

Talbot Trail Public School

Action Research Team:

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Action Research Question:

How does the use of action strategies affect student engagement and ability to think critically about text?

Introduction

The research on student engagement has a relatively short history. Given this fact there are a myriad of conceptualizations of student engagement. A review of the literature indicates that there is little consensus on a definition and there are considerable variations in how engagement is measured. *Engagement is typically described as having two or three components. Researchers espousing a two component model often include a “behavioural” (e.g., positive conduct, effort, participation) and an “emotional” or “affective” (e.g., interest, identification, belonging, positive, attitude about learning) subtype (Finn, 1989; Marks, 2000; Newmann, Wehlage, & Lamborn, 1992; Wilms, 2003), with both subtypes foundational to understanding engagement.* (Appleton, Christenson, Furlong, 2008).

Foundational ideas about critical literacy were brought to the forefront by Paulo Freire over 30 years ago. He challenged readers to “read the world through the word.” Freire’s work along with current theories has become known as critical pedagogy. This approach encourages students to become text critics by questioning and challenging what they read. Looking through a critical lens gives reading a whole new meaning. P. David Pearons (2001) noted, *Comprehending with a critical edge means moving beyond understanding the text to understanding the power relationship that exists between the reader and the author – to knowing that even though the author has the power to create and present the message, readers have the power and the right to be text critics, by reading, questioning, and analyzing the author’s message. Understanding the power relationship is the essence of critical literacy.*

Rationale

Motivating students to be engaged is an ongoing challenge for teachers in today’s climate. Teachers at Talbot Trail were cognizant of this fact and were also struggling to find ways to elicit critical thinking responses in students; students who they felt were capable but yet unmotivated. Earlier in the school year, teachers learned about teaching learning critical pathways (TLCP) and how to use the big idea as a focus. Social issue texts are chosen around a big idea and are then used to develop an instructional plan. Using texts focused on a big idea facilitates the planning of lessons but, more importantly, it is a means of getting students to think critically about text. They felt that using the big idea of poverty might foster empathy in students with the added possibility that engagement and motivation would increase. Teachers also hoped that their ability to teach using the read aloud instructional strategy would improve. Finally, they wanted to introduce common instructional strategies within their divisions.

Jeffrey Wilhelm, author of *Action Strategies for Deepening Comprehension: Role Plays, Text-Structure Tableau, Talking Statues, and Other Enactment Techniques That Engage Students With Text*, has done an extensive amount of research on student motivation and engagement. He used action strategies in his

classroom and has witnessed first hand the growth of his students in their ability to think critically. Wilhelm's success in engaging students inspired the teachers at Talbot Trail to use some of the strategies from his book to see if they could also engage and motivate students. The strategies they used were frontloading, hotseat and tableau. A brief definition of the strategies used follows.

Enactment – According to Wilhelm, “*enactment is, quite simply, creating situations in which we “imagine to learn.” As a teacher, I invite students to imagine together actively depicting characters, forces, or ideas, and to interact in these roles.*” *Action Strategies for Deepening Comprehension, p. 8.*

Frontloading – introductory activities that activates prior knowledge (the schema that is needed to understand text), builds genre knowledge (knowing how text works), and uses the reading comprehension strategy of setting a purpose for reading.

Hotseat – students are given the opportunity to assume a role other than themselves (a character or thing). The student must think on their feet because they become the character in terms of how the character would think and feel. The rest of the class participates by asking probing higher level questions. “*Students can sit in the hotseat as a book character, an author, a real life figure, a group or representative of a group, as an idea, a force, a mathematical concept, and so forth.*” *Action Strategies for Deepening Comprehension, p. 83*

Tableau – During the tableau students create visual pictures. Using their bodies to create frozen pictures, they must highlight key details and situations from the text.

Method

Several steps were taken in the action research process. Prior to using the action strategies teachers and students were given surveys. The teacher survey (Appendix A) was used to determine teacher attitude and the student survey measured learning style (Appendix B). Next, teachers chose three critical thinking questions (What message does the text seem to convey? What do the good characters do to make them so good? The bad? What are the values we might learn to use in our lives after reading this book?). The team adapted and modified a rubric which measured thinking and application as it relates to critical literacy to assess the reading responses (Appendix C). Texts, based on the big idea of poverty, were reviewed with the goal of choosing the ones best suited to the developmental stage of the students. For the baseline assessments a text was read to students without any frontloading or action strategy followed by asking the students to complete a reading response. Student engagement was also measured at this time using a four point Likert scale measurement tool (Appendix D). .

