

7-2015

Using Student-led Discussion Strategies to Motivate, Increase Thinking, Create Ownership, and Teach Citizenship

Matthew Brisbin
mbrisbin11@georgefox.edu

Follow this and additional works at: <http://digitalcommons.georgefox.edu/actionresearch>

 Part of the [Educational Methods Commons](#), and the [Secondary Education and Teaching Commons](#)

Recommended Citation

Brisbin, Matthew, "Using Student-led Discussion Strategies to Motivate, Increase Thinking, Create Ownership, and Teach Citizenship" (2015). *Master of Education Action Research Projects*. Paper 1.
<http://digitalcommons.georgefox.edu/actionresearch/1>

This Project is brought to you for free and open access by the School of Education at Digital Commons @ George Fox University. It has been accepted for inclusion in Master of Education Action Research Projects by an authorized administrator of Digital Commons @ George Fox University. For more information, please contact arolf@georgefox.edu.

ACTION RESEARCH PROJECT

USING STUDENT-LED DISCUSSION STRATEGIES TO MOTIVATE, INCREASE
THINKING, CREATE OWNERSHIP, AND TEACH CITIZENSHIP

by

MATTHEW BRISBIN

FACULTY RESEARCH COMMITTEE:

Chair: Eloise Hockett

Member: Mark Shelton

Presented to Educational Foundations and Leadership Department

and the School of Education, George Fox University

In partial fulfillment of the requirements for the degree of

Master of Education

July 15, 2015

ABSTRACT

This study aimed to see how teacher implementation of a student-led discussion process influenced intrinsic motivation of students in a high school Language Arts classroom. There was a specific focus on how these discussions impacted the students' critical thinking. A pre and post-survey, student journals, videos of discussions, and interviews were used to collect data regarding motivation and critical thought. The study verified prior research regarding student discussions as a useful tool in classrooms if implemented in an effective way. However, there were no new conclusions reached. With that said, student-reported intrinsic motivation and critical thinking showed an increase from pre to post-survey. Many students were able to learn the process of preparing and writing their own discussion questions. Students also confirmed that they believe student-led discussions are beneficial to help them see what they know and what they still need to learn. These findings, as well as other questions raised throughout the study, open the door for future research. Still, the research question cannot be answered conclusively without the consideration of other variables.

TABLE OF CONTENTS

ABSTRACT.....	ii
TABLE OF CONTENTS.....	iii
LIST OF TABLES.....	v
CHAPTER 1.....	1
Introduction.....	1
Purpose of the Study.....	2
Statement of Problem.....	2
Research Questions.....	3
Definition of Terms.....	3
Summary.....	4
CHAPTER 2.....	5
Review of the Literature.....	5
Introduction.....	5
Student-to-student Discussions.....	6
Student-to-teacher Interactions.....	8
Critical Thinking In Classroom Discussions.....	10
Conclusions.....	11
CHAPTER 3.....	13
Methodology.....	13
Introduction.....	13
Setting.....	13
Participants.....	14
Research Design.....	14
Human Subject Safeguarding.....	14
Instrumentation/Materials.....	15
Role of the Researcher.....	16

Procedures of the Project.....	17
Data Analysis	20
Possible Contributions.....	20
CHAPTER 4.....	22
Results of the Project.....	22
Introduction.....	22
Results of the Project.....	23
Figure 1: The Pre-assessment Survey Data Questions 1-10.....	25
Figure 2: The Post-assessment Survey Data Questions 1-10.....	26
Figure 3: The Students' Favorite Class Activity Pre Survey.....	27
Figure 4: The Students' Favorite Class Activity Post Survey.....	28
Figure 5: The Student Reported Biggest Motivator Pre Survey.....	29
Figure 6: The Student Reported Biggest Motivator Post Survey.....	30
Figure 7: The Increase of Student Motivation Over the Study.....	31
CHAPTER 5.....	38
Discussion and Conclusions.....	38
Discussion.....	38
Conclusions.....	43
Implications for Future Research.....	45
References.....	49
Appendices.....	51
Templates of permission forms.....	51
Templates of instruments used.....	52

Chapter 1

Introduction

When I first started teaching high school English nine years ago, I noticed a general lack of student engagement in reading and writing. At the time I was too inexperienced to know why, but as I look back, I now realize that this was largely because of the students' lack of confidence with reading on an interpretive level and wanting to get a good grade in my class. By the time most students get to high school, they have been trained to listen to their teacher for the knowledge that they will be expected to learn and reproduce. This largely comes from classes like science and math where there is always a correct answer regardless of what the student thinks. In English class, however, nothing could be further from the truth. It is when I see my students thinking for themselves and processing the real world scenarios that they encounter in their reading that I see the most success. Often, the students I get are unwilling to take that step for fear of being "wrong" and receiving a bad grade. This fear of failure is precisely the reason most of my students have a hard time engaging in what they are reading or writing about.

Research suggests that the overwhelming presence of extrinsic motivators, like grades, is responsible for students' poor performance, and lack of critical thought (Ariely, Gneezy, Loewenstein, & Mazar, 2009). Therefore, I began looking for teaching strategies that naturally foster intrinsic motivation and critical thought, and I found that there are few strategies as effective as student led discussions at increasing intrinsic motivation and

critical thought in the learner (Burgess, 2009; Morrone, Harkness, D'Ambrosio, & Caulfield, 2004; Rugutt, & Chemosit, 2009).

Purpose of the Study

The purpose of this study was to explore the use of discussion-based teaching strategies in a high school English classroom. Specifically, I used an action research design to investigate the relationship between discussion-based teaching strategies and intrinsic motivations among a sample of 11th grade high school students. An objective of this project was to gain greater understanding about whether student centered discussions can lead to an increase in perceived intrinsic motivation and critical thought.

Statement of the Problem

The problem is that students see a grade as the biggest motivator to learn and complete assignments. Their grades, in turn, represent a possible entry into college or a scholarship offer and because of this, no one can blame the students for feeling anxiety about their performance. Unfortunately, this is not good enough for those students who do not plan to go to college, and see graduation as optional. The resulting situation is that if students do not see the value in what they are learning, then they will not learn it. Therefore, in order to make the learning more relevant, and consequently more engaging, I wanted to explore the effects of implementing a student-led class discussion routine within my classroom.

Research Questions

In what ways do student-centered discussions influence intrinsic motivation compared to extrinsic motivation? Furthermore, in what ways do students demonstrate critical thinking through student-centered discussions?

Definition of Terms

There are several terms that will be used repeatedly throughout this study. Each of them has several accepted definitions. The following is how these terms are defined for the purposes of this research project.

- Higher-Order-Thinking- “instances when the students are asked to display deeper understanding, to make connections of the current topic to their prior knowledge, or to think about relationships between ideas” (Morrone et al., p.29, 2004).
- Mastery Goals- “Mastery goals are intrinsically motivating, self-referenced rather than based on normative comparison, and concerned with increasing competence through effort.” Mastery goals place a value on the process of learning (Rugutt, & Chemosit, p.17, 2009).
- Performance Goals- Performance goals are extrinsically motivated with success determined in reference to others and concerned with displaying competence for others to see. Performance goals involve either obtaining favorable judgments of competence (performance-approach goals) or avoiding unfavorable judgments of competence (performance-avoidance goals). Students with performance goals value the outcome that results from having learned the material (Morrone et al., p.22, 2009).

- Critical Thinking- “Critical Thinking is a theory of action: it is reasoning and deciding about how to solve problems, thereby obtaining considerable benefits such as a desirable knowledge of reality, or greater wisdom. Thus, thinking critically is not merely advancing further into the terrain of good judgment and good argumentation; it must also help us to solve problems or reach our goals, thereby turning argumentation from an end in itself into a means” (Olivares, Saiz, & Rivas, p.370, 2013).

Summary

This study examines discussion-based teaching and its use in helping to motivate students and helping them think critically. As the focus in education shifts towards high stakes, standardized, summative assessment, intrinsically motivating students to learn through student-led discussion is even more important.

Chapter 2

Review of the Literature

Introduction

One of the greatest challenges educators face today is motivating their students. Researchers suggest one of the most significant factors to be aware of are students' learning goals. These scholars maintain that most students are motivated by either mastery goals, or performance goals (Dweck, & Leggett, 1988; Morrone et al., 2004; Valenzuela, Nieto, & Saiz, 2011). Students with mastery goals intrinsically enjoy the process of learning the material, while students with performance goals value the extrinsic outcome that is achieved as a result of their learning. Although both goals originate from within the student, mastery goals are decidedly intrinsic and performance goals are extrinsic. Rather than being self-motivated the way intrinsically motivated students are, people who are extrinsically motivated are performing in order to earn some reward or recognition, or to avoid punishment.

Through a review of the literature, results show that regardless of a student's perceived learning goal, these extrinsic motivators may have a negative impact on the learner's ability to think critically as opposed to intrinsic motivators, which do not show the same effect. (Ariely, Gneezy, Loewenstein, & Mazar, 2009; Glucksberg, & Weisberg, 1966). This trend compounds when higher stakes are resting on the student's performance. For example, if students take a test that is required for graduation, or entrance into a university, it is likely that they will underperform. While these students may still have passing scores, Ariely et al. (2009) suggest that because of a phenomenon

similar to choking under pressure, people will tend to narrow their focus and stop thinking critically. Therefore, educators need to find ways to target their students' natural curiosity in order to create learners who can think critically and stop putting so much emphasis on grades and test results.

