

The Use of Hands-On Comprehension Games in Literacy Development

By

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Abstract

Reading comprehension is one of the most difficult components to teach. I have tried every resource my district has given me to help build comprehension skills and I have not seen a significant impact on the children's learning. I investigated hands-on games and activities to see if they could help improve and build comprehension skills.

Many children in the twenty-first century are tactile learners and need hands-on activities. Keeping this in mind I researched and implemented hands-on games and activities for students in the fifth-grade to practice and reinforce their comprehension skills. I created, taught through guided practice, and reinforced a variety of new games and activities to assist in improving a variety of comprehension skills ranging from basic (5 W's: who, what, where, why, when) to deeper meaning such as inference. I wanted to see if hands-on games or activities had an impact on comprehension skills.

I was focused on Marcell's (2006) ideas and implementation of comprehension games and activities from "Comprehension Clinchers." Marcell discusses the "Big Four" which consists of metacognitive, visualizing, predicting, and connecting strategies. I performed a six-week long qualitative study focused on skills in comprehension using hands-on activities. I observed and analyzed the work of two fifth graders. I implemented two reading-center games focused on comprehension skills. I explored whether the implementation of comprehension focused, hands-on

learning activities in a classroom setting have either positive impact or no impact on students' reading comprehension.

Chapter One

Introduction

Scenario one: A fifth grader wrote a three page historical biography essay focusing on an individual who had impacted a technological tool. This child chose to write about the importance of Alexander Graham Bell in the Industrial Revolution. She composed an entire essay talking about his life and his accomplishments. I was so excited about this essay because looking at her rough draft she seemed to **really** get it! While grading the essay, using a writing rubric, I came upon the title of the essay. Ready? The title was “He Was the Only U.S. President Ever Named Alexander Graham Bell.” I had to close my grade book and go home after I read this.

Scenario two: A fourth grader was reading Dr. Seuss’ “Green Eggs and Ham” to me during Drop Everything and Read (D.E.A.R.) time. When he was finished reading the book I asked him to tell me about what he had read. He responded with, “The fox wanted French toast for breakfast, but they were only serving green eggs and ham so he got mad and told them he didn’t want to eat what the cat was serving.” I had to smile.

Scenario three: A fifth grade student was completing a main idea worksheet. He needed to read the passage, then highlight the main idea and underline the supporting details. When I looked over to him, he had his head down, not understanding how to determine the main idea and supporting details. I reminded

him of the “Chicken Game” at our literacy center he worked on earlier in the day. At this center he had to draw the head of the chicken around the main idea, the body around the supporting details, and the legs around the concluding sentence. He started laughing and said, “Why didn’t you say that first!” I had to smile as I watched him draw the head, body, and legs of the chicken followed by underlining and highlighting. He was able to do this while thinking of the game he played earlier which helped him to identify the main idea, supporting details, and conclusion of a body of literature.

Have you ever had a student completely miss the point of an assigned reading or leisure reading similar to the above scenarios? Reading comprehension is one of the most difficult components to teach. I had tried every resource my district had given me to help build comprehension skills and I had not seen a significant impact on the children’s learning. I investigated hands-on games and activities to see if they could help improve and build comprehension skills. My students’ Individualized Education Programs and progress monitoring showed there are many tactile learners in my classroom which made me want to see if hands-on activities and games could support and build upon their comprehension skills.

Problem Statement

First, I have defined the term reading comprehension which I cited throughout my thesis. My definition of reading comprehension is the ability to understand, explain, and answer questions pertaining to a reading piece. Frederiksen (1982) also defines reading comprehension as “not a single skill but as a combination of specific information processing components working together to derive meaning from print” (126). I have used these terms throughout my paper and analysis.

Through observations of my classroom and other elementary classrooms I saw students struggle with reading comprehension. Many teachers “teach to the test” and give their students worksheet after worksheet to practice comprehension skills so they do well on state tests. Though some children can do fine with “worksheets” many had a difficult time applying the skills they learned to their own independent reading. In my classroom, I usually have about five percent of my class who demonstrate reading comprehension by completing worksheets independently. The remainder of my class does not do well with paper and pencil reading comprehension tasks. They require a more bodily-kinesthetic approach to be successful I showing reading comprehension.