To meet the professional development needs of the members of our group and to ensure consistency with respect to implementation of the three action strategies, two members of our Action Research Team used an alternate group of students to model each of the three strategies for us. This observation lesson was recorded and CD's were made and distributed as a learning resource for our team

In order to make the data collection manageable, each teacher chose a target group of students to observe based on their own criteria. Students from early literacy classes, grades 1, 5, and 6 participated in this project.

Action strategies were then introduced. Each class adapted the lessons and strategies to best suit the needs of their students. Engagement was monitored throughout the process and teachers moderated student work to ensure they were on common ground with their assessments. Finally, a culminating task was completed. Data was analyzed and final conclusions and reflections were noted. Teachers used four different texts throughout the whole process. Refer to Appendix E for data analysis.

Limitations

Measuring engagement had its limitations as observed by teachers and varied by grade. For instance, the early literacy teacher had a challenge because she didn't have the students consistently every day. In grade 1 the big idea was limiting because the students didn't have the schema to make connections. Other challenges involved instructional strategies, i.e., teachers thought that other strategies used besides action strategies may have increased student engagement. Using the same questions may have limited growth. Students were not shown how to improve their answers and teachers did not model enough (the gradual release model). Texts may not have been the most suitable and lessons could have been more common. Finally, teachers felt that the rubric was too broad in scope.

Conclusion

In conclusion, data analysis in all divisions revealed that these action strategies produced an overall increase in student engagement. Findings with regard to the impact of action strategies on critical thinking are less conclusive. We attribute this to the limitations of the problem-posing questions as a means of measuring student's ability to think critically about text. Upon further examination of the questions, it became evident that there was a misalignment between the strategies students were using in the hotseat and what the questions were measuring. Although both were addressing critical thinking in terms of inferring and making connections, the hotseat was looking at a student's ability to infer and connect from a character's perspective, whereas the problem-posing questions were asking students to infer the main idea of the text and how they could use it in their own life. This fact became increasingly apparent for the teachers who had gone beyond the parameters of this study to include writing in role as a means of measuring critical thinking in their classrooms. The data from both the Early Literacy and Junior classes showed an overall increase in student's critical thinking skills. It is believed that the strategies provided an avenue for the students to hone their questioning skills and to think beyond the text. Ultimately, the students benefited by learning how to think more critically and teachers benefited by renewing their enthusiasm for using read alouds and by transferring their learning to other forms of teaching such as literature circles.

Individual Reports

Early Literacy Action Research Report

In my Early Literacy Program, I have always used drama strategies as a means of having students re-enact the story through dramatic retells. My students have always responded positively to this type of drama. During the course of this Action Research project, Wilhelm's action strategies were introduced as a means of going beyond basic comprehension of text, to move into more critical thinking, whereby students reflect from different perspectives, the possible thoughts, feelings, and motives of a character. I hypothesized that the use of Wilhelm's action strategies would further increase my students' engagement with text, which in turn would improve their critical thinking. The strategies used included frontloading, hotseat and tableau. The three texts used were: *Lily and the Paper Man*, *The Little Match Girl*, and *Beatrice's Goat*.

The target group consisted of six Grade 2 Early Literacy students; three males, and three females. A high, medium, and low, were chosen for each gender based on both level of engagement and critical thinking skills. Data used to determine the three high, medium, and low students consisted of my baseline data, anecdotal notes, report card marks, and first term DRA levels. Students' overall academic performance in the target group ranged from Level 1 to Level 3 for first term reading report card grades and Level 6 to 30

on first term DRA scores. Students determined to be low in level of engagement were those students who rarely made eye contact with the teacher, rarely participated in class discussions, were constantly fidgeting, needed several prompts to stay on task during independent and group work, or needed one on one assistance to complete tasks. Students determined to be low in their level of critical thinking ability were those red flagged for DRA first term (Level 12 or below), and received a Level 1 for their thinking and application (as measured by their ability to make inferences and personal connections to text) in Early Literacy first term. As a part of my baseline data, student learning styles were also measured using Max Coderre's Learning Channels Inventory. Three of the students in the target group were Visual /Auditory learners, two were Visual / Kinesthetic learners, and one was a Kinesthetic / Visual learner.

