study, students increasingly took these strategies on themselves and oriented their ideas to each other. I often observed and recorded students saying, "I would like to add onto what...said." From week seven, I provide an example below of a student using this language:

Chin: I think using dialogue makes writing more fun and interesting.

Isaac: I would like to add onto Chin. I agree that it is more interesting and helps the reader know who is doing the talking.

This example provides evidence that students are using this phrase and orienting their ideas to each other. Towards the end of the study this behavior continued to increase.

In addition to increased frequency, the students' comments showed a more complex and sophisticated understanding of the importance of the co-construction of knowledge. On one of my exit tickets, I asked students "Why is it important to share ideas during discussion?" I noticed that many of the answers had to do with learning new ideas from each other, which provides evidence that their view had changed to relying on their peers more. Samantha suggested, "It is important so that the conversation is between students and not just the teacher and students". Mirian's comment on her exit ticket gives further evidence of the importance of student-led learning. Mirian stated, "If one person shares ideas then others will get new ideas." This is an important example of how students' ideas became important to each other.

Findings

My goal for this research study was to become a more effective teacher, but more importantly to explore how I could increase the participation and equity in the classroom through whole-group discussion. I wanted to increase the confidence students had with participating in whole-group discussion and therefore increase their overall learning. I was also interested in addressing status through the use of different strategies to create a more balanced level of equity. To understand the status that existed in the classroom, I used a presurvey as well as observations. I compared this data throughout my study as well as used a postsurvey. When I compared the pre- and postsurveys, I noticed many interesting findings.

Student Voice

After each literacy seminar, I asked students to reflect on how the discussion went. I also asked them this question throughout the study on exit tickets. When I asked students what could be improved during literacy seminar, students talked about how some people did not get a chance to share. Towards the end of the study, students became more concerned about this topic. A positive change students wanted to see happen during discussion was for more voices to be heard. This was evident during discussions, reflections after a discussion, and throughout the exit tickets. The reflections were a part of the debriefing process, whether it was through dialogue or an exit ticket. The reflections the students provided became strong evidence that there was a ripple effect in the students' thinking about equity and participation. Towards the end of the study, most students participated in the literacy seminar, and many were more comfortable on a daily basis during discussion. When I asked students

towards the end of the study if they felt comfortable sharing in discussion, most students replied *Yes*.

After each literacy seminar, we had a whole-group discussion on what went well or what could be improved. During these meetings, students often commented that students shared who normally don't share, or that they noticed that some students did not get a chance to share. This was a ripple effect of the students noticing this on their own without me discussing it. The example below is a conversation between two students reflecting on how literacy seminar went:

Abby: Well, in our circle I noticed that Ruby and Amy got left out. I noticed a lot of people that talked over and over again, they kept talking. It was hard for Ruby and Amy to talk.

Arun: People who didn't share last time got to share today.

Teacher: I think there were a few new contributions. Okay, nice work.

During literacy seminars, students increasingly took it upon themselves to look around for students who had not had a chance to share. This was a positive ripple effect because they were doing so without my guidance, as in the following excerpt from our literacy seminar on segregation:

David: I don't have anyone in my family who is black, but if I did, I would treat them like they were a white person.

Rachael: Can I please speak now?

Teacher: Yeah I just want everyone to be paying attention and make sure everyone has had a turn. Has everyone had a turn Rachael?

Hector: Ruby hasn't, and I think Amy was raising her hand.

Teacher: Ana did you want a turn?

Ana: Amy can go.

Teacher: Amy and then Ana?

Amy: I thought Rachael wanted to go.

Teacher: Well I was asking Rachael if other people could share as well.

Amy: The thing is that, even now, people still, people from here,
Americans usually still kind of treat black people not as nice.

In the above transcript there are two important practices happening. The first one is that I used a status treatment during the literacy seminar. I asked a high-status student, Rachael, who speaks the most during seminar, if she would let other people have a turn. Rachael responded to this intervention very positively by trying to include more students who were not participating. The effect of this treatment was that she stopped and contemplated whether other students had participated. I noticed during my observations of the videos that Rachael often stopped and looked around for other students to contribute to the conversation. Rachael also reflected about this by stating in our debrief discussion, "I think everyone did very well, but I thought some of the kids did not get a chance to talk. Maybe they are feeling left out." Additional evidence of Rachael responding to this intervention comes from week six of a literacy seminar:

Teacher: Rachael, do you have something to add?

Rachael: Well, it looks like Carrie has something to say. She can go first.

Throughout the remainder of my study, and without my guidance, Rachael continued to look for new speakers during seminar. The other important practice demonstrated in the above evidence was students noticing who had not spoken and inquiring if they wanted a turn. This was another ripple effect that took place throughout my research.