Student-to-student Discussions

With this clear correlation between intrinsic motivation and critical thinking, teachers need to seek out teaching strategies that foster higher order thinking in hopes of finding ways to target their students' natural curiosity. Although there are a plethora of teaching strategies that target intrinsic motivation and higher order thinking, few are as effective as student led discussions (Burgess, 2009; Morrone, et al., 2004; Rugutt, & Chemosit, 2009). This same research shows a majority of students report feeling much more motivated to complete the task at hand when given the opportunity to freely discuss the ideas of the class in relation to the content being taught. Even when the discussions take place in an online forum, Burgess (2009) notes that 90% of the participants describe themselves as feeling an increase in motivation as a result of the dialogue. Two strategies that are often used to facilitate student-to-student discussions are Socratic seminars and the Harkness method. Though there is little research relating to the effectiveness of these methods in regards to student engagement, the use of these methods do still incorporate student conversations. As Burgess (2009) explains, the format of the conversation does not matter in regards to the effect of the increased motivation, what is most important is that students have the freedom to take the discussion to places that they see fit.

One way to approach student discussions is to have small groups participate in project-based learning. This not only allows students to use their own curiosity, but also enables groups to synthesize their learning when sharing what they have learned with one another (Bahar, 2003; Burgess, 2009). When students have the autonomy to pursue their own interests and collaborate with peers who share these interests, what results is a genuine dialogue fueled by something each student finds personally important. This increased level of engagement is something that Bahar (2003) notes can be compounded in an online forum. When students are able to respond on the web, they can do so as they learn on the computer, and have the ability to get expedited feedback from either instructor or classmate without having to wait until the next class. If this same student is required to wait until the next class to share his/her learning, the excitement level will inevitably decrease with the time that passes between the research and the dialogue.

Teachers who teach subjects that are concept heavy, like math or science, often report not having the time or the ideal subject to use student-to-student discussions. Largely this is due to the concept heavy content that their fields require. When the mastery of one concept is necessary to understanding the next, teachers typically rely on teaching the concepts directly to the class. Still, even these types of classes can benefit from setting aside time in class for dialogic discussions (Morrone, et al., 2004; Tanner, & Casados, 1998). These discussions, in which the teacher is there only as a guide, requires the group of students to talk their way through a concept by continually questioning each other and tapping into each individual's unique background knowledge. As the group is able to solve a problem, researchers report an increased level of engagement and a more complete mastery of the concept (Morrone, et al., 2004; Tanner, & Casados, 1998).

This radically different approach to math, for example, may revolve around students being presented a real life problem that requires a new concept to find a solution. Students may then engage in some collective problem solving in order to come up with a way to attack the problem. A particularly motivated and well-versed class may have enough collective background knowledge for the class to create or identify new ways to solve problems, but even if there is not, a series of scaffolded questions by the instructor may successfully lead students to the correct solution. This new approach deemphasizes the outcome (finding the correct answer), and moves it to the process of learning a new concept. All of a sudden, the major goal for the day is to learn a new way to solve a problem, even if that means getting the problem wrong a few times. This mastery approach very often results in positive student attitudes and increased engagement in learning a new concept (Gambrell, Hughes, Calvert, Malloy & Igo, 2011; Morrone et al., 2004). During this process, students are allowed to take risks and seek out each other's help while before it was likely considered cheating to do so. When performance stops becoming the focus, meaningful learning is often the result.

Student-to-teacher Interactions

To an outside observer, a discussion-based classroom may appear to be largely student led, and to an extent this is an important part of the process. However, without the proper guidance from a teacher, students cannot be expected to reach their full potential (Morrone, et al., 2004; Olivares et al., 2013; Rugutt & Chemosit 2009). As the learning process begins, it is important for the teacher to set an appropriate purpose for the class, control the direction of the study through a series of guiding questions, and to scaffold the learning just enough to push the students into new areas of focus, but without giving them

the answers (Olivares et al., 2013). One of the difficulties is that, depending on the purpose of study, each student may be in need of different direction and scaffolding during a given class, particularly if they are participating in project-based-learning. However, neglecting to give students positive feedback and encouragement, as well as guidance, may result in a lack of motivation, and a decrease in overall performance (Morrone et al., 2004; Olivares et al., 2013; Rugutt & Chemosit 2009).

Addressing the need of student-to-teacher interaction can be done in a variety of different ways. Morrone et al. (2004) suggest that the easiest, and perhaps most effective way, is to do this as a whole class. Although the class may be split up into small groups, each working on addressing a common problem or understanding, when one group has questions or is in need of guidance, it is helpful to include the entire class in the student-to-teacher feedback. The essential idea here is that if one student or group has a question about what they are doing, it is likely that there are others in the class that will benefit from the same information. This way, although working separately in groups, the class is still working together as a whole to learn the content. Furthermore, when students are given this new information, even if it was intended for only one small group, it has a positive affect on the motivation level for nearly everyone in the room (Morrone et al., 2004).

Certainly, this whole class interaction will not be applicable all the time, and there will be occasions where the teacher needs to have a one-on-one conference with a student. Since each individual will need different feedback, this is much harder to plan for, but there are still several keys to making this interaction meaningful, and engaging. The first is to always maintain a positive attitude (Rugutt & Chemosit 2009). If a teacher

cannot remain enthusiastic about what a student is working on, then a student cannot be expected to either. Conversely, if a student sees his or her teacher become excited about what they are working on, it will reinvigorate the student. Secondly, Olivares et al. (2013) have found that it is necessary for the teacher to monitor the level of the student's critical thought, and be willing to coax them in the right direction through guiding questions. Finally, Morrone et al., (2004) have found that it is critical for the teacher to emphasize the learning process by asking students to elaborate on their understanding, and not simply the result of the learning. Providing this consistent affective support will encourage students to put forth more effort and increase motivation levels.

Critical Thinking In Classroom Discussions

While student discussions and a positive teacher interaction have been shown to increase motivation, the research also states that these higher levels of motivation enable students to easily access their capacity for critical thought. It is, once again, the responsibility of the teacher to, not only show students how to do this, but to monitor that they are doing this on a consistent basis (Ariely et al., 2009; Burgess, 2009; Gambrell et al., 2011; Morrone et al., 2004; Glucksberg & Weisberg, 1966; Olivares et al., 2013; Rugutt & Chemosit, 2009; Valenzuela et al., 2011). For critical thought to be effective as a motivational tool, it must be defined as reasoning and deciding how to solve problems (Olivares et al., 2013). If we think of critical thought as simply a means to show good judgment or argumentation, it will not encourage students to learn; there must be a real world application that answers the questions students are grappling with thus changing argumentation from an end, to a means.

Furthermore, Ariely et al., (2009) suggest that critical thinking is something that is actually stifled when there is some kind of extrinsic motivator. Therefore, if a student has not sufficiently bought in to the value and the purpose of their task, they can never be expected to perform at their peak capacity (Ariely et al., 2009; Morrone et al., 2004; Olivares et al., 2013; Rugutt & Chemosit, 2009; Valenzuela et al., 2011). In a world that increasingly places value on a person's ability to think critically, this must be taken into consideration. This speaks to the importance of a teacher emphasizing the purpose behind their lessons. When students are taught how to navigate the world they live in, and the one they will be living in in the future, they see value in what they are doing. In addition, if a student does not see their task as being worth their time, it will decrease their motivation and their capacity for critical thought (Valenzuela et al., 2011). However, this does not come naturally to most students. Olivares et al. (2013) suggest that specific instruction in the areas of deduction, induction, and practical reasoning are necessary, hence the need for close monitoring and guidance on the part of the teacher.

Conclusions

There are many studies that suggest that student-led discussions help to increase intrinsic motivation levels (Gambrell et al., 2011; Morrone et al., 2004; Glucksberg & Weisberg, 1966; Rugutt & Chemosit, 2009). Regardless of venue (i.e. face-to-face or online), it is important to take advantage of any opportunity to give students the chance to discuss their work, and any common questions and/or problems. Along with consistent student-to-student discussions, teachers need to be organized, and focused on the learning that is taking place. Without constant monitoring, feedback on student progress, and communication about purpose and relevance, students will lose motivation and focus.

Therefore, in order to achieve optimal levels of intrinsic motivation, students need to be involved in academic discussions that are focused around a specific purpose, and guiding questions created by the teacher. It is only under these conditions that we can begin asking our students to think critically and expect them to have success.

CHAPTER 3

Methodology

Introduction

The research presented in Chapter 2 suggests that discussion in the classroom is a useful tool if applied in an appropriate way. However, it is also evident that more research needs to be conducted on the topic. As a result, I implemented a daily discussion routine in a high school English classroom and investigated how it improves the students' perceived engagement and motivation to learn, as well as their ability to think critically. The research questions I explored were: In what ways do student-centered discussions influence intrinsic motivation compared to extrinsic motivation? Furthermore, in what ways do students demonstrate critical thinking through student-centered discussions?

Setting

This action research project was conducted in a comprehensive high school located southwest of Portland, Oregon. The school district's demographics include approximately 66% White, 29% Hispanic, 2% Asian Pacific, 1% African American, and 1% American Indian. The student population of the high school is just over 2,000 and demographics are reflective of the school district. Roughly 53% of students are eligible for free and reduced lunch, nearly 17% of students are English Language Learners, and 12% are Special Education students.

Participants

The participants for this action research project included 25 students, 22 of whom were high school juniors; the other three were senior foreign exchange students. The sampling strategy was a purposive sample. This class consisting of 16 and 17 year old students was a standard American Literature course. This was not an advanced course of any kind, and it is important to note that these students were in this class to satisfy a graduation requirement, not necessarily because this was an area of interest to them. The study included 10 male and 15 female students. There were no English Language Learners (ELL), however there were two students who were formally exited from the ELL program and, as stated previously, three more were foreign exchange students. One student had an Individualized Education Plan, and there were no Talented and Gifted students in the class.