Once the surveys were completed, baseline data was collected using Lily and the Paper Man as a read aloud, with no action strategies. Our Literacy Numeracy Support Teacher (LNST) and I did team teaching to collect baseline data. The LNST teacher conducted the read aloud, while I measured student engagement for all six target students, using the Student Engagement Rating Scale. Following the read aloud, the students completed three reading response critical thinking problem posing questions. Students were also allowed to use photocopied pictures from the book to create character think bubbles and journals from a character's perspective. Students had previous experience with the character think bubble but no previous experience for the journal response from a character's perspective. Students' critical thinking was then measured using the common rubric.

Following my baseline data collection, Wilhelm's frontloading, hot seat and tableau action strategies were integrated into three subsequent read aloud lessons. To build these connections and enable students to move from their own reality into the story world, Trigger Letters were created. Students were required to read the letter and partake in role play activities where they would determine the underlying issue, their own feelings about it, as well as reflect from differing viewpoints. Real life photographs of instances of poverty around the world and various objects, "presents", were also used during frontloading, whereby students were asked to imagine themselves as that person or family, and use this awareness to determine what present they would most want and why.

After each read aloud and action strategy, students were required to use the information and insight into the characters and stories gained from these strategies to complete the three problem posing questions, two character think bubbles, and one journal from a character's perspective. Once again, no modelling was done for the three problem posing questions. For the two writing in role assessment activities, students were allowed to choose photocopied pictures from the story to help them with their writing, and the writing was modeled beforehand. Critical thinking for both the reading response questions and writing in role were assessed using the common rubric.

Due to the time constraints of my Early Literacy Program, and the added component of writing in role, lessons were carried out over several periods, with multiple re-readings of each text. Following each lesson, I completed a Teacher Reflection Journal, evaluating overall effectiveness, issues, concerns and next steps.

Analysis of the data shows that the use of Wilhelm's Action Strategies increased both student engagement and ability to think critically about text. For the targeted students, Wilhelm's action strategies revealed an increase in student engagement during both the reading and writing activities. As measured by the Likert Engagement Scale, overall student engagement increased by an average of 1.4 levels for reading and 1.2 levels for writing. I attribute this increase in engagement in writing to the hotseat and role playing activities that allowed all my students, even those not participating, to be able to see and hear the different responses their fellow classmates generated while in role, allowing them to gain a better understanding of different perspectives and fuelling them with ideas for their own writing.

The cumulative data indicated some marginal differences between genders with respect to engagement, and type of activity. On average, the boys showed an increased of (0.2%) in engagement during the reading process, and the girls showed an increased of (0.2%) in engagement during the writing process. I believe that the slight differences may be attributed more to individual learning style than gender. One of the boys in the target group was predominantly a Kinesthetic learner, who showed an overall increase of 3 levels in engagement during the reading process, which included the interactive hot seat and role playing activities, thereby accounting for the slightly higher scores for engagement during the reading lessons.

On average the data for both reading and writing activities show that Wilhelm's Action Strategies resulted in positive increases in students' ability to think critically about text. However, individual results varied. In both activities, measures of critical thinking showed a decline in overall performance from baseline to cumulative data for one student, and in each individual case that student was a boy. I attribute this to the time constraints of my program and the fact that each lesson was spread out over two weeks, which interrupted the flow and skewed the learning process. For the two boys in question, who have difficulty staying still and focusing on the task at hand, the results in their learning may have been more consistent if there was less time between lessons and only one means of assessment instead of three. Although the average overall scores for students indicate a positive increase in critical thinking for reading and writing, the overall impact was less significant than that of student engagement. Analysis of the data for student engagement during the writing process as compared to students critical thinking in their writing shows that cumulative increases in engagement (avg. 1.2 levels) double that of critical thinking (average of 0.7 levels). A similar, but more positive trend was noted for student engagement, as compared with students' critical thinking skills, during the reading process. With an average increase of 1.4 levels per student, engagement was marginally higher than students' critical thinking (average increase of 0.4 levels) during the reading process.