The increase of student voice throughout this project both increased participation and balanced the equity in the classroom. The evidence of students putting importance on all voices being heard was found in exit tickets, during discussions, and in every discussion debrief. I observed students changing their behaviors to make sure all voices were heard during discussions. The dominant voices in literacy seminars responded well to intervention and changed their own behavior throughout the study.

The increase in participation during authentic discussions from the beginning of this study to the end was significant. It can be attributed to many structures in place throughout this study, such as setting expectations, orienting students to each other, and assigning competence. The data supporting this claim includes exit tickets, observations, and video transcriptions. The following chart (Figure 1) displays the changes in participation throughout this study and includes all literacy seminars.

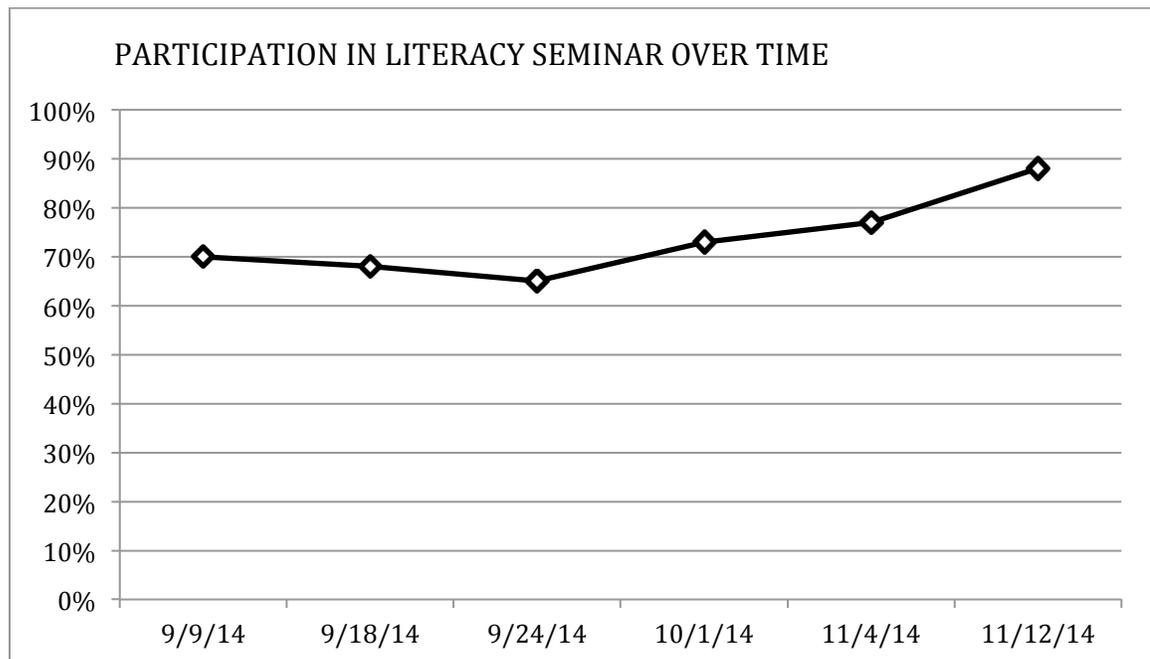


Figure 1. Participation levels over six literacy seminar discussions.

The evidence of this participation chart clearly shows the rate of increase of participation within the literacy seminar. In the beginning of the study 70% of students answered *Yes* to contributing to discussion in the classroom. By the end of the study 88% of students said they contributed to discussion in the literacy seminar.

Status

Throughout the study, I maintained a goal to increase equity in the classroom, and one way I did this was by addressing status. One of the ways I addressed status in the classroom was to assign competence to low-status students. I also conducted research on who held high status in the classroom based on the exit tickets, pre- and postsurveys, and a separate status survey.

The data I collected with observations and video transcriptions provides evidence that after implementing a status treatment with low-status students, the level of participation rose. Assigning competence was also effective in balancing equity within classroom discussions. When I assigned competence to students, these students became participants and contributed greatly to discussions. It was also evident that other students honored the students I assigned competence to and oriented their own ideas to these students.

In the example below, I assigned competence to Hector, a low-status student, because he made a great contribution to the discussion. Throughout this discussion, the debriefing discussion, and literacy seminars that followed, students continued to acknowledge Hector's contribution.

David: If it weren't for, Martin Luther King, things would be different right now. Joseph or Hector or Isaac wouldn't be in this class right now.

Teacher: Yeah that kind of reminds me of what Hector was saying.