Many children growing up in the twenty-first century are accustomed to video games, movies, hand-held Nintendo DS devises, computers, MP3 players, and so on. What I saw in my own classroom are children who cannot sit still and were unable to connect the meaning to context due to learning style. They needed to be moving and

interacting with other children while learning. In my classroom it seemed many children needed to be physically involved and engaged with others in their learning. They needed to have hands-on activities and games to assist them in new learning and practice in reading comprehension skills. I explored whether the implementation of comprehension focused, hands-on learning activities in a classroom setting have either positive impact or no impact on students' reading comprehension.

Purpose

In the research study I examined how hands-on reading games and activities affect fifth graders' reading comprehension. This examination involved the following questions:

What kind of reading and writing activities do the games contain?

How do the students get engaged in the games?

In what ways do these games support or hinder reading comprehension?

How do these games affect other reading and writing activities during the reading block?

Rationale

I believe reading is the most difficult subject to teach. Children learn differently and their brains process information at different rates. It is also a challenge for teachers to know exactly what a child is thinking while he/she is reading. Teachers often wonder how a student came to the conclusion he/she did while grading reading comprehension tasks. Also, it is a challenge for teacher to know what a child is thinking while decoding and solving unknown words. The child also struggles when trying to articulate his/her thinking while reading and answering comprehension questions. We as teachers need to make our best educated hypothesis as to why and how children produce the responses they provide during both reading observations and reading comprehension tasks. Teachers do this based on education, workshops, and past experiences.

Improving reading is always a goal for parents, teachers, and administrators. The main component in improving reading is to improve reading comprehension. Many teachers, including me, have implemented drill and practice worksheets to help develop surface and deeper meaning comprehension. When I interviewed two fifth-grade teachers about teaching reading comprehension skills in her classroom one responded with, "I use guided reading, partner work, graphic organizers, listening centers, and computer centers." The second fifth-grade teacher responded in using different district reading programs based on the children's needs and reading comprehension level. She also used reciprocal teaching, hands-on games, and

graphic organizers. Both teachers use a variety of methods and techniques in teaching reading comprehension. However, when questioned about participation levels, both teachers responded when children have interactions with their peers and have objects to manipulate; the participation level is higher than working whole group or independently. Children benefit from hands-on interactions and social interactions with one another during learning and practicing skills.

Based on the results of the teacher interviews, I concluded many children in the twenty-first century are tactile learners and need hands-on activities. Keeping this in mind I researched and implemented hands-on games and activities for students in the fifth-grade to practice and reinforce their comprehension skills. I looked at a fifth grade inclusion classroom, with a range of reading levels varying from Kindergarten to seventh grade. I created, taught through guided practice, and reinforced a variety of new games and activities to assist in improving a range of comprehension skills ranging from basic 5 W's, who, what, where, why, when, to higher level comprehension such as inference. The definition of inference is deriving logical conclusions from premises known. I wanted to see if hands-on games or activities impact comprehension skills.

I focused on Marcell's (2006) ideas and implementation of comprehension games and activities from "Comprehension Clinchers." Marcell discusses the "Big Four" which consists of metacognitive, visualizing, predicting, and connecting strategies. Marcell talks about two specific games which I implemented in my

classroom. The first game is called “Why, oh Why?” (Appendix I). In this game there is a paperclip spinner with the “5 W’s” labeled. The children needed to ask a question about the text to another child which would build on making an inference and drawing conclusions. The second is “Connections” which was used with a barrel of monkeys (Appendix J). The children needed to state a pertinent connection from the text in order to connect a monkey to his/her chain. I focused my study on these two games and observed the interactions and outcomes which the games had on the children’s reading comprehension.

Study Approach

In the six week long qualitative study, I used a variety of instrumentation. I first started with an unstructured interview with two- fifth grade teachers on different activities they do in their classroom focusing on comprehension. I wanted to know what current practices and/or activities teachers have in the rooms and if they seem to have an impact on developing the children’s comprehension skills. I also asked the teachers if they saw the students enjoying and participating while practicing comprehension skills.

Then, I had an unstructured interview with two students in my classroom on my current teaching practices on comprehension. My unstructured interview was a relaxed interview where I asked four overarching questions. I asked him/her how he/she understood a book while they were reading. I asked about his/her likes and

dislikes of current practices and if he/she used these strategies while reading and/or testing. However, my student's responses guided the direction of the informal interview. After I implemented the new hands-on games and activities I re-interviewed the same children to see if their view points of their comprehension skills have changed. I asked the children what their favorite games or activities were and had them explain why they enjoyed these the most. I also asked them what games or activities helped them the most and had them explain why.