Research Design

The methodology for this study was an action research project relying on a mixed methods approach. The purpose for this design was to learn both about my own practice as a teacher and the perceptions of my students. Triangulation was used to support trustworthiness (Johnson, 2008). Instruments included pre and post-surveys, daily student and teacher journals, a focus group interview, and video footage of class discussions as the primary means to collect data.

Human Subjects Safeguarding

There was minimal risk for participants in this study. All instruments used in the study were familiar to students as these tools are used in many classrooms on a daily

basis. Every opportunity was taken to ensure confidentiality. Data were kept in a secure location that only I have access to. The participants were not identified by name. I followed the George Fox University guidelines for human subject safeguarding.

Instrumentation/Materials

In order to answer the research questions, I used several different instruments to collect data. A short survey was given (See Appendix B) to students both at the beginning of the study and then again at the end. It included 14 questions. Questions 1-10 were Likert scale and ask participants about their perceived reactions and motivations regarding content related tasks. Questions 11-14 were open ended and ask the participants about what motivates them at school, and their experience with class discussion. The goal of this survey was to get some baseline information about student perceptions of what motivates them. I then compared the results before and after the study.

Participants also kept a journal to reflect on their perceived motivation to learn the class content throughout the study (See Appendix C). This was a daily assignment in response to prompts given about the content discussed during the class period, and a metacognitive response in which they wrote about how they mentally responded to the discussion. Specifically, the students responded daily to the following questions: How did the discussion today help you to better understand the novel? How did your group discussion go today? What grade would you give it? What went well, and what could have happened to make it better? Which question from your group contributed to the best

conversation? Finally, did today's discussion help you to become more interested in the novel? Explain your answer.

The goal of these journals was to help students become more metacognitive and begin to think about the learning goal, what they already knew, and what their peers have presented to them through discussion. I collected the journals and analyzed student comments for possible themes. In total, journals had 15 entries assuming the student was not absent during some of the classes.

My journal was anecdotal notes including the process taken to implement the discussion routine, assessment results, survey results, and comments from student journals. This was a weekly entry in which I reflected on what I had observed from the students, and how implementation of the new discussion routine had gone. The goal of this journal was to help me reflect on the quality of the discussions being done and the process of implementation.

Along with the survey and journals, a focus group interview was done with the class to complete triangulation in the study. The questions targeted individual responses about how they believed having regular class discussions affected their desire to learn (See Appendix D). Responses from students were recorded for further review.

Finally, I also recorded video footage of several of the class discussions to review. Specifically, I was using this to assess the level of questioning, contributions to discussion, and assessing discussion moves (e.g. building on an idea, presenting new information, challenging an idea, questioning a response, supporting your thoughts with the text).

Role of the Researcher

The role of the researcher in this project was both teacher and researcher. I was the one collecting data from the students through surveys and journals, as well as keeping my own anecdotal notes. I also analyzed the data.

Procedures of the Project

I began collecting data April 13th, 2015. The data collection lasted for 8 weeks, which included a two-week hiatus for Smarter Balanced testing. The data collection ended June 5th. The study began with a survey to collect data from the participants regarding their perceptions of what motivated them (See Appendix B). Following the pre-survey, I gave the participants a basic overview of the action research process and how they contributed to my project. We also covered the difference between intrinsic and extrinsic motivation, so that they could more accurately describe their perceived motivations. Finally, we reviewed what a good academic discussion looks like using the *Discussion Moves* recording sheet (See Appendix D). While the different types of comments were review, the question types were new information for them, so we spent a few minutes discussing these, and talking about a few examples. Finally, I explained to the participants that the next step that I expected them to take in regards to having an academic discussion was to be able to come up with their own questions for discussion, rather than relying on my questions to guide them.

In our discussion of “open-ended” questions, I explained the difference between open and closed questions, and I gave them some direction when it came to writing quality open-ended questions. The *types* of questions that I taught the participants to use

are based on the question types in Jim Burke's book *What's the Big Idea?* (2010). First, inductive questions ask the reader to develop an interpretation or opinion on some aspect of the book. Evaluative questions ask about the success of the author's writing style. Finally, analysis questions ask the reader to make outside connections to other texts, ideas, or situations through analysis.

Once we established the different kinds of questions, I modeled writing questions for the last novel that we had read, and then I had them write their own based on a short story that we had just read together. I then arranged them into groups of five or six, and selected one member from each group to be the *Discussion Tracker*. His or her job was to fill out the *Discussion Moves* recording sheet during their short group discussion. He or she still could participate in the actual discussion of the text though it was not their primary job. Afterwards he or she discussed with the group where their strengths were, and what needed work according to the tracking sheet. A different student in each group had the job of *Discussion Director* each day. His or her job was to ask the first question, make sure each participant has a chance to discuss, and ask follow up questions based on their responses. The first discussion lasted 5-7 minutes, followed by a 3-minute follow up discussion led by the *Discussion Tracker*. At the conclusion of this discussion, I led a whole group discussion about what worked, what was challenging, and what we could try to improve for next time. We ended class with the students responding to the daily journal prompts (See Appendix C).

These same class discussion routines were implemented daily throughout the study, and were conducted a minimum of two times per week due to the block schedule that we have. The types of discussion varied depending on the content that we covered.

Most discussions were in a small group of five or six students, other follow up discussions were conducted as a whole class. The reason for this change was to engage more students in the discussion process. If there were fewer students to compete with for speaking time, more students are then allowed to talk. For this reason, small group discussions were our primary method of student-to-student discussion. However, once small groups had a chance to discuss, was still an opportunity to hear different perspectives by bringing the discussion out to the rest of the class. Mostly, there were student-to-student discussions. I acted only as facilitator when needed, but was not a participant during these activities. That is, I did not contribute my own ideas. The purpose for this was to empower my students to find the answers for themselves, and not rely on me, an expert in their eyes, to give them the answers they need. Instead, my role was giving them feedback on the discussions and necessary skills for this (i.e. eye contact, building on each others' ideas, contradicting each other, asking clarifying questions, summarizing points of agreement, etc.) This discussion process was largely Socratic in nature; that is, I attempted to guide the direction of these discussions only by asking clarifying questions and letting my students work their way to the solution. This process according to Olivares et al. (2013) is the very definition of critical thinking. Other times, I played a more active role in responding to what the students are saying and responding to. Largely, this was in the form of clarifying their understanding of the content. For example, if they were making assumptions based on a faulty understanding of what we were studying, I stepped in and corrected the mistake.

I kept notes in a journal regarding my perception about how each discussion went as well as a reflection on my perception of the students' engagement with each. I asked

the students to take the last 10 minutes of each class period to write a reflection in their journals about their reactions to each specific discussion that we had (See Appendix C). These were largely about their perceived level of engagement during the class, and reflections about what was similar or different than past discussions that we had had, and why that made them more or less engaged with the content. It was also about what questions they felt like they had answered through the discussion during that class, what further questions the discussion had brought to mind, and the relevance these topics had to their own personal lives.

In week eight of the study, I conducted a focus group interview. The interview method came in the form of questions that I posed to the whole class. They then discussed them in small groups (five or six students). I then went around to each of the groups and had them respond to me about what they discussed. There were five interview questions (See Appendix E). Group answers were documented on a table to be compared and analyzed. In week eight, students re-took the same survey they took in week one. Finally, I collected the students' journals to analyze along with the video footage.

Data Analysis

When it came time to analyze my data, I was looking to answer my research questions by comparing and contrasting the surveys given at the beginning and end of the unit. I also looked through the student journals to search for themes and trends regarding the discussion process and the prompted questions. I also reviewed the video clips of the student discussions to observe the process at work, and looked for evidence of critical

thought. Finally, in order to complete the triangulation, I reviewed the student responses to the focus group interview questions.

Possible Contributions of the Project

In the last decade there has been a lot of national focus on standardized testing and the Common Core State Standards. However, the literature shows that these kind of high stakes, extrinsic motivators actually detract from students' ability to perform a task, and to think critically. Since the literature supports the idea that intrinsically motivated students are able to think at a higher level, I designed a study that explored how discussion based teaching affects students' perceived intrinsic motivation. Upon completion of this Action Research Project I believe there were several contributions. One contribution from this project includes an implementation of a discussion centered class routine which incorporates both student and teacher reflection. Another contribution is a documented strategy that engages students in what they are learning, and therefore increases the level of critical thought that they use on a regular basis. Since getting rid of high stakes testing is not a realistic goal, I tried to establish an atmosphere that fosters critical thought in hopes that they will do so more easily on standardized tests. Students also learned to reflect on the learning goal, what they already knew, and what questions they needed to ask to find the answers to what they did not know. This metacognitive process is useful in everyday learning in and out of the classroom and will greatly benefit my students in the future. A final contribution was collegial discussion and shared findings with my colleagues and participants.

CHAPTER 4

Results of the Project

Introduction

Over the last six weeks I implemented a routine of daily student led discussions in a high school English classroom and investigated how it affected the levels of my students' intrinsic motivation and critical thinking. The research question I explored was: In what ways do student-centered discussions influence intrinsic motivation compared to extrinsic motivation? Furthermore, in what ways do students demonstrate critical thinking through student-centered discussions? Special attention was given to students' perceptions of their level of intrinsic motivation and critical thinking ability through a variety of data points.