Gender appeared to be a factor with respect to critical thinking and student writing. Whereas each of the three girls made a consistent gain of one grade level in their writing, the boys' results were more variable, with one boy even dropping a grade. As writing was not an original part of our study, but just an add on for my own research, I attribute this decline to the fact that initially I was scribing this students oral ideas, using his thinking as my primary means of assessment. However, over the course of the three months of this research this student began to gain confidence with his writing and took more of the responsibility. Therefore, I see the drop in his performance due more to his developing writing skills than to his actual ability to think critically.

In conclusion, overall, I found Wilhelm's action strategies improved student engagement and ability to think critically about text. However, as I only had time to do two alternate stories following my baseline data collection, I feel that the increase in students' performance would have been even more significant with the addition of two to three more lessons. Time constraints forced my lessons to be chunked up and spread out over several days. Another weakness was the lack of alignment between the action strategies engaged in by students and the problem posing questions. Although both target critical thinking with regards to making inferences and personal connections to text, they look at two very different aspects of it. The hotseat and role play activities ask students to make connections to their own life and infer what a character is thinking and feeling. The problem posing questions ask the students to infer the main idea of the text and make a connection with respect to how they would use the lesson in their own life. Overall, I feel that my students struggled with these questions because the hotseat activity did not directly translate their learning to the questions. Students' rarely reflected on them adequately and tended to rush through their answers. My lack of modelling for how to think about and answer these types of questions was also a factor in terms of students' comfort and confidence for answering. I saw a noticeable difference from the problem posing questions to the writing in role activities. Students had a much more positive attitude towards the writing in role. A few factors contributed to this. First, the hotseat fuelled them with ideas to use in their writing. The activity also aligned directly with the means of assessment; it was easy for the

students to take learning from one context and transfer it to another. Second, I modeled the writing in role for them each time, providing the scaffolding necessary for them to take risks. Thirdly, I scaffolded the process further by having them complete think bubbles for a character of their choice first, which served as a warm up for the journal writing. Finally, I provided them with visual aids in the form of pictures from the story to help them with their ideas. I feel that Wilhelm's strategies are only effective in improving critical thinking if done within a gradual release of responsibility framework that supports student learning and thinking at each step of the process.

Primary

In order for the grade one teachers to attain some baseline information relating to engagement and critical thinking, an engagement rating scale (observational) was completed for each student. After reviewing "Action Strategies for Deepening Comprehension" by Jeffrey D. Wilhelm, we decided to implement the following action strategies: frontloading, hotseat and tableaux. Poverty, being our big idea, we used the following texts for our read alouds: "Lily and the Paper Man", "The Little Match Girl", "Beatrice's Goat" and "Those Shoes". Using the big idea, the students will further develop their ability to think critically about text and motivate them to become engaged readers.

The students were chosen based on several key factors. The target group's first term DRA comprehension scores, observations during read alouds and anecdotal checklists proved that these students were performing below our expectations. It was evident through their participation during read-alouds, large group conversations and written responses that their engagement was low.

Before each lesson, we introduced the frontloading strategy through the use of a letter, props or pictures related to each individual story in order to activate the students' prior knowledge. During the read aloud, we stopped at key parts in the story to deepen their engagement and discuss the events in the story. After each lesson, the students performed the action strategies hotseat and tableaux. To culminate the activity, the students wrote a written response to the story and the target group was asked to answer oral critical thinking questions developed by the Action Research Team.

Overall, we discovered the grade one students' engagement during hotseat and tableaux increased and their written reading responses slightly improved according to the critical thinking rubric. However, the scores did not reach our expectations of them. Considering what we already know regarding cognitive developmental stages we have come to the conclusion that to think critically may have been beyond their grasp. To think critically, the students need to have a better understanding of how to relate the text to themselves. Most grade one students do not have the life experiences needed to think critically. In addition, the critical thinking questions generated prior to our research did not elicit the responses we were hoping to achieve.