I made informal observations throughout a four week period in which the new games and activities were implemented. I watched for participation, interest and outcomes of games/activities. My informal observations were anecdotal style notes and records along with a teacher-made observation sheet I created for this specific purpose (Appendix G).

As a formal final assessment, I gave the children a baseline test focused on the skills they had learned halfway through the study (Appendix H). The test focused on the novel *The Pinballs*, by Betsy Byars which the children have read independently in the classroom. I used the same skills the children had been practicing and developing during the literacy centers and formed a series of short-answer comprehension questions. These questions focused on the skills from the hands-on comprehension games based on the novel, *The Pinballs*. At the end of the study I gave a similar test using the novel, *Frindle*, by Andrew Clements. I wanted to measure the amount of growth the students acquired throughout the interaction with the games. As an

informal assessment (see Appendices I and J), I gave the children a comprehension worksheet based on the skills they practiced during the game to see if they had transferred their knowledge to real-life practices.

Organization

The six week long study was qualitative driven where I observed two focal children in a case study format. The focal children are fifth graders, one a male and the other a female, who benefited from hands-on learning activities. I gave an unstructured pre-interview to two-fifth grade teachers as well as my two focal children with the intentions of learning their understanding of comprehension strategies. Then, I took informal observations throughout the children's involvement with the selected games at the reading centers. As a baseline for my study I assessed the students on a novel, *The Pinballs*, by Betsy Byars to see how they were implementing the skills they had learning thus far. At the conclusion of the six weeks, I gave a final assessment focusing on the skills learned from the games based on the novel, *Frindel*, by Andrew Clements. I also conducted an unstructured post-interview mimicking the pre-interview. This determined if the children's strategies and interest level has changed throughout their participation in the study.

Definitions

Reading comprehension: Reading comprehension is the ability to understand, explain, and answer questions pertaining to a reading piece. Reading is not a single skill but as a combination of specific information processing components working together to derive meaning from print (Frederiksen, 1982).

Gradual Release of Responsibility: Patricia Johnson developed this teaching method and refers to it as responsive teaching which is similar to "explicit modeling" where a teacher begins to give the student responsibility in his/her own learning strategies. The process has five components; modeling, scaffolding, prompting, backing off, and reinforcing (Johnson, 2006).

Modeled Literacy Instruction: Teacher demonstrates reading [games] which are too difficult for students to read [play] games themselves. Teachers talk about their thoughts and strategies they are using (Tompkins, 2010)

Shared Practice: Involves students in activities they could not do independently. Provides practice for students before they can read [interact in hands-on games] independently (Tompkins, 2010).

Guided Practice: Teachers scaffold or support student's [interaction with hands-on games], but students do that actual activity themselves (McCarrier, Pinnell & Fountas, 2000).

Independent Practice: Students participate in activity themselves at an independent level. Also, provides authentic literacy experiences where students choose their own topics and materials (Tompkins, 2010).

Hands-on: Relating to, being, or providing direct practical experience in the operation or functioning of something. Also, involving or allowing use of or touching with the hands (Merriam-Webster, 2012).

Authentic Literacy Tasks: Activities and materials related to real-world reading and writing (Tompkins, 2010).

Summary

Considering the technology our students are exposed to on a daily basis, it makes sense that students exhibit difficulty remaining focused on worksheet-based reading comprehension tasks independently. Getting children to read is one thing but, building comprehension skills is a different obstacle. I performed a six-week long qualitative study focused on building skills in comprehension using hands-on activities. I observed and analyzed the work of two fifth graders. I implemented two reading-center games focused on building comprehension skills. My overall objection was to determine if hands-on games or activities has an impact on comprehension skills.

Chapter 2

Literature Review

Introduction

I have provided the conceptual framework for this study. The conceptual framework is divided into comprehension and hands-on games. I have discussed previously used comprehension practices and the activities benefits and issues. My research was guided by looking through the lens of previously established researchers such as, Ysao, Frederiksen, Canney, and Marcell.