- David: No I think Joseph needs to speak. Joseph needs to speak.
- Hector: Joseph
- Ana: It's really stupid that they are being racist. And it's just not cool. I mean to black people are the same, it's not cool. And to white people they just bully other black people. And I have a friend that's black and she doesn't even care. It doesn't matter what color you are. It's just what matters inside.
- Teacher: Joseph.
- Joseph: I'm confused. How did that even happen? How did that even start? With the black people.
- Teacher: Which part?
- Joseph: The racism.
- Hector: Oh because the whites found out that if they got a hold of the blacks, they could like sell them for money. Or they could make them do work so they could get more money. And plus, a lot of the blacks, had money too. So they tried to capture all the blacks, and then they treated them like slaves.
- Emily: It's kind of harsh that people think that black people are weak and really can't, stupid and can't do that much. And it's just, like I'm saying, it's just dumb.
- Hector: I think I agree on with Emily and Joseph too. Because it is kind of crazy, that the whites would think that the blacks are weak. Because when whites treated them like slaves, they actually tried to fight back. And they weren't weak. And still, blacks are in the army

now. And plus if it wasn't for those people who fought back, the President wouldn't be the President right now.

Teacher: Can I say something real quick? ... I really like how Hector is bringing in a historical element into this conversation, which I know a little bit was touched on. We're going back like way into slavery and segregation is what you're talking about.

Hector: And plus I have another thing to add, because if it wasn't for Martin Luther King and all those people. People like, me, Isaac, and Marco would not be in this class.

Emily: Like Isaac.

Hector: Yeah Isaac. We probably wouldn't be in this class right now. We would probably be in a different school.

During this literacy seminar, I assigned competence to Hector who struggled socially and did not often participate during group discussions. The topic of this discussion directly related to this cultural background, and he was very excited and passionate about sharing in the discussion. I assigned competence in the transcript when I said, "I really like how Hector is bringing in a historical element into this conversation..." I assigned competence by validating this contribution of bringing in a historical element to the conversation. I noticed the ripple effect of assigning competence to this student in the way students agreed with him and kept coming back to his contribution during discussion. In the following excerpt, three students oriented their ideas to Hector's contribution.

Mirian: Yeah, they were polite. I like how Hector brought up history.

Jon: I think that everyone did a great job. I like how everyone got reminded of Hector's idea of and Martin Luther King.

Abby: I like Hector's ideas because I like how everybody was listening to this and disagreeing or agreeing.

There is a pattern of students coming back to the importance of Hector bringing in the historical element. There was a significant improvement in the way the other students viewed Hector. Before I assigned competence to Hector, he did not speak very often and was considered low status among his peers. After I assigned competence to his contribution about segregation, students throughout and after the discussion referred to his ideas. This provides evidence that assigning competence can both increase status and increase participation for that student.

I could tell that his self-efficacy was lifted both during the literacy seminar and in the reflection that followed. The video recording showed how he smiled after someone agreed with him and the excitement he had to be able to participate. The evidence that his self-efficacy increased was the higher level of participation as well as his comfort in speaking in front of peers that he wrote about on his exit tickets. On exit tickets following this discussion, Hector wrote that he felt comfortable sharing because people listened to him and agreed with him.

There were a few students in the class who had very high status. I was able to identify these students as having high status based on a status survey, exit tickets, the postsurvey and observations. Two of the high-status students, Rachael and Isaac, were also the ones who often dominated discussions during literacy seminar. They were highest ranking on exit ticket questions such as, "Who in the class shares the most important ideas?" They were also the highest ranking on the status survey. I used a status treatment on these students by

asking them to share the floor with other students as well as asking them to look around to make sure other voices were heard. The following excerpt demonstrates an example of using a status treatment on Rachael:

Rachael: Can I please speak now?

Teacher: Yeah, I just want everyone to be paying attention and make sure everyone has had turn. Has everyone had a turn Rachael?

Hector: Ruby hasn't, and I think Amy wants to go.

This is an example of how I used a status treatment to both balance equity and make sure all voices were heard. The video recording shows Rachael looking around for other students who have not had a turn. Although Rachael seemed disappointed to not be able to speak, she was actively looking for peers who have not had a turn. When several of her peers had turns, she shared her ideas. During the debriefing discussion, Rachael said, "It went well because more people had a chance to share." This is evidence that using a status treatment can balance the status in the classroom while encouraging students to become aware of their own position in the classroom.

Although Rachael and Isaac were highest ranking on the data for high status, they often answered the exit tickets stating that they felt they were never listened to or did not have much of an opportunity to talk during discussion. For Isaac, he was the youngest student in the class and learned about content through dialogue. I do not think he was aware of his dominant role in discussion, but rather found it natural to talk often.