We discovered that when students are actively engaged in a text (via action strategies), their comprehension skills increased. When the students took the hotseat, their responses to the "not right there questions" were shared in great detail. But, even better than that, were the questions the rest of the class asked of the person in the hotseat. The insight reflected in their oral questioning which displayed their ability to comprehend the big idea and their ability to relate to the characters in the stories. As their experience with hotseat grew, so did their risk taking as displayed by their engagement and oral responses.

As we reflect upon this project, we are pleased with the students' success and growth. Therefore, in the future we plan to incorporate these new action strategies across the curriculum, for other literacy topics (fairy tales, author studies) and for other big ideas. The focus will be more on enriching the students' engagement skills rather than their critical thinking abilities.

Junior

Prior to this project, the two junior teachers involved integrated drama activities into their daily teaching. In order to increase critical thinking skills and overall engagement, new action strategies were introduced to the students. The teachers hypothesized that the consistent use of the new strategies would increase critical thinking and student engagement. Specific strategies employed were: frontloading, hot seat, and tableau. The four texts used with the big idea of poverty were: *Lily and the Paper Man*, *Fly Away Home*, *Four Feet Two Sandals* and the poem *Plenty*.

The target group consisted of 4 grade five students and 4 grade six students (6 male, 2 female). Students' overall academic achievement levels varied from 1 to 3. Five of the students within the target group were visual learners and three were kinesthetic learners. These students were selected due to lack of engagement during reading activities and discussions. The students were often quiet and usually on task during reading activities but not particularly interested. They rarely participated during class discussions and had difficulty making connections or sharing personal opinions.

For the baseline lesson, a story was read to the students without activation of prior knowledge or implementation of new action strategies. Observable engagement was assessed for the students in the target group using the four point Likert scale. The students then answered the same three questions in their reading response journals for each text. Throughout the subsequent three lessons, frontloading, hot seat and tableau were integrated into the read aloud. The student responses were assessed with the aid of the common rubric. The grade 6 students also completed a writing activity where they had to write in role from a character's perspective.

The teachers felt that overall, observable engagement increased due to the use of the action strategies. They observed that engagement doubled with almost all the boys. Of the six boys, five volunteered to take on a role in the hotseat. One grade 5 boy did not show increase in engagement. His teacher attributed the lack of change to some learning difficulties that the boy possessed. The girls did not show any observable increase in engagement during class discussions, but when asked to write in role, all the grade 6 students' submitted writing with more details and richer ideas. The teachers noticed that the shared reading approach was effective in assisting students find meaning. Having the texts on the SMART Board was helpful to the visual learners and contributed to their engagement. Chunking the lessons and spreading them over 2-3 days also assisted students with processing the information. By the second or third day of using the hotseat strategy, students were more willing to take risks.

Although student engagement did increase, improvement on the reading response questions was marginal. The teachers attributed the marginal increase to the three problem posing questions that were used. Outside of the research, the questions would have been adapted to reflect the individual needs of the lesson. The generic nature of the questions did not allow students to transfer their engagement to their reading response answers. The teachers concluded that these action strategies were useful in increasing student engagement, but further instruction and modeling of reading responses is still needed to see more observable improvement in critical thinking.

Administrator Perspective on Action Research Project

The action research team at Talbot Trail crossed divisions and specialties to include a diverse group of educators. Two of the members were also the primary and junior division leads. As the project progressed, it was evident that the group was becoming a true model of a cross divisional Professional Learning Community, and were using teacher moderation in a very effective way comparing students in SK up to grade six.

By this time, many other teachers became interested in the techniques and the process. At our February Professional Learning Community half day, the group presented a sampling of the strategies, including a video of a hotseat, as well as an outline of how the project was structured. One member of our group was part of the grade one team. These five teachers took on Action Strategies as their next Teaching Learning Critical Pathway. The Literacy Numeracy Support Teacher (LNST) and Early Literacy teacher modeled the strategies for the other teachers who were not part of the original research.

The junior division of our school was just finishing up a Strategic Learning Plan. Their previous goal had been conventions based and they were looking for something that would address high end thinking and comprehension. The strategies and observed success in other classrooms made those teachers realize that this may increase the comprehension in their own classrooms.