I used Frederiksen's (1982) definition of reading which he defines as "not a single skill but as a combination of specific information processing components working together to derive meaning from print" (p. 126). Reading and comprehension are tied together throughout this thesis. I wanted to see if a child can transfer knowledge related to reading comprehension from a game into his/her independent reading comprehension tasks.

Types of Comprehension Builders Used By Teachers in The Past

In the past many teachers, including myself, have used worksheets to focus on improving comprehension. The children are normally sitting alone at a desk with a passage in front of them followed by questions which pertained to the reading. The

children are then responsible for the completion of the worksheet which is to be done independently.

Teachers also rely on classroom discussions to build comprehension. He or she will have read a passage to his/her class and asked them basic comprehension questions such as, who is the main character, what is the problem, where is the setting, and so on. However, Fountas and Pinnell (2009) believe teachers need to make teaching points to support the child's comprehension. Instead of asking basic questions, teachers need to expand the processing system to each individual child (pp. 420). Fountas and Pinnell (2009) have also familiarized teachers with a variety of teaching methods focusing on comprehension: predicting, making connections, synthesizing, inferring, analyzing and critiquing. According to Fountas and Pinnell these skills assist reader in developing reading comprehension skills.

Teachers use a variety of strategies during classroom discussion. In an article by Rick VanDeWeghe (2007), he studies eight different conversational strategies; reciprocal teaching, transactional strategy instruction, questioning the author, elaborative interrogation, instructional interrogations of writing, reading, and talk, envisionments, collaborative reasoning, and instructional conversations. These different strategies are used by teachers in everyday instruction.

Benefits Reported

There are many benefits to classroom discussions. In a study conducted by Rick VanDeWeghe (2007), he investigated the different kinds of classroom discussions and which ones promote reading comprehension. In his study he discovered the following information about reciprocal teaching:

...teachers and students to engage in give-and- take conversations about texts strategically driven by deliberate focus on essential comprehension- building skills...a teacher and student or group of students read a portion of text and then take turns "teaching" that segment of text to one another. In the dialogue about the text, the "teacher" summarizes the content, generates questions about the content, clarifies, and predicts. The dialogic process of the conversations allows for the adult teacher to model comprehension activities such as summarizing, locating main ideas, speculating about character, noticing plot developments, and so forth; over time, students learn these strategies through exposure, practice, and feedback, and the adult teacher is able to monitor the students' developing understanding of the text as well as the students' developing expertise as reader. (p. 86)

These benefits are focused mainly from the teacher's perspective. Teachers prefer this type of structured lesson for comprehension because they have complete control over the questions and answers. The teacher can see who is participating and which questions are providing difficulty for the students.

Collaborative reasoning is also beneficial to the students. Rick VanDeWeghe (2007) states, "This strategy develops critical thinking by engaging students in a group process of articulating arguments and counterarguments about a shared text" (p. 89). In this discussion students need to weigh their arguments, pick a position, find supporting evidence from the text, and reflect on their reasons. All of these strategies call for the student to look at the text through a deeper lens. They need to

connect to the text in order to take a position, they develop a perspective through the text, and they practice finding evidence or details to support their argument or main idea. These strategies will help students on assessments with higher order thinking questions.

In *The Continuum of Literacy Learning*, by Fountas and Pinnell (2011) they discuss the importance of how students process learning through talking. “Talking represents the students thinking. We engage students in conversation that is grounded in a variety of texts that expand their ability to comprehend ideas and use language to share thinking” (p. 2). When discussions in class are done properly students can express their feelings and listen to other view points and interpretations.

Issues Reported

In the activities from above, the strategies can easily become dominantly teacher centered. There can be little to no authentic conversation taking place between the teacher and the students. More importantly there can be little to no authentic conversation between the students. The students are not learning from one another through conversation.

Teachers also report the same students answer the posed questions every time, while other students simply sit back and miss the entirety of the comprehension lesson. This instruction is also ineffective because the group is too large for intense, effective teaching (Fountas & Pinnell, 2009). The lesson is also difficult to assess the

students because the teacher is the one asking pre-thought questions, whereas when students discuss a novel they bounce ideas, thoughts, and comments around.

Teachers need to use three types of prompts to open conversation and potential meaning of the text. Rick VanDeWeghe (2007) describes these three prompts (queries). The first is initiating, which are conversation starters. The second is follow-up, which connect meaning with perceptions. The third is narrative, which help students think about character and craft (p. 87). When a teacher does not use these queries the questions can become lower-level thinking which requires basic pedagogy skills.