Triangulation was used in collecting data to support trustworthiness. At the beginning of the study students took a survey regarding their beliefs about their levels of motivation in regards to reading and writing. The same survey was given at the end of the study to track changes. There were four open-ended questions and another 10 using a Likert Scale.

After taking the survey, at the beginning of the study, students were taught about the necessary steps involved with preparing for discussions. For example, students learned to take notes on the content being discussed and finish each section of their notes by writing two open-ended questions that they wanted to ask their group. During the discussions, one student per group would track the *Discussion Moves* in order to debrief the quality of the discussion afterwards. Each day, after this debrief, I prompted the

students to respond to the same four reflection questions (See Appendix C) in their journals. These student journals were the second means of collecting data. Students responded to the reflection questions following each daily discussion for a total of 15 entries. For analysis, I randomly selected six of the 24 journals to review using the random name chooser on my SMART Board.

Another source of data were video recordings of two of the daily discussions, the first was taken after three weeks and the second near the end of the study, and a focus group interview. Students were asked five questions and then follow-up clarification questions if necessary. The rest of Chapter 4 includes a detailed account of the data collection process as well as analysis, patterns, and interpretations of the results.

Results of the Project

Likert scale responses

Prior to the beginning of the study, my students had begun working on building the capacity to have group discussions. This included becoming comfortable with the *Discussion Moves* (see appendix D) and learning how to listen and respond to each other. This unit would not have been successful without this groundwork being laid first. The biggest change that I made for this project is that up until this unit began, I always provided them with the questions to discuss, but during these six weeks I expected my students to not only write their own questions in preparation for the discussions, but to also have some notes from the reading to show that they had prepared. The changes that I observed came as a result of the students taking more ownership in the writing of questions, and also in the preparation that is necessary prior to each academic discourse.

To begin, I gave my students a survey to get some baseline data about the motivation they already felt in terms of my class, and how the students felt our previous class discussions had affected that.

The results of the survey brought to light some telling information about where my students felt the previous discussions affected their learning experience in my class. For the 10 Likert scale questions, I used a five-point system ranging from Strongly Disagree (1) to Strongly Agree (5). The results of the beginning survey can be seen in the graph below. As I reviewed the data, I found that the questions asking about discussions raising the level of the student's intrinsic motivation were numbers one (Do you enjoy reading?), two (Do you read for enjoyment?), three (Do class discussions motivate you to read more?), five (Do you normally get your homework done on time?), six (Are you normally curious about the books read in this class?), seven (Do you enjoy analyzing books we read?), and eight (Do you like discussions questions with multiple answers?). The questions related to how discussions increased their ability to think critically were four (Do discussions help you to write better?), seven (Do you enjoy analyzing books we read?), eight (Do you like discussions with multiple answers?), nine (Are you usually willing to change my mind when considering new ideas?), and ten (Are you solving questions that relate to real world issues during discussions?) as shown in Figure 1.

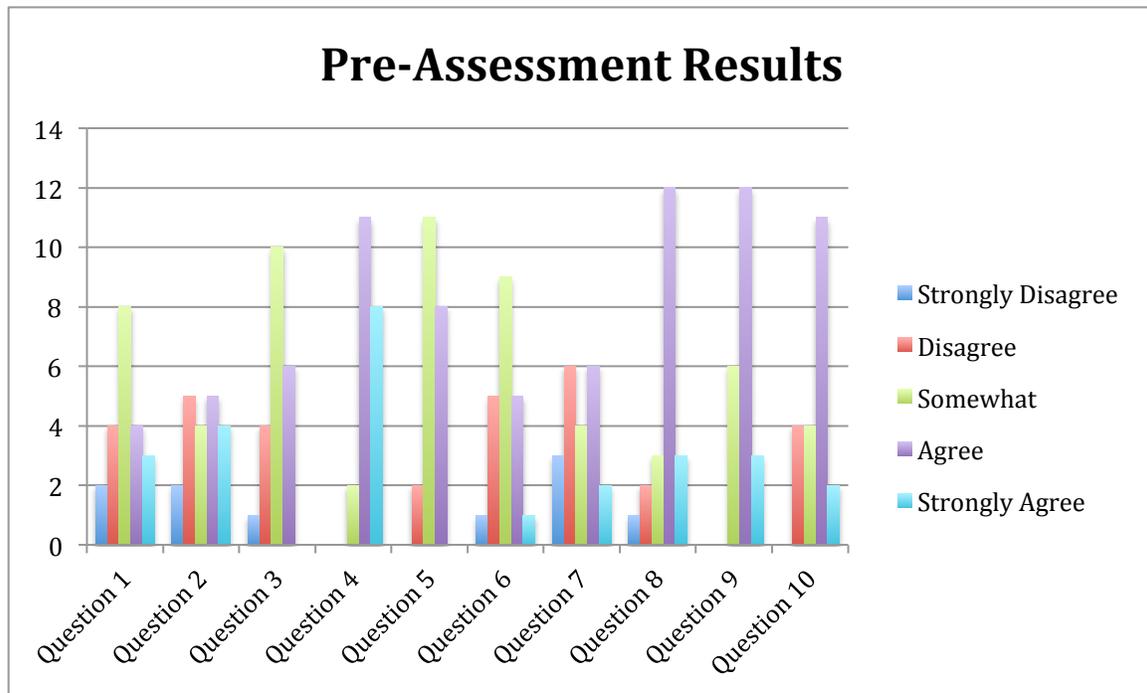


Figure 1. Pre-assessment data on Likert scale questions 1-10

Based on these data, it seems clear that my students felt pretty strongly that having discussions helped them to think critically, as evidenced by questions four, eight, nine, and ten. However, the data pertaining to discussions raising the level of intrinsic motivation showed mixed results, and a majority of the students answered “somewhat” on these questions. There were a few key takeaways here. For instance, according to the survey, having students discuss teacher-generated questions had a major impact in their ability to think critically, but little impact on the levels of intrinsic motivation.

So how did having more ownership in the discussions affect these data? Here are the results of the same survey given at the end of my study (See Figure 2)

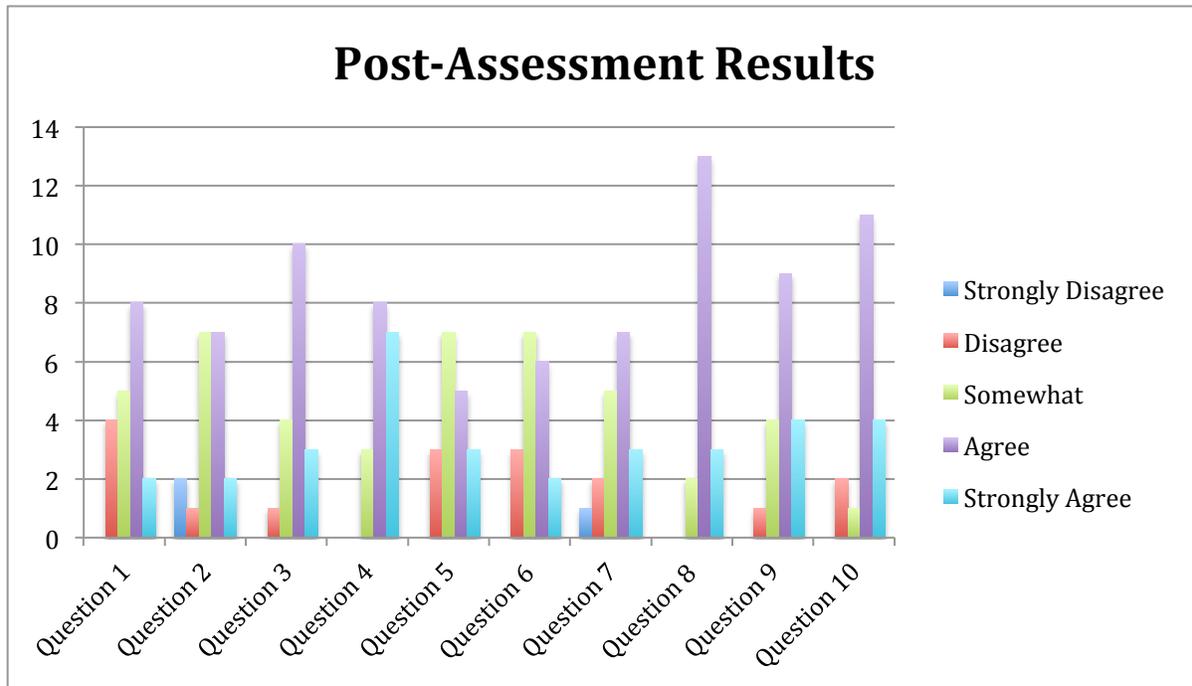


Figure 2. Post-assessment data on Likert scale questions 1-10

The first thing that I noticed was an increased score for the questions associated with intrinsic motivation. Most notably, question three, which asks if discussions motivate students to read, stood out as being one of the biggest jumps. This is significant because the question simply asked if having discussions made the student want to read more, which shows an increase in their intrinsic motivation. The number of students who agreed that discussions did increase their motivation to read jumped from six to 13 including three that answered that they strongly agreed with this statement. A second take away is that the level of perceived critical thinking that occurred during this study, which was high to begin with, also increased, though it did not show as big of a jump as the levels of self-reported intrinsic motivation.

Open ended responses

The second part of the survey asked four open-ended questions, but only three gave me information that pertained to this study. Question 13 asked about the student's individual experience having discussions in all their classes. By including this question I was hoping to find that students who had class discussions more often would take more away from the process, but the results showed that none of them were given the opportunity to have student generated discussions outside of my class. Since the rest of these questions were open ended, I read through the responses and found themes that I used to code their responses.