Rachael demonstrated throughout the data from exit tickets and video transcription that she struggled with self-efficacy. On one exit ticket, Rachael stated that students did not listen to her and also did not believe her

contributions were valuable to discussion. If I were to continue this study, I would continue to use status treatments to moderate her participation in group discussion, but I would also focus on assigning competence when she made valuable contributions. I would also continue to have one-on-one dialogues with her about her contributions to the group, as well as offering insight about how her peers value her ideas.

Comfort During Discussion

A key finding throughout this study was the importance of comfort during discussion. Each week I asked students if they participated in discussion and if they were comfortable, and I asked for reasons why or why not they felt comfortable. The majority of the students responded on the exit tickets by discussing body language, eye contact, and agreement or disagreement. This insight was important because it offered explanations as to why students chose to participate or not. I used this information as a guide throughout my study to strengthen or change the structures in place to increase participation during discussion.

Body language and eye contact. In comparison to the exit tickets in the beginning of this study, the majority of the students on their final exit tickets said they felt comfortable to share their ideas. Most confirmed that this was because they felt listened to and respected. Some students who normally did not share and did not feel comfortable had shifted their thinking. One example of how body language and eye contact were factors for increasing participation is with a student named Luke. In the beginning of the study, I asked on an exit ticket, "What would help you share more ideas during discussion?" Luke answered, "If the room was a bit more quiet and students were showing they were listening."

There was an improvement towards the end of the study. In week ten, I asked in an exit ticket, “Did you feel like the class listened to your idea?” Luke responded, “Yes, most everybody looked at me, listened to me, and did not talk to other people.” This data supports the importance of body language and eye contact as contributing factors to how comfortable students were in sharing their ideas during discussion.

On one of the exit tickets, I asked students, “Did you feel like the class listened to your idea?” Eighty-five percent of the students indicated that they did feel listened to. Many of them included details about how students were looking at them when they were talking. One example is a student who wrote, “Most everybody looked at me, listened to me, and did not talk to other people.” In the postsurvey there was substantial evidence that students who felt listened to had improved. Figure 2 compares the pre- and postsurvey using the following item: When I participated by talking in class, I...

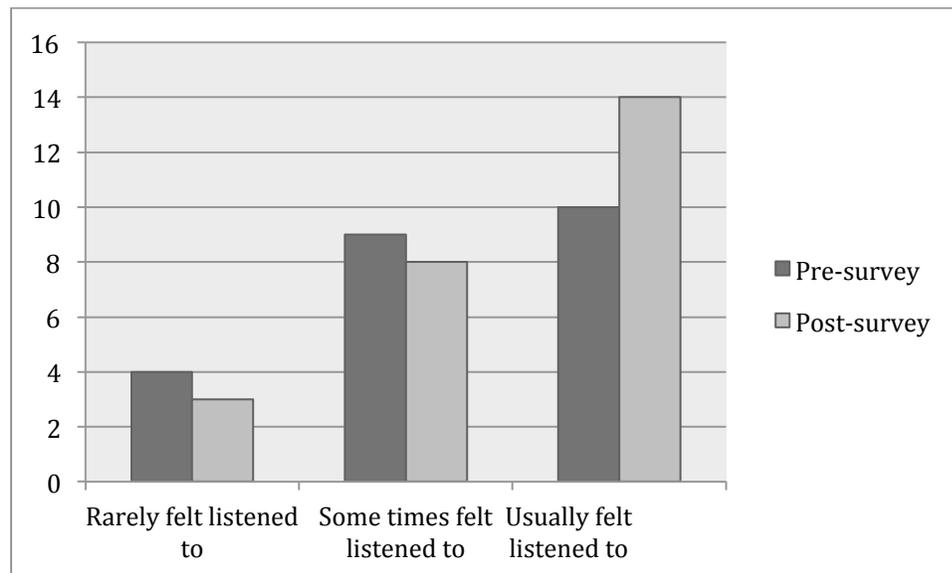


Figure 2: Comparison of students feeling listened to (survey item 1).

Agreeing and disagreeing. One important trend that appeared in the study was the way students showed respect by agreeing and disagreeing with their peers in a polite manner. The way the students agreed or disagreed with each other during discussion was with a quiet hand gesture. When students agreed with each other they used a hand gesture in which they made a fist with thumb and little finger extended outward, and rocked the little finger toward the speaker with a back and forth motion. When students disagreed, they gestured with their index fingers quietly meeting together. Students had been practicing this gesture throughout the study, and the expectations were to make these gestures close to the chest and to use the gesture in a quiet manner. These quiet gestures provided a powerful way to increase participation by allowing every student to have an opinion as well as by teaching students to orient their ideas to each other. In the exit tickets, there was strong evidence of the correlation between how comfortable the students felt and others' agreement with their ideas during discussion. Two patterns I noticed from the data of the exit tickets were an increase in comfort towards the end of the study and an increase in students' references to the importance of agreeing with each other. One of the students commented on an exit ticket about discussion stating, "The only reason I felt comfortable sharing was because people were agreeing with me."