Vivian Paley (1986) believes, “Possibilities for connecting play and outside events are fleeting” (p. 129). Paley (2007) also states, “Watching children play invites philosophical discourse” (p. 148). Children bring different background and cultural experiences into the classroom while interacting with their peers during play. Dyson and Genishi (2009) believes, “Children learn to attune to one another, to collaboratively learn to take their turns and tie their meaning together in some kind of narrative sense” (p.58). Interaction between children is crucial in the development of young minds and socializations. Ysao (2002) believes play is significant for literacy development in children. Ysao (2002) states, “While children play and communicate, they are learning intuitively how language works, practicing its many nuances, and gaining insights into the meaning of written language. Children's conversation, and their creativity and competence in literacy, can be enhanced through play activities”

(p. 515). Children need to interact with one another to develop and build their literacy skills.

Hands-on Games in Reading Instruction

Scholastic Reading provides teachers with many file folder games which they can implement in their classrooms. They provide hands-on activities focusing on spelling, punctuation, sentence builders, homophones, riddles, rhyming games and much more. Teachers can use these games during reading centers, tutoring, or small group instruction. In the past I have used a homophone game with my class called, They Sound the Same. The children have two sets of cards; one set has words and the other set has pictures. They put all these cards face down and take turns picking two cards at a time trying to match them to the correct picture, similar to the game Memory. They must match the correct homophones to the correct illustration in order to get a point. The player with the most correctly matched homophones wins. The children enjoy this game because it is interactive which makes learning enjoyable.

Another hands-on activity I have used is from Ellen Moore (2004) which is called, Super Sentence Sort. In Super Sentence Sort the students have a graphic organizer divided into four groups; Who, Did What, Where, and When. The students then sort the task cards, which consist of words or phrases, into the correct category. When they have completed this step they then select one card from each category and create a super sentence.

Fountas and Pinnell (2009) created a hands-on word game called, Follow the Path. In Follow the Path the children roll a die and move the corresponding spaces. They then draw a card and have to complete the task it asks. A task may be to clap out syllables, identify the next letter in the alphabet, read the word, or saying the beginning or ending sound of a word. The goal is to get to the end of the path first.

Another hands-on word game I have used with my class is Lotto (Fountas and Pinnell, 2009). Lotto is a game board with twelve squares. In the squares are letters, pictures, or word cards glued to the paper. The children have to pick a card from the deck and say what is on the card. The players search their game cards for a corresponding letter, picture, or word. They can make any place which corresponds. The first player to cover the entire board wins.

Use of Hands-on Games in Comprehension Development

In the past teachers, including myself, have used hands-on activity to assist a child with visualizing what he/she is reading. The activity was designed and published by Barclay Marcell in 2006 and is called Mind Movie. Mind Movie can be worked on independently or in partners. Students read a text or chapter from a text and illustrate what they visualized while reading, almost like a movie. They need to include the background (setting), characters, events and interpretation of what these circumstances look like in their heads. Mind Movie also aids in developing skills in sequencing of events. The students need to illustrate events in the order in which they

occurred so it can systematically “run like a movie.” Students develop an understanding of why sequencing is important and provides them with practice in developing moving scenes in their heads while reading to keep comprehension fluid.

There is also another hands-on activity teachers, including myself, have assigned in class. This activity was designed and published in 2006 by Barclay Marcell and is called, Next. In Next the students are working on predicting. This activity can also be done individually, in partners, or in groups. The students read a page or chapter (depending on reading level) and write what their prediction is for the next event. After they have their predictions recorded, the students take turns passing a Magic 8-Ball around to see if their prediction will occur. This is a fun, interactive game you can have your children play. They can also discuss if they think the Magic 8-Ball is correct or incorrect and provide evidence from their text to support their predictions.

Hands-on Games Implemented in Thesis

I focused on Marcell’s ideas and implementation of comprehension games and activities. Marcell discusses the “Big Four” which consists of, metacognitive, visualizing, predicting, and connecting. Marcell talked about two specific games which I implemented in my classroom. The first is a game called Connections which is used with a barrel of monkeys (Appendix J). The children needed to state a pertinent connection from the text in order to connect a monkey to their chain.