Question 11 asked the students to describe what kind of classroom activities that they most enjoy. In asking this question, I hoped to find a correlation between those activities and the levels of intrinsic motivation. My thought was that if they most enjoyed these activities, it would take less extrinsic motivators to engage them, and would therefore show an increase in the level of intrinsic motivation during these activities. I coded the top five responses to this question on the pre-assessment as follows: Student driven research, Group projects, Lectures, Discussions, and Reading (aloud as a class or silently as individuals) as shown in Figure 3. Not surprisingly, a majority of my students chose

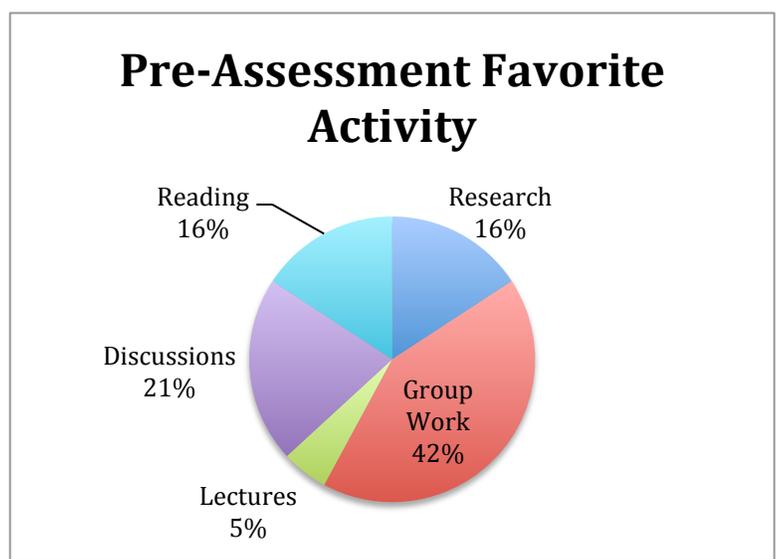


Figure 3. Pre-assessment data on students' favorite class activity

group work as their favorite activity. While the next most popular was having class discussions. Both of these activities involve face-to-face student interactions with each other, though class discussions are more structured conversation than when they are working on a group project.

I noticed a startling change in the students' favorite activities on the post-assessment (See Figure 4). After the six weeks of having daily discussions that were completely student directed, there was a huge increase in the amount of students who reported that their new favorite class activity was discussions. This result runs counterintuitive to what many believe might happen when any activity is used every day, but the routine and the consistency gave students the chance to practice, reflect, and improve their ability to prepare and lead class discussions. These data show that the engagement level had a significant increase during student led discussions. However, after consulting the rest of my data, it is clear that this is not entirely due to the increase of intrinsic motivation, but also the increase of extrinsic motivation.

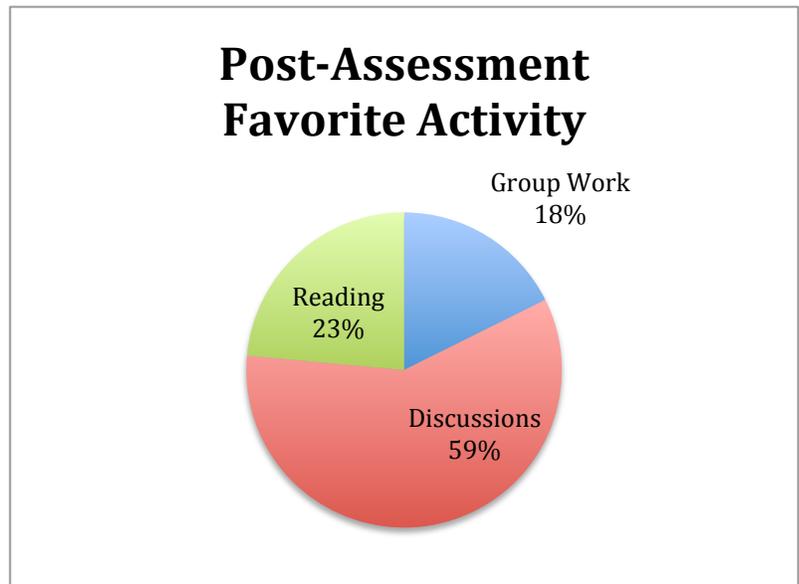


Figure 4. Post-assessment data on students' favorite activity

Question 12 of the survey simply asked students what motivated them to do well in school. I found that students gave a very wide range of answers, but for the purposes of this study, I found it most effective to categorize the answers as either extrinsic or

intrinsic. Most of the answers were clearly one side or the other, but I chose not to label a student's answer as intrinsic unless it was either concerned with learning out of curiosity, or for the purposes of mastering a skill. This is consistent to what Rugutt and Chemosit (2009) would call Mastery Learning Goals. Similarly, if the student's answer matched what Morrone et al. (2009) would call Performace Goals, valuing the outcome or

favorable perceptions of others, they were labeled as extrinsic. For example, if a student said they were motivated by future success, or to make a parent or teacher proud, they were categorized as extrinsic motivators even though there is no immediate reward or punishment they are avoiding. The results of the pre-assessment showed that a majority of

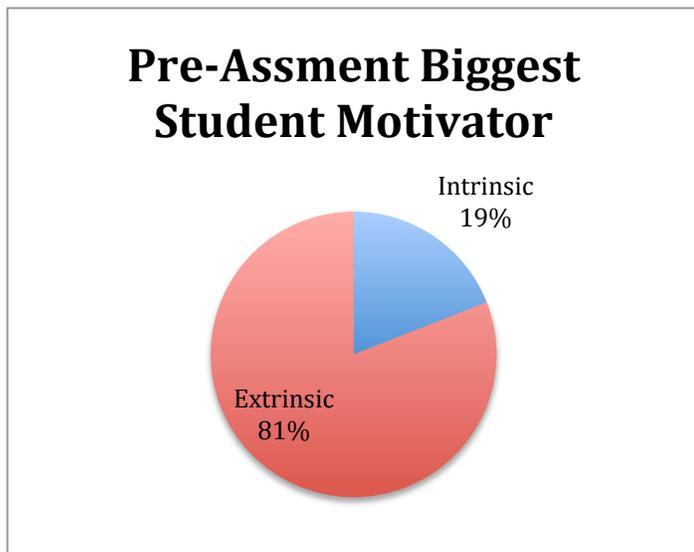


Figure 5. Pre-assessment data on students' biggest motivator

my students were most motivated by extrinsic stimuli (See Figure 5). Again,

this was not surprising considering our entire American education system is designed on extrinsic motivators (i.e. grades, standardized tests, diplomas, college acceptance, etc.). It also shows that many of these students have not been able to learn about topics of interest to them while at school. This idea brought to light a secondary question that I was also able to answer through this study: What makes content interesting to a student? Though I only teach Language Arts, I still believe that everyone can find something of interest in each of the core content areas in school, it is just a matter of finding that special topic, or making the less obvious topics more interesting through our instruction.

Unfortunately, the changes that I found for question 12 on the post-assessment were minimal, though there was a slight increase in the amount of students who reported intrinsic motivation (See Figure 6). What is interesting is that, according to question 11, my students were more engaged by having daily student led discussions in class; however, according to question 12, many of them were still

motivated by extrinsic stimuli. I discovered the details to this phenomenon in question 14 and during the focus group interview; what seems to have occurred is that the daily discussion routine created new ways to motivate students, both intrinsically and extrinsically. When I asked students to explain their reasoning behind their answers about what most motivates them, they told me that although they did feel an increase in the amount of intrinsic motivation during our discussions, it did not take away from the fact that there were all these other foundational things like grades, and scholarships, and graduation that were much stronger than the intrinsic motivation that they were feeling. The good news is that now they enjoyed what they *had* to do a little more than they did before.

As I started analyzing the data for question 14, I found that the pre-assessment did not reveal anything significant. The question asked students to explain how our discussions have affected the way they prepare for class and their level of engagement in the lessons. Again, before I began this unit, my students had not yet taken much

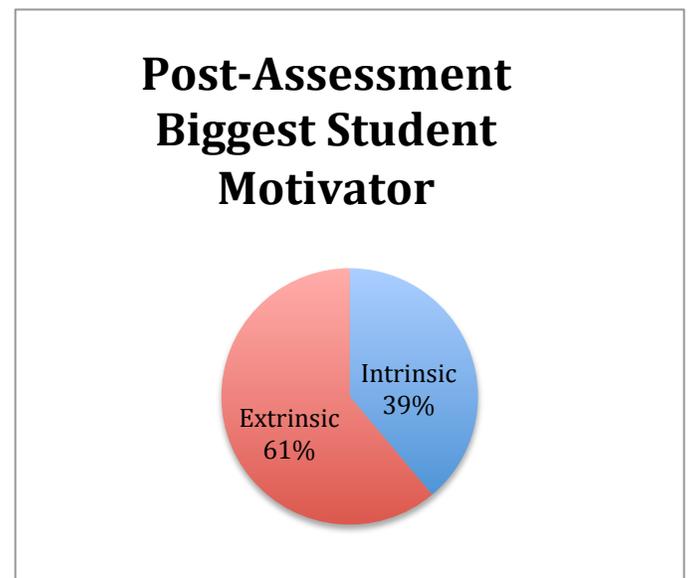


Figure 6. Post-assessment data on students' biggest motivator

ownership in their learning nor the topics of discussion, so the answers that I found for question 14 at the start of the study consisted of, “it’s a good way to catch up if we miss a day,” or “it helps me to notice things about our reading that I hadn’t noticed before.”