It was very interesting to see the project enlarge to involve these nine teachers in the junior division. They were booking the LNST to come into their classrooms to model the strategies. A grade four teacher created a frontloading power point with images from Afghanistan in order to set the stage for one of the books. Teachers were on the school conference sharing the book files in order to present the books on their SMART Boards. Many other teachers, especially from the primary division, had borrowed the Wilhelm book.

The school as a whole benefited from the Action Research project. The experience of the small group translated into divisional practice and the use of great PLC strategies such as common assessments and teacher moderation supported the entire school's progress.

Literacy Numeracy Support Teacher Perspective

The opportunity to be part of the action research team at Talbot Trail gave me the advantage of making observations from an alternate perspective. I do not have a classroom of my own and am not at the school everyday which made it difficult to conduct research of my own. My role was one of mentor, instructional specialist, resource provider, learning facilitator, classroom supporter and most importantly learner. Initially, I mentored the teachers since I was part of an action research team in the previous year and had a good understanding of the process based on my professional learning from Dr. Lynn Hannay. Another benefit that I provided to the team was my experience being part of a critical literacy team, having a solid understanding of teaching learning critical pathways as well as attending three workshops with Jeffrey Wilhelm. After the initial meeting it was decided that I would model for the team some of the action strategies we had chosen to use in our research. All of the teachers gathered in one class and we video taped the lesson for future reference. This was a new and exciting experience for me. I learned along with the team. This activity deepened our understandings of how to delivery the action strategies and accompanying instructional strategies to engage students and best meet their needs. The next few weeks were spent working in various classrooms helping me to refine and strengthen the lessons while modeling the strategies for the teachers. Consulting with the team and taking part in teacher moderation created rich dialogue and cemented our learning throughout the process. Finally, I was able to give guide the team when we met to write our final report and was then responsible for compiling and organizing our research findings and data analysis.

Appendix A

Action Research Teacher Attitude Survey

BEFORE _____ Date _____
AFTER _____ Date _____

Circle the number that most closely matches your opinion of each statement.

- 1. I do not agree
- 2. I agree a little
- 3. I agree
- 4. I strongly agree

1. I am currently aware of drama strategies that can be used to teach literacy.	1	2	3	4
2. I integrate drama into language arts lessons on a regular basis.	1	2	3	4
3. My degree of comfort teaching drama will impact student performance.	1	2	3	4
4. My biases do not affect student engagement.	1	2	3	4
5. My critical thinking skills will improve after teaching action strategies.	1	2	3	4
6. This action research will carry over across the curriculum.	1	2	3	4
7. My ability to ask higher order questions will improve.	1	2	3	4
8. I feel excited being part of this action research project.	1	2	3	4
9. Action strategies will improve my teaching practice.	1	2	3	4

Comments:

Learning Channels Inventory

From "Learning Channels Inventory" by Max Coderra (Sherwood Park)

Place the numbers 1,2 or 3 in the box after each statement that best indicates your preference.

(PLEASE USE #3 – Often, #2 – Sometimes, #1 – Seldom)

1. I can remember something best if I say it out loud.
2. I prefer to follow written instructions rather than oral ones.
3. When studying, I like to chew gum, snack and/or play with something.
4. I remember things best when I see them written out.
5. I prefer to learn through simulations, games and / or role playing.
6. I enjoy learning by having someone explain things to me.
7. I learn best from pictures, diagrams and charts.
8. I enjoy working with my hands.
9. I enjoy reading and I read quickly.
10. I prefer listening to news on the radio rather than reading it in the newspaper.
11. I enjoy being near others. (I enjoy hugs, handshakes and touches).
12. I listen to the radio, tapes and recordings.
13. When asked to spell a word, I simply see the word in my mind's eye.
14. When learning new material, I find myself sketching, drawing and doodling.
15. When I read silently, I say every word to myself.

In order to get an indication of your learning preference, please add the numbers in the boxes together for the following statements.