I also noticed this pattern especially during discussions after a seminar. When I asked students what went well during literacy seminar, many remarked about how students politely agreed or disagreed. The example below is a

transcript from our debriefing after seminar on the poem, *Okay, Brown Girl, Okay*, by James Berry.

Madeline: People had really good ideas, and a lot of people have the same idea a lot of times because it's actually pretty true.

Teacher: People were agreeing? Okay, Emily.

Emily: It was nice how people were agreeing when they talked about the same thing. They also said you can go or you can go ...

Teacher: They were polite?

Emily: Yeah, they were polite. I like how Hector brought up history about it, and yeah.

Teacher: Me too, so can you keep passing it? [The microphone]

Chin: I agree with Emily, like how people that were talking a lot let other people go.

Teacher: I agree with that.

Austin: I think it was very nice that other people were not being mean about it.

Jon: I really like how a lot of the people they took turns, and I like how a lot of people used a agree sign and stuff, instead of just saying it.

Ana: I like when talked because I like how everybody was listening to this and either agreeing disagreeing.

Teacher: Yeah.

Samantha: I really like how everybody was talking politely. They didn't say anything like last time about and argued about it. Last time we had trouble with that. This time it was very polite.

Teacher: There was an improvement instead of arguing, people were listening more.

My findings provided evidence about how important comfort during discussion was to increase the rate of participation. There was a strong increase of responses about the importance of body language, eye contact, and disagreeing and agreeing, as was shown in the exit tickets. Towards the end of the study, students felt more comfortable sharing their ideas, and their participation increased.

Orienting Students to Each Other

Another recurring theme involved how students oriented themselves to each other's ideas. There was a pattern of how comfortable they were with each other by the way they interacted and oriented to each other. In the transcript below, there is evidence of both a student-led conversation as well as adding onto one another's ideas:

Isaac: I agree with you because I think it reminds me of Martin Luther King because he had a speech about that, like racism.

Teacher: Mm-hmm (affirmative).

Rachael: I agree with Isaac because, yes, Martin Luther King did do a speech.

David: I don't think that people would be racist towards blacks or if you're a black person towards whites.

Teacher: Does anyone want to add on to what David just said?

Abby: I agree with David because it doesn't matter what color your skin is because it's what matters inside.

Teacher: I'm wondering if Carrie has something to say, it looks like she was ready earlier? Yes.

- Isaac: I agree with David. I am going to let Carrie talk.
- Teacher: Thank you, Isaac.
- Carrie: I think that it really doesn't matter ... You don't have to judge people about their skin color.

The students within this example are orienting their ideas to each other by adding their own opinions to the discussion about racism. When the students agree with each other, it provides evidence that they are having a conversation with each other and finding ways to add onto the conversation.

I used a few strategies to encourage students to orient their ideas to each other during discussions. One of the strategies I used was to ask if anyone wanted to add onto what a student said. There is an example of this in the above transcript where I ask students if they want to add onto the information. I also asked students to rephrase what a student said. Another strategy I used was to ask students to share their ideas with a partner and be ready to share what their partner shared. I observed this in the same video from the above transcription. In the above transcription, students are agreeing with each other and adding onto each other's ideas without my guidance. This pattern is evidence that they are practicing this strategy without my support in the last couple of weeks of this study. Towards the end of my study, students were using statements such as "I would like to add onto Jon."

When asked in the exit ticket towards the end of the study, "Did you feel like the class listened to your ideas?" students spoke of how other students looked at them when they spoke and did not speak over them. Samantha, a student in the class, when asked on an exit ticket why she was comfortable sharing stated, "I saw people as a community." This is an example of how

comfortable students were sharing because of the sense of respect they felt in the classroom.

I compared data from the presurvey and the postsurvey (Figure 2) to find evidence of students learning from each other. The survey item that correlates with this chart is, "In class activities, I learn new ideas from other students."

Figure 3 shows a comparison of students' responses in the pre- and postsurvey.