These answers did not have anything to do with their preparation for class, and, although several mention that it helps them understand the content, the answers are not specific, nor are they about the change they felt in the level of engagement.

The data that I found for question 14 on the post-assessment were much more useful, and a bit surprising to me. To begin, the students wrote more about their preparation. I suspect this is because now they actually had to prepare and could not fake their way through a conversation that they had not prepared for. Secondly, their descriptions about how discussions increased their level of motivation were much more specific, and all of them confirmed that they felt much more motivated to work when they were in charge of these dialogues. Once again, for the purposes of this project, I coded the answers as follows: Increase in Extrinsic Motivators, and Increase in Intrinsic

Motivators. Like question 12, I coded the student responses based on the definitions of Mastery Goals (Rugutt, & Chemosit, 2009), which are intrinsic, and Performance Goals (Morrone et al., 2009), which are extrinsic.

Figure 7 illustrates a substantial increase in the levels of intrinsic

Increase of Student Motivation Over the Course of this Study

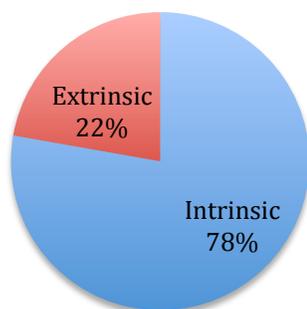


Figure 7. Self-reported increase of student motivation

motivation as compared to the increase in extrinsic motivation. One student who reported an increase in intrinsic motivation wrote that “learning the skill of having a discussion is not only helpful in the classroom, but will continue to be a really useful skill throughout the rest of [their] lives.” Another student explained that being able to hear her classmates’ opinions “helped [us] to figure out [our] own ideas and helps [us] to become more open minded.” Students who reported an increase in extrinsic motivation largely had the same answer, and that was that they felt “more pressure to prepare for class because they felt like they would be letting down their classmates if they didn’t come to the discussion prepared.” This was interesting to me as well, because essentially these students were saying that they are more motivated by the fear of letting down their peers, than they were of simply letting themselves down. Prior to this study, students knew that not preparing for class was effectively letting themselves down, but they still often came to class without doing their homework or any other preparation for the day. By placing the ownership on the students, they felt more accountable to each other.

What was most surprising to me about question 14 is that this data seems to be directly opposite of what I found after analyzing the responses from question 12. My explanation for this is that question 12 asked student what was *most* motivating for them, while question 14 asked them to evaluate how having routine, student directed discussions *specifically* affected their motivation. Therefore, the data show that even though having regular student led dialogue does increase student levels of intrinsic motivation, that does not take away the external, and more effective, motivators of getting good grades, scoring high on state tests, and making parents and teachers proud of them.

Student journals and interview

The student journals and the focus group interview helped me to get more in-depth information that confirms the conclusions that can be drawn from the survey. These two sources also helped me to gain insight to the secondary question about what makes content more intrinsically engaging to students. The student journal entries consisted of a daily response to four questions (see appendix C) about the discussion they had just taken part in. Through these journals I was able to gauge the daily levels of motivation these students felt as a result of having just completed a discussion. Specifically, I asked my students to reflect on the quality of the discussion for the day, and if they felt more interested in the novel as a result of that dialogue.

After a review of these responses, I found that one common theme was that students did not feel an increased sense of engagement or motivation to continue reading after every discussion. In fact, that only happened if the students felt that the discussion they had just participated in was of a fairly high quality. During the discussions, one member of each group filled out a *Discussion Moves* tracking sheet (see appendix D) and also kept track of how many times each person in his or her group spoke during the discussion. At the end of each small group conversation, we took time to debrief on what the tracking sheets told them, and discussed what we could do to improve next time. This was the information that I asked the students to consider when they graded the discussions in their journal reflections. Once students were asked to individually grade their group on the level of the discussion and to write about possible improvements in their journals, I found that most students did not report an increased intrinsic motivation to continue reading unless they had given their discussion a score of at least a B.

According to the student journals, the major factors that contributed to higher-level discussions were practice, high group participation, and connections that the group made outside of the text under discussion. Obviously, this routine took three or four sessions before the students started to get comfortable with not just the new discussion method but also getting used to taking quality notes and writing good, open-ended questions. This was clear in all of the journals that I read. However, once this transition period was over, the consistency of quality discussion fluctuated depending on the topics covered in the discussion, and the level of participation. Many journal entries mentioned being frustrated by the lack of participation from one or two members of the group. One girl noted that she “felt like [she] did most of the talking.” She also wrote that “if people talked more, it would have been better,” and that “taking more notes helps a lot.”

After several weeks of establishing a routine, I stumbled upon a tool that immediately sparked a noticeable change in the level of these discussions. After the students had read and taken notes on a few chapters of the novel, I showed them a TED talk related to some of the major themes of the novel. Although the book we read, *A Lesson Before Dying*, was written in the early 1990’s, the story takes place during segregation on a plantation in Louisiana. Up until watching this TED talk, Bryan Stevenson’s: *We need to talk about injustice*, most students were able to conceptualize the injustice of slavery and segregation, but they largely believed that the injustices that they were reading about had ended with the Civil Rights movement. They did not recognize the relevance or the importance in the topic of racial bias until they heard Stevenson talk about his experience as a modern day black lawyer. All of a sudden

something clicked and the whole class started making all these other real world connections to the TED talk, and then back to the novel we were reading.

I was fortunate enough to be video taping one of these discussions during this class, and something that I have noticed after watching the tape is that you can visibly see the engagement in all of the students sitting around their table. Each of them is leaning forward, smiling, and they have their notes and books open in front of them. They laugh together at the appropriate times, they cite quotes from the book and the TED talk, and they look like they are all genuinely interested in their conversation. Furthermore, the length of this discussion jumped from the normal 10 minutes to 40 minutes.

One journal entry following this particular discussion reads, “This was the best discussion that we have had. We were able to really build on each other’s ideas, and every one contributed, which made it fun. We spoke a lot about the TED talk, but also [connected] it back to the book, and that helped me to understand it better.” Due to the smashing success of using a TED talk to make connections to what we read, I did my best to find more of them. Though I was unable to always find one, it was apparent to me that the quality of the discussions exponentially improved when students were able to make more real world connections.

I suspected that this was the answer to my question about making my content more interesting and engaging to my students. Showing students the relevance to what they were learning about was the key. Though this seemed to be confirmed in the students’ journals, I carefully crafted each of my focus group interview questions to seek out more evidence to help me confirm this hunch (see appendix E).

The day of the interview, I took a few minutes to show them my research questions, and spent some time explaining in student friendly language the definitions of intrinsic motivation, extrinsic motivation, and critical thinking. These were, again, based on the concepts of Mastery Learning Goals (Rugutt, & Chemosit, 2009); Performance Goals (Morrone et al., 2009); and the notion that critical thinking involves divergent thinking, supports one's ideas with evidence, looks to transfer the information to new situations, solves real world problems, and evaluates the evidence of multiple arguments (Olivares et al., 2013).

The most telling question was number five, which asks kids to talk about how making real world connections seemed to affect their level of motivation compared to simply discussing the book in isolation. In response to this question, one student pointed out that since none of them were old enough to experience what life was like during the era that the book is set in, it was hard to empathize with. He said, "We can mentally make that connection about what it must have been like, but none of us really know [the main character's] struggle; so, being able to make these outside connections helps us to put ourselves in the character's shoes, which helps us to understand them better." Another student built on that idea by saying that she wished that they were able to have more of these discussions in other classes because it helps her to gain perspective about her own life and, in turn, helps the content to stick in her mind.

When I asked the students how our discussion routine changed the way they learned, and how it increased their ability to think critically, one of the most interesting responses was that having discussions forces them to support their ideas with concrete evidence, especially if they are challenging someone else's idea. She explained, "You

obviously don't want to offend anyone, so if you want them to see things from your point of view, it's important to tell them why you believe what you do. That helps everyone to consider multiple perspectives about the same idea, and allows each of us in the group to make a more thoughtful decision about what we believe." Another student pointed out that having these discussions helped them to read deeply, which then increased the quality of the notes they were taking, which then improved their questions and discussion. Building on that idea, a third student reflected back to the days before we started this unit and how I would be the one asking them questions, and how they were much deeper than most of the questions that they come up with. She said that now, after learning how to take better notes and write her own questions, she felt like they would be able to talk at length about some of those questions, where before they struggled to make it to two minutes of conversation.

Finally, now that I have analyzed the surveys, the journals, and the interview responses, the data appear to consistently point to the fact that daily student directed discussions not only increases the level of the student's intrinsic motivation, but also increases their extrinsic motivation. Furthermore, there is overwhelming evidence to show that these discussions also lead to increasing the amount of critical thinking that the students will voluntarily use. This is shown in one student's comment at the end of our interview that she's noticed that she has really internalized this discussion process and started using it in lots of different ways, whether that be in her other classes or talking to an adult on the phone, or interviewing for a job. She explains that she feels like this process has helped her to find more importance in all areas of her life.

CHAPTER 5

Discussion and Conclusions

Discussion

My research and data collection process was successful overall. I believe that my data show that engaging students in self-directed class discussion will significantly increase levels of intrinsic motivation in students. Also, my data show that student led discussions increase the amount of critical thinking that students do on a regular basis.