VISUAL PREFERENCE 2 4 7 9 13 = Total _____

AUDITORY PREFERENCE 1 6 10 12 15 = Total _____

K / T (KINESTHETIC / TACTILE) 3 5 8 11 14 = Total _____

The highest score indicates that my learning preference is _____

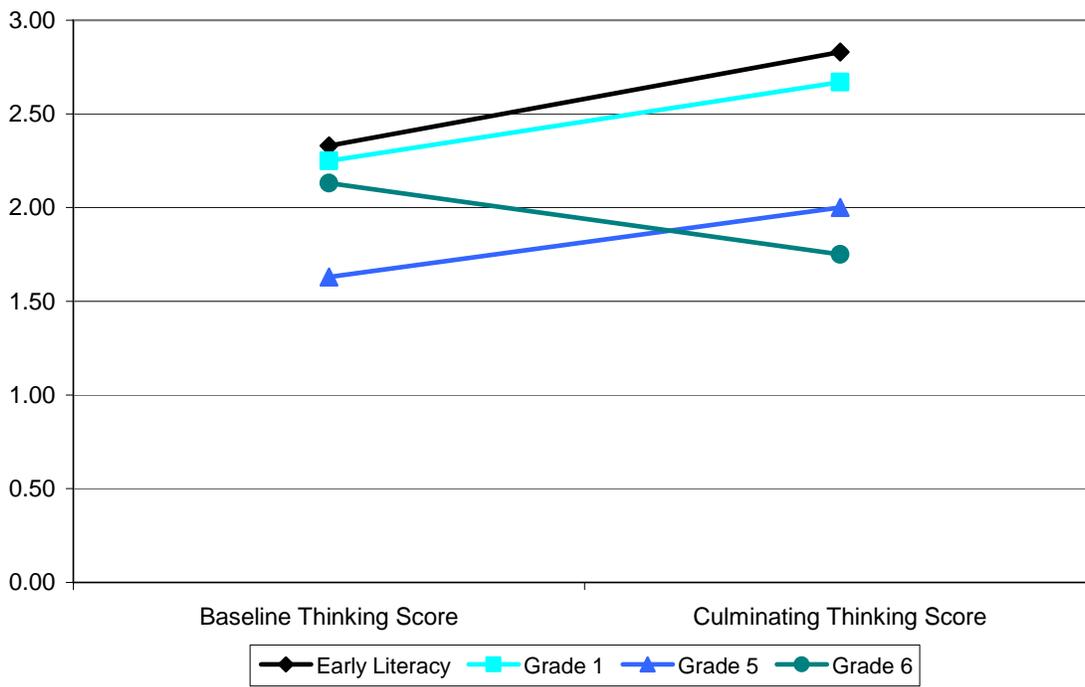
Appendix C

Critical Literacy (Thinking and Application) Rubric

	Level 1	Level 2	Level 3	Level 4
Thinking Use of thinking skills (making inferences, detecting bias, examining multiple perspectives, forming conclusions).	Uses thinking skills to make inferences, detect bias, examine multiple perspectives and /or form conclusions with limited effectiveness	Uses thinking skills to make inferences, detect bias, examine multiple perspectives and /or form conclusions with some effectiveness	Uses thinking skills to make inferences, detect bias, examine multiple perspectives and /or form conclusions with considerable effectiveness	Uses thinking skills to make inferences, detect bias, examine multiple perspectives and /or form conclusions with a high degree of effectiveness
Application Make connections within and between various contexts (between the text and personal knowledge or personal experience, other texts, and the world outside school).	Make connections within and between various contexts (between the text and personal knowledge or personal experience, other texts, and the world outside school) with limited effectiveness <i>* connecting the answer to the main idea</i>	Make connections within and between various contexts (between the text and personal knowledge or personal experience, other texts, and the world outside school) with some effectiveness <i>* connecting the answer to the main idea</i>	Make connections within and between various contexts (between the text and personal knowledge or personal experience, other texts, and the world outside school) with considerable effectiveness <i>* connecting the answer to the main idea</i>	Make connections within and between various contexts (between the text and personal knowledge or personal experience, other texts, and the world outside school) with a high degree of effectiveness <i>* connecting the answer to the main idea</i>

Appendix E

Overall Student Critical Thinking in Reading Response Questions



Overall Student Engagement During Hotseat