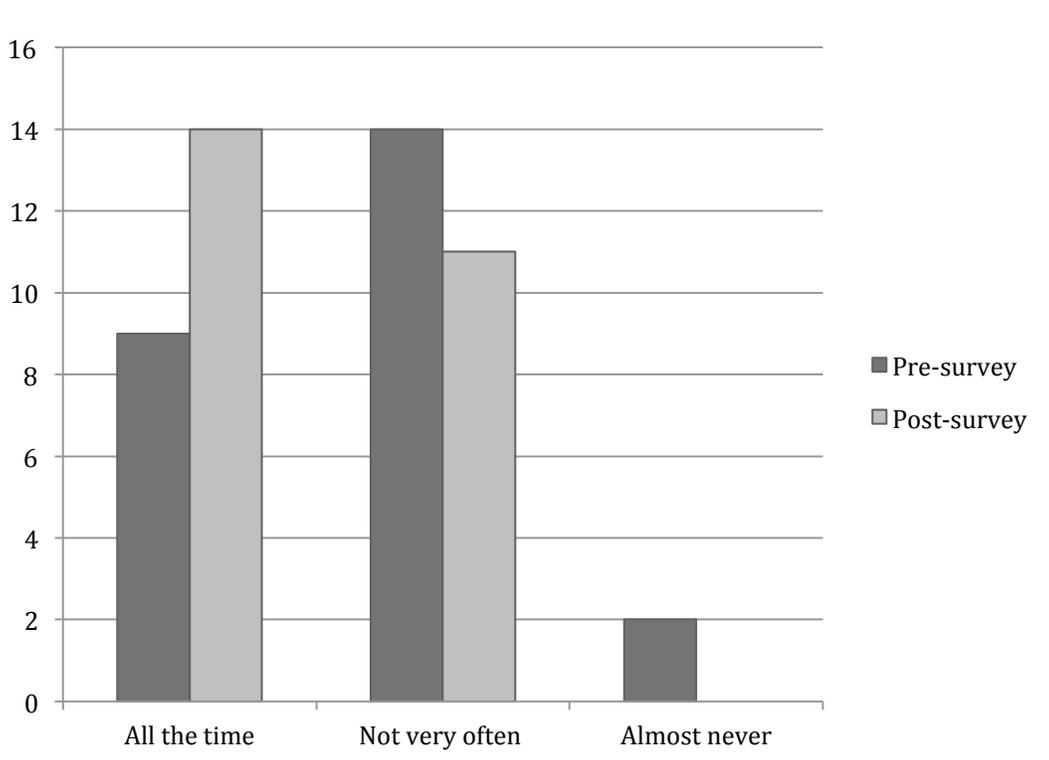


Figure 3: Comparison of students' beliefs about learning from others.

The largest increase that is shown in the chart is the amount of students who stated that they learn from other students all the time. The comparison between pre- and postsurvey results, indicates that students both felt more comfortable sharing their ideas with their peers and also believed that their peers made valuable contributions.

Implications and Further Research

Previous research has suggested that there is a positive linkage between discussion in the classroom and participation in learning. In classrooms that encourage a student-led curriculum, students are much more engaged and motivated to learn. Other research studies provide evidence that verbal participation is beneficial for all students in the classroom, especially for low-achieving students. Structures in place that support authentic discussion are critical to developing a trusting environment.

In this research study, my purpose was to describe and explain the structures used in the classroom that promoted authentic discussion. Using the structures during authentic discussion led to both an increase in participation and also a high level of trust in the classroom. By creating structures such as expectations, a climate of trust, by assigning competence, and by orienting students to each other's thinking a balance of equity was also achieved.

The structures in the classroom created a climate of trust that offers some significant educational implications, especially for teachers who are interested in using authentic discussion in their own classrooms. Structures within authentic discussion are practical and workable to increase the level of participation and equity in the classroom.

One of the implications that deserves special attention is the important role expectations played throughout this study. By creating expectations as a class and following them extensively, students were able to feel safe enough to participate in discussions. Therefore, it is important for teachers to pay close attention to developing and maintaining a focus on expectations.

Another critical implication discovered during this study is the importance of orienting students to each other's thinking. As a trusting relationship developed between students, they felt increasingly comfortable sharing in authentic discussions. This increased the rate of participation and therefore the learning that took place in discussion. It is important for teachers to spend the time creating relationships with their students as well as developing a climate that encourages positive, respectful, and trusting relationships between other.

As the findings show, all of the structures discussed throughout this study were essential components to encouraging authentic discussion. The structures, building off of each other, increased the likelihood of participation and equity. For example, creating and following expectations offered a foundation for students to orient their thinking with one another.

A short study like this raises more questions than it can answer. Two valuable areas for further research are the dynamics of status within literacy seminars and the students' skill development with different kinds of texts. The first theme that I would like to spend more time researching is status in the classroom. More specifically, I would like to continue to research and implement status treatments with some of the high status students who do not believe they are listened to. Focusing specifically on my extremely vocal students who perceived that others did not listen to them would add depth to my study. Status treatments could include pointing out their perceptions of themselves, finding ways to change their perceptions of how others view them, and continuing to encourage them to hold back during discussion. My research would target how

to reduce the frequency of their contribution during discussion while increasing their awareness of their status.