This critical thinking piece, defined by Olivares et al. (2013) as the ability to solve real world problems and transfer learning, was overwhelmingly self-evident in every area that I used to collect data. The questions on the survey that I identified as asking about critical thinking all showed that my students believed that they were doing a lot of critical thinking in my class, as compared to their other classes, both before and after this study was conducted. Before I began this study, students were already accustomed to carrying out class discussions, but, for the purposes of this study, started writing their own discussion questions and taking more ownership in the discussion process. This shows that the simple act of having students talk with each other more often will result in an increase of their critical thought. However, my data do show that by adding the expectation of writing their own questions and carrying out their own discussions, my students found an increase in both the level of critical thought and the frequency they were doing it.

In this case, the increase was likely due to students learning to listen to information, process it, and use evidence to either build on or challenge what was said.

This is a thought process that many teachers ask of their students when they are writing, but the writing process is much slower than the discussion process. When students are writing, they are able to gather information, organize their thoughts, pick out quotes that support their ideas, and spend as much time as they need crafting their responses. Since having discussions requires this process to happen much faster, students have to predict the topics of conversation as they read. They had to write down important quotes from their reading so that they could reference them during the discussions, selecting these quotes, again, based on their predictions of the direction the discussion would go. They did not have much time to craft their responses, they had to have their opinions previously established, so they could respond flexibly as dictated by the direction the conversation went. As a result, students had to think on their feet, and they had to do it often. This did take some getting used to, but with practice, my students reported that they were able to increase their capacity for critical thought because of these discussions. Their increased ability to think critically showed in the increased level of discussions, but also in the improved quality of the students' notes, and writing ability, which I observed in their journals.

When I began to analyze my data related to intrinsic motivation, I was at first discouraged to see that, even after this study was completed, most of my students were primarily still extrinsically motivated. This seemed to go against what I read about in the literature, however, upon looking more closely, I discovered that having student led discussions did, in fact, increase the levels of intrinsic motivations in most of my students.

This started to become apparent through question 11 of the student survey (see pages 26-27). Although my students had been working with class discussions for several weeks, only 21% of them reported that discussions were their favorite activity on the pre-assessment. After this six-week study, that number increased to 59%. What this shows is that simply having student discussions will not necessarily have a big impact on most of the students' levels of intrinsic motivation, though it may for some. What made the biggest difference on their internal drive was giving the students more ownership in the discussions. Once students started being able to control what they got to talk about, as long as it still pertained to the novel, they were able to dig into the places that made them the most interested. It was not uncommon to see all three or four table groups discussing completely different things from day to day.

Question 14 (see page 30) of the survey helped me to confirm my preliminary hypothesis from question 11. This open-ended question showed me that although it may not be the most motivating factor in their educational lives, 78% of my students still believed that student directed discussions did increase their level of interest about the novel we were studying. The other 22% also discussed an increased level of motivation from our discussion routine, though their motivation came from a fear of not being prepared for their discussion. These students claimed that they read, not because they were that interested in the book, but because they did not want to let down the other members of their group. Even though this is an increase in extrinsic motivation, this was still encouraging information since the discussions *did* still increase their motivation, even if it did not come from within.

The piece of data that really made me dig a little deeper over the course of this study was question 12 of the survey (see pages 28-29). This question asked students what the most motivating factor to do well in school was for them. The ratio of intrinsic to extrinsic motivators heavily favored extrinsic factors on both the pre and post-assessment. The first thing this made me question is why my students were so disengaged with their education. These numbers told me that most of them were there just because they had to be. I will dig into this secondary question a bit more later on, but for now I want to focus on some takeaways that I observed about the nature of motivating high school students.

First of all, the best and most enduring learning comes as a direct result of a student's curiosity. If he or she is motivated from within, this lesson will not easily be forgotten. Secondly, despite this, extrinsic motivators are so much more effective in terms of getting work done. I attribute this mostly to the competitive nature of our society. Students today want to know immediately what score they earned on an assignment, and the next thing they want to know is if that was better than their friend's score. Furthermore, if a student is put in the position to have to choose between doing an assignment that will affect their grade and studying up on something that they are more interested in, but has no bearing on their scores for a class, nearly every student will chose to put off what they are interested in.

The American education system has so deeply engrained this system of extrinsic motivators that if they all went away and put all the emphasis on the learning, our students would likely not push themselves enough to reach standard in many content areas. Instead, they would only study what was interesting to them. So these extrinsic

motivators are still very necessary. Think about it this way: if I give my three-year-old daughter the choice between a snack made of carrot sticks or a cookie, she's going to choose the cookie every time. Even after I tell her about all the health benefits of choosing those carrots, and try to educate her about the importance of eating well, she will still choose the cookie, unless there is some sort of a reward for eating the carrots.

It is the same for our students. If we do not give them some extrinsic reward, or consequence, they will not learn all the necessary skill sets to be successful after they graduate. Even if I lecture to them about the importance of said skills, not many students will likely take me up on learning them unless there is an immediate reason to do so. Their future is not immediate enough to really move them to action. But what if I could offer my students a better tasting academic snack? In other words, how can I strike a balance between the proper levels of intrinsic motivation, and extrinsic motivation? Ideally, this would mean my students are interested in what they are learning about, but are still moved to action because they know they will still be graded on their work.

This is where student-led discussions come into play. According to all my data points, giving student's the ownership to prepare for and lead these discussions drastically increases the amount of intrinsic motivation, as long as the topics of discussion are relevant to the students. As I described in the previous chapter, I stumbled upon a way to immediately engage students and make them want to know more, and that was asking them to make outside connections to the content. For me, this came in the form of showing TED talks, and having students write leading questions that would get them discussing the connections between the book, the TED talk, and their own lives.

This finding was confirmed in the student journals, the video footage of the discussions, and in the focus group interview.

Conclusions

Without more research and a bigger sample size, I cannot conclusively say that student-led discussions have an influence on student motivation and critical thought. There are several variables that were not accounted for, like the make up of student participants and the selection of the novel that we studied, and these factors could have possibly impacted the outcome of this study. However, the data that I collected show that for this particular group of students, student-led discussions had a positive influence on their intrinsic motivation and critical thought.

For me, one of the biggest takeaways from this project is that giving students the responsibility to run class discussion on their own is much more beneficial than having them discuss my own questions. In the past, I have been hesitant to give the students this much responsibility for fear of having the discussion fall flat, but it turns out that empowering the students to take more ownership really engaged them, and made them feel like they had control over what they were learning. Additionally, student-led discussions are a teaching strategy that can be used in any classroom, with any level of student if they are given the proper support. These discussions help to build community, and really change the class atmosphere for the better. For example, one of the most important aspects of the daily discussion routine, in regards to community building, is to have a whole class debrief about the process. On one of the first days of this study, I noticed that there were several students who did not say anything in the discussion. They

were still listening, and were clearly engaged in what was being said, but they never offered any of their own thoughts. During the debrief process, I asked them why they had not said anything. One girl said she was hesitant because she did not know everyone's name in her table group, and she did not want to be rude. The other student said that she had things to say, but was not able to find a place to insert her thoughts without interrupting someone else. These issues were easily solvable, but it was important that everyone was aware of the barriers preventing everyone from contributing.

Another lesson that I will take away from this experience is the more purposeful I am in making the content relevant to the students, the more interesting it becomes to them, and the easier it becomes for them to think critically. The more often students are asked to think critically through their discussions, the more natural it will become for them. This will, in turn, increase test scores, and the level of writing they can produce. However, despite all of the evidence to support the benefits of student discussions, my most important realization is the necessity of finding a balance between intrinsic and extrinsic motivators. The extrinsic motivators are what keep the students moving forward with their work, but the intrinsic motivators are what will allow for more in-depth exploration of our content.

There is not much that I would have done differently if given the chance, but if I were to choose a few things to change, it would be to focus more on teaching my students to make more connections in their conversations. My data show that when students did this during discussions, those were the most intrinsically motivating sessions. Secondly, I would encourage discussions about more than just the literature that we studied. I would try to incorporate them into all the different areas that I focus on during a Language Arts

class including research, the writing process, and learning specific writing rules. I think this might have enabled me to make writing more interesting for the students, and it would have helped them to see the value in revision.

As for the action research process, I have gained an enormous respect for the value of this process. It has remarkably changed the way that I will conduct future lessons in all of my classes. It has also shown me the necessity of reading and seeking out the research. Over the last several years, I have often participated in professional development that is *research based*, even though we are rarely given the study to read for ourselves. I will definitely continue to use the action research process on a much smaller, and more informal, scale as I continue to move forward with my career. I have learned not to be scared to try out new things on my students, and to monitor what works and what does not. This is a lesson that I will continue to use throughout my career and will keep me from becoming a teacher whose practice has stagnated.

Implications for Future Projects

I began this study to look at the way student directed class discussions would influence the level of my students' intrinsic motivation as compared to their extrinsic motivation; also, how the same discussions impact my students' ability to think critically. As I mentioned in a previous section, this process has brought to light several related questions that I would like to continue to research through reading the literature, and through more action research: How does making real world connections to the content affect student engagement, and mastery of the content? Secondly, what are other teaching strategies that increase intrinsic motivation, and what is the optimal balance of intrinsic

and extrinsic motivation? Finally, how do student led discussions influence the quality of project-based learning?

As for the first question, I did see positive results in both student engagement, and the level of mastery during my project, but I did not have enough data to really get a definitive answer. None of the literature that I read had much to say about this specifically. In my current practice, I try to make the relevance of my lessons apparent to my students. I even tell my students to ask me what the point of my lesson is if they are not sure. Still, I do not see the same level of engagement as when students were making this connection themselves. This makes me curious about what the research has to say about this difference. Is it more effective to be up front and clear with my students, or is it more beneficial if I hold back and try to lead them to this discovery themselves? How can I be more purposeful in targeting my students' intrinsic motivation?