I would also like to research how to support discussions of a broader range of texts in the literacy seminar. During my research project, the focus was in ELA and the source of text was primarily poetry. If I were to continue this research I would offer a broader range of texts including articles, fiction, and nonfiction chapter books. I would also broaden the content area to include social studies, visual art, and science.

Using a broader range of text as well as variations in content would allow students to engage in dialogue across the curriculum. In addition to using a variety of text and content, I would also continue to broaden my awareness choosing material to increase critical thinking. Chosen texts could be selected for content that encourages critical thinking and multiple perspectives to create rich discussion.

In order to minimize the effects of context and to strengthen transferability, it would be valuable to study the use of these practices in other grade levels and school contexts. These suggestions would also explore ways to try it out in different settings such as grades, subject areas, and school settings. An important element to research as part of implementing this study is to research the effects and benefits of creating expectations and community agreements. The value of taking the time to connect with students and creating classroom agreements was the most beneficial finding within my research study. Valuable research could be done on how to facilitate a discussion to encourage critical thinking, and how to orient students to each other's thinking, with students of different ages and in different school settings. This would clarify both

methods and importance of expectations in relation to successful discussions. It is also important to research the effects of status within a classroom setting while understanding ways to attend to status and use status treatments.

With the pressure of high-stakes testing and instructional mandates, it can be hard for teachers to envision using authentic discussion in their own classrooms. Often teachers under this pressure resign themselves to strictly following scripted curriculum while using the IRE form of instruction. It can be challenging to trust that students can take the initiative in their own learning or that student-led discussion is appropriate with all of the educational pressures.

The findings in this research study offer an argument for the importance of using authentic discussion in the classroom while also suggesting more opportunities for student-led learning. Through spending time on establishing expectations, building a climate of trust, and encouraging students to orient their ideas to each other, participation and equity increased.

Though I was the only one in the building who taught authentic discussion, I had support from colleagues and principal for the importance of my work. The principal of the school had used a similar form of discussion in his own classroom as a teacher and was very supportive of my efforts. My colleagues were also supportive and interested in implementing authentic discussions in their own classroom.

It would be unlikely for a teacher to recreate the structures I have listed throughout this research, but with the ideas in mind, teachers can create their own classroom environment around the unique personalities of the students in the class. The analysis of this study can inspire teachers to come up with similar

structures for authentic discussion through their own expectations and norms that can be adapted and adopted in the classroom.

References

- Alder, M. & Rougle, E. (2005). *Building literacy through classroom discussion: Research-based strategies for developing critical readers and thoughtful writers in middle school*. New York, NY: Scholastic Inc.
- Anders, P. L., Alvermann, D., & Evans, K. S. (1998). Literature discussion groups: An examination of gender roles. *Reading Research and Instruction*, 37(2), 107-122.
- Anderson, N. C, Chapin, S. H, & O'Connor, C. (2009). *Classroom discussions: Using math talk to help students learn*. Sausalito, CA: Math Solutions.
- Boaler, J. (2005). *Transforming students' lives through an equitable mathematics approach: The case of Railside School*. Unpublished manuscript, Graduate School of Education, Stanford University. Available at <http://www.stanford.edu/~jboale>.
- Berry, R. A., (2006). Inclusion, power, and community: Teachers and students interpret the language of community in an inclusion classroom. *American Educational Research Journal*, 43(3), 489-529.
- Berry, R. A. W., & Englert, C.S. (2005). Designing conversation: Book discussions in a primary inclusion classroom. *Learning Disability Quarterly*, 28(1), 35-58.
- Billings, L., & Fitzgerald, J. (2002). Dialogic discussion and the Paideia seminar. *American Educational Research Association*, 39(4), 907-941.
- Bridges in Mathematics (2nd ed.). (2014). Salem, OR: Math Learning Center.
- Clarke, L. W. (2006). Power through voicing others: Girls' positioning of boys in literature circle discussions. *Journal of Literacy Research*, 38(1), 53-79.

- Cohen, E. G. (1994). *Designing group work. Strategies for the heterogeneous classroom*. New York, NY: Teachers College Press.
- Cohen, E. G., & Lotan, R. A. (1995). Producing equal-status interaction in the heterogeneous classroom. *American Educational Research Journal*, 32(1), 99-120.
- Cohen, E. G., Lotan, R. A., Whitcomb, J. A., Balderrama, M. V., Cossey, R., & Swanson, P. E. (1995). Complex instruction: Higher-order thinking in heterogeneous classrooms. In R. J. Stahl (Ed.), *Handbook of Cooperative Learning Methods* (pp. 82-96). Westport, CT: Greenwood Publishing Group.
- Cornelius, L. L., & Herrenkohl, L. R. (2004). Power in the classroom: How the classroom environment shapes students' relationships with each other and with concepts. *Cognition and Instruction*, 22(4), 467-498.
- Crespo, H., Featherstone, H., Jilk, L. M., Oslund, J. A., Parks, A. N., & Wood, M. B. (2011). *Smarter together! Collaboration and equity in the elementary math classroom*. Reston, VA: The National Council of Teachers of Mathematics.
- Degani, A., Vaaknin, E., & Zohar, A. (2000). Teachers' beliefs about low-achieving students and higher-order thinking. *Teaching and Teacher Education*, 17(4) 469-485.
- Dewey, J. (1944). *Democracy and education*. New York, NY: A Free Press.
- Dweck, C. (2000). *Self-theories. Their role in motivation, personality, and development*. New York, NY: Psychology Press.
- Empson, S., Dominguez, H., Maldonado, L., & Turner, E. (2013). English learners' participation in mathematical discussion: Shifting positioning and dynamic identities. *Journal for Research in Mathematics Education*, 44(1), 199-234.

- Freeman, Y. S., & Freeman, D. E. (2008). *Academic language for English language learners and struggling readers: How to help students succeed across content areas*. Portsmouth, NH: Heinemann.
- Freire, P. (1998). *Pedagogy of Freedom: Ethics, democracy, and civic courage*. Lanham, MD: Rowman & Littlefield.
- Freire, P. (2000). *Pedagogy of the oppressed*. New York, NY: Bloomsburg Publishing.
- Fuson, K. C., Hufferd-Ackles, K., & Sherin, M. G. (2004). Describing levels and components of a math-talk learning community. *Journal for Research in Mathematics Education*, 35(2), 81-116
- Nystrand, M., M. J. ,Gamoran & A. Heck, (1993). Using small groups for response to and thinking about literature. *The English Journal*, 82(1), 14-22.
- Hadjiioannou, X. (2007). Bringing the background to the foreground: What do classroom environments that support authentic discussions look like? *American Educational Research Journal*, 44(2), 370-399.
- Juzwik, M. M, Nystrand, M., Kelly, S., & Sherry, M. B. (2008). Oral narrative genres as dialogic resources for classroom literature study: A contextualized case study of conversational narrative discussion. *American Educational Research Journal*, 45(4), 1111-1154.
- Kelly, S. (2007). Classroom discourse and the distribution of student engagement. *Social Psychology Education*, 10(3), 331-352
- Lopez-Robertson, J. (2012). "Oigan, tengo un cuento": Crossing la Frontera of life and books. *Language Arts*, 90(1), 30-43.
- Lotan, R. (2006). Teaching teachers to build equitable classrooms. *Theory into Practice*, 45(1), 1-12.

- Paschen, E. & Raccah, D. (2005). *Poetry speaks to children*. Naperville, IL: Source Books, Inc.
- Milner, R. (2010). *Start where you are, but don't stay there*. Cambridge, MA: Harvard Education Press.
- Noddings, N. (2013). *Education and democracy in the 21st century*. New York, NY: Teachers College Press.
- Stevens, R. J., & Slavin, R. E. (1995). The cooperative elementary school: Effects on students' achievement, attitudes, and social relations. *American Educational Research Association*, 32(2), 321-351.
- Wells, G., & Arauz, R. M. (2006). Dialogue in the classroom. *The Journal of the Learning Sciences*, 15(3), 379-428.
- Zwiers, J. (2008). *Building academic language: Essential practices for content classrooms, grades 5-12*. San Francisco, CA: Jossey-Bass.
- Zull, J. (2002). *The art of changing the brain*. Sterling, VA: Stylus Publishing, LLC.

Appendix

Survey

Name:

Date:

1. When I participate in classroom discussions, I

- a. Rarely felt listened to
- b. Some times felt listened to
- c. Usually felt listened to

2. During class I

- a. Often have ideas that I think are good
- b. Sometime have ideas that I think are good
- c. Usually have ideas that I think are good

3. This year, I think

- a. A lot of students shared important ideas in class.
- b. A few students shared important ideas in class.
- c. Only one or two students shared important ideas in class.

4. When I have an idea during class discussions, I

- a. Share often
- b. Rarely share
- c. Never share

5. In class activities, I learn new ideas from other students

- a. All the time
- b. Not very often
- c. Almost never

6. When I have an idea to share

- a. I often worry about what other people will think of my idea.
- b. I sometimes worry what other people will think of my idea.
- c. I rarely worry what other people will think of my idea.

7. Who in your class shared very important ideas?