As I mentioned earlier, one of the biggest epiphanies I had during this study is that for optimal engagement and productivity, a balance between intrinsic and extrinsic motivation is necessary. This is just something that I have inferred from my data, but it does seem to make logical sense for me as a learner, and in my classroom as a teacher. Still, I do not have any solid evidence to support this conclusion. It makes me curious if anyone has actually done a study about it. The balance between the two types of motivation does not seem to be something that is on any educational radar currently, but I am sure there are some studies out there to read. I know that there is plenty of research about best teaching practices, but I am curious if any have been found to increase levels of intrinsic motivation. The practice that I am currently most curious about is Project-Based Learning (PBL). Seeing the level of student engagement increase as a result of

them having more control in their discussions makes me wonder about what might happen if students had complete control of their learning like they do when PBL is implemented.

This leads me to my third question about the synthesis of PBL and student led discussions. I do not know much about Project Based Learning, but I do know that at the end of a period of individual study, students report back to the class about what they learned. I am curious if it is possible to tweak the system enough to have small groups who are working towards researching a common topic, but each individual is exploring a different question. Then, before the research is completely over, students would have small group discussions to fill in the rest of the group about what they have learned, and come up with follow up questions that are presented by the new information. Then, at the end of the project, the group could give a collective presentation that synthesized each of their individual learning. Would this still work? Would it improve the engagement level or hinder it?

Besides the implications for further research, there are several things that I learned that will improve my practice. I know that regardless of the classes that I am teaching, there will always be some form of student discussions happening on a regular basis. I now know the importance of teaching students the thought process that is necessary to be a successful participant in a discussion including the *Discussion Moves* and the necessity of preparation before hand. Furthermore, I will be more cognizant about encouraging my students to make real world connections to what we are learning.

This action research project helped solidify the research, in my mind, regarding student discussions as a useful tool to help engage students in their learning. Along the way many other questions came up, as noted previously. It is important that educators are students of their craft and I hope to continue doing this by pursuing some of the aforementioned questions in the future as well as continuing to use the things I have learned to better my practice.

References

- Ariely, D., Gneezy, U., Loewenstein, G., & Mazar, N. (2009). Large stakes and big mistakes. *Review of Economic Studies*, *76*(2), 451-469. doi:10.1111/j.1467-937X.2009.00534.x
- Bahar, M. (2003). The effects of motivational styles on group work and discussion-based seminars. *Scandinavian Journal of Educational Research*, *47*(4), 461-473. doi:10.1080/00313830308591
- Burgess, M. L. (2009). Using WebCT as a supplemental tool to enhance critical thinking and engagement among developmental reading students. *Journal of College Reading & Learning*, *39*(2), 9-33.
- Burke, J. (2010). *What's the big idea?: Question-driven units to motivate reading, writing, and thinking*. Portsmouth, NH: Heinemann.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, *95*(2), 256-273. doi:10.1037/0033-295X.95.2.256
- Gambrell, L. B., Hughes, E. M., Calvert, L., Malloy, J. A., & Igo, B. (2011). Authentic reading, writing, and discussion: An exploratory study of a pen pal project. *Elementary School Journal*, *112*(2), 234-258.
- Glucksberg, S., & Weisberg, R. W. (1966). Verbal behavior and problem solving: Some effects of labeling in a functional fixedness problem. *Journal of Experimental Psychology*, *71*(5), 659-664. doi:10.1037/h0023118

- Johnson, A. P. (2008). *A short guide to action research* (3rd ed.). Boston, MA: Pearson.
- Morrone, A., Harkness, S. S., D'Ambrosio, B., & Caulfield, R. (2004). Patterns of instructional discourse that promote the perception of mastery goals in a social constructivist mathematics course. *Educational Studies in Mathematics*, 56(1), 19-38.
- Olivares, S., Saiz, C., & Rivas, S. F. (2013). Encouragement for thinking critically. *Electronic Journal of Research in Educational Psychology*, 11(2), 367-393.
doi:10.14204/ejrep.30.12168
- Rugutt, J., & Chemosit, C. (2009). What motivates students to learn? Contribution of student-to-student relations, student-faculty interaction and critical thinking skills. *Educational Research Quarterly*, 32(3), 16-28.
- Tanner, M. L., & Casados, L. (1998). Promoting and studying discussions in math classes. *Journal of Adolescent & Adult Literacy*, 41(5), 342-50.
- Valenzuela, J., Nieto, A., & Saiz, C. (2011). Critical thinking motivational scale: A contribution to the study of relationship between critical thinking and motivation. *Electronic Journal of Research in Educational Psychology*, 9(2), 823-848.

APPENDICES

Appendix A

XXX High School
615 NE 15th Street
XXX, OR 97128

Dear Parent/Guardian,

My name is Matthew Brisbin—I am your student’s English teacher for the 2014-2015 school year. I have met some of you and look forward to working with you and your student during this semester. I am currently working on the completion of my Masters degree in Education at George Fox University. This letter is to inform you that I will be conducting an action research project in April and May of 2015. My project is to measure the effectiveness using student led discussion to foster intrinsic motivation in students. This is a common practice and will not lead to considerable change in the way that I teach. All necessary measures will be taken to ensure confidentiality and no student names will be put into print. As part of my data, I will be videotaping portions of the discussions to review. These will not be published as part of my research and all students will remain anonymous. Furthermore, my research chair and I will be the only people who will view the tapes. I believe my research will benefit your student and I’m excited to see the outcome. I’d be happy to share my results with you. Please don’t hesitate to contact me if you have any questions or concerns. Finally, if you do not want your son or daughter to be a part of this study, please notify me via email at the address below. Thank you for your time and support with this project.

Sincerely,

Matthew Brisbin
XXX High School
English Department
503-565-4383
mbrisbin@msd.k12.or.us

Appendix B

Pre/Post Assessment Survey

Rate your agreement with the following statements on a scale of 1-5. **1=Strongly Disagree and 5=Strongly Agree**

- | | | | | | |
|--|---|---|---|---|---|
| 1. In general, I enjoy reading. | 1 | 2 | 3 | 4 | 5 |
| 2. I read books other than what is assigned to me in class. | 1 | 2 | 3 | 4 | 5 |
| 3. Having class discussions makes me want to read more. | 1 | 2 | 3 | 4 | 5 |
| 4. Writing is easier after a discussion. | 1 | 2 | 3 | 4 | 5 |
| 5. I usually get my homework done on time. | 1 | 2 | 3 | 4 | 5 |
| 6. I am usually pretty curious about the books that we read in this class. | 1 | 2 | 3 | 4 | 5 |
| 7. I enjoy analyzing the books we read. | 1 | 2 | 3 | 4 | 5 |
| 8. I like discussing questions with lots of answers. | 1 | 2 | 3 | 4 | 5 |
| 9. I am usually willing to change my mind about something if I consider a new perspective. | 1 | 2 | 3 | 4 | 5 |
| 10. I feel like I am solving questions that relate to real world issues when we discuss what we're reading in class. | 1 | 2 | 3 | 4 | 5 |

For the next few questions write your response in the space provided using complete sentences.

11. Which classroom activities do you most enjoy (i.e. lecture, reading, writing, research, group projects, discussions etc.)?

12. What motivates you most in school?

13. How many of your classes do you usually have discussions in, and what does that typically look like (i.e. share with a partner, teacher led, student led, small groups, whole class etc.)?

14. How does having class discussions affect the way you prepare for class and your level of engagement in the lesson? Explain why you think this happens.

Appendix C

Journal Reflection Questions

1. How did the discussion today help you to better understand the novel?
2. How did your group discussion go today? What grade would you give it? What went well, and what could have happened to make it better?
3. Which question from your group contributed to the best conversation?
4. Did today's discussion help you to become more interested the novel? Explain your answer.

Appendix D

Record of Group Discussion Moves

Topic for Discussion	Group Participants	Whole Class
COMMENTS	TOTALS	TOTALS
Gives info <i>(The Crucible was written during the 1950's even though it takes place during the 17th century)</i>		
Echoes/ restates <i>(So you're saying it's a question of ethics.)</i>		
Links/Builds on an idea <i>(This is similar to what Katy said.)</i>		
Transitions to a new idea <i>(Now that we understand the event, let's turn to its significance.)</i>		
Challenges an idea <i>(A different way of looking at this is...)</i>		
Interprets the text <i>(So the purpose behind Elizabeth lying to the court is to show that she does respect John and wants to protect him.)</i>		
Cites the text <i>(Let's look at line three, where she uses the word "intentional".)</i>		

QUESTIONS	TOTALS	TOTALS
<p>Open-ended</p> <p>(What are your reactions to John Proctor?)</p>		
<p>Relational</p> <p>(How might Sam's points relate to what Joanne said about cats?)</p>		
<p>Directed</p> <p>(Carol, what is your opinion about ___?)</p>		
<p>Requesting confirmation</p> <p>(Do I understand your point correctly when I say...?)</p>		
<p>Requesting clarification</p> <p>(Could you explain what you mean by that?)</p>		

Appendix E

Focus Group Interview Questions

1. In what ways has having daily discussions run by the students changed the way you learn in this class?
2. Describe how our discussions have changed your motivation to prepare for class, including the way you read and take notes, as well as your motivation to participate in class activities.
3. How have our discussions increased your ability to think critically?
4. How have our discussions helped to change your motivation to come to class? Is it still about avoiding punishment and getting good grades, or is your motivation more intrinsic now?
5. When you are able to see and discuss how the book connects to real and current world problems (e.g. racism, education), how does that affect your motivation compared to when you only discuss what is in the book?