The second game is called Why, oh Why? (Appendix I). In this game there is a paperclip spinner with the “5 Ws” (Who, What, Where, Why, When) labeled. The children needed to ask a question about the text to another child which would build on making an inference and drawing conclusions. I focused my study on these two games and observed the interactions and outcomes which the games had on the children’s reading comprehension.

Gradual Release of Responsibility

The Gradual Release of Responsibility, by Pat Johnson (2006), is an essential component in this study. In order for my study to be reliable and valid I needed to teach the students how to properly play the interactive hands-on games before I observed them on their actions and behaviors. Johnson begins this process by assessing a student’s skill in a subject area. Johnson then determines which skill the student needs to develop in the subject area and teach this skill to the student (Johnson, 2006). Prior to Johnson teaching the skill, she considers using the following strategies; modeling (demonstrate what the child should do using explicit language, teacher has all responsibility), scaffolding (giving the child support and some responsibility during guided instruction), prompting (providing a child with a term to remind him/her of the strategy strategy), backing off (teacher supports fades so the student is initiating the strategy on his/her own), and reinforcing (naming the strategy and praising the student for his/her efforts) (Johnson, 2006).

Modeled Literacy Instruction

The definition of Modeled Literacy instruction is when the teacher demonstrates reading [games] which are too difficult for students to [play] themselves. Teachers talk about their thoughts and strategies they are using [while interacting with the game] (Tompkins, 2010). Prior to the start of the study, my co-teacher and I modeled and demonstrated the proper way to play the games correctly to the students. I set up a demonstration for the children where they observed and understood how to play the games properly. During this stage the teacher controls all of the responsibility in learning.

Shared Practice

Shared practice involves students in activities they could not do independently. This practice provides practice for students before they can read [interact in hands-on games] independently (Tompkins, 2010). Following the students observing the teachers modeling the game; the students began to gain some of the responsibility in the learning process. Little at a time, the students joined the teacher in participating in the game. The students began to practice and understand how to play the games with one another.

Guided Instruction

Guided instruction is when teachers scaffold or support student's [interaction with hands-on games], but students do that actual activity themselves (McCarrier, Pinnell & Fountas, 2000). When the students completed their shared practice with the teacher, they gained more responsibility through guided instruction. During this instruction, the teacher observed a group of students playing the games during the literacy block. The teacher made sure the students were playing the games correctly and answered any questions the students may have had while interacting with the games.

Independent Practice

Independent practice is when students participate in activity themselves at an independent level. Also, provides authentic literacy experiences where students choose their own topics and materials (Tompkins, 2010). The students held all of the responsibility in their learning. During this time the students played the games in groups without the teacher's guidance. While the students were playing I conducted my observations during the second, third, and fourth weeks of the study.

Summary

There are many individuals who support a variety of comprehension builders, some including hands-on activities. There are pros and cons to every hands-on game for comprehension development; however, I wanted to see if these games can influence students' results on assessments. I wanted to explore if students took what they learned when playing the games and applied the skills into test taking.

Chapter Three

Methods

Introduction

This study was designed to look at hands-on games and activities and determine if they could help build and improve comprehension skills. After I looked at all the tactile learners in my classroom, it influenced me into taking an interest in investigating if hands-on activities and games could benefit and build upon students' reading comprehension skills. I conducted the study in a fifth grade classroom in an elementary school. In the following section, I introduce the contextual information, and methods of data collection, and procedures.

Community

The school is located in an urban city in Western New York. The district educates more than 32,000 children from pre-Kindergarten to grade twelve. The district is highly diverse including children from 28 foreign countries speaking 35 different languages. The majority of the housing is for the lower socio-economic status. The neighborhoods surrounding the schools are too unsafe for the children to be walking home alone. The school itself is completely locked off to the public. If you are a parent, volunteer, or teacher you need to be "buzzed" into the school after confirming who you are and your purpose for the visit. There is an ample amount of police officers who monitor the area encompassing the school. There are also

crossing guards around the neighborhoods since the traffic is heavy in this region. The demographics majority are mainly occupied by African American and Hispanic households.

From my experience, there is not much community support connected with the school. There are few parents and outside community members who volunteer time, money, or resources to the school and children. There is a church which provides volunteers to enter the building and read with the children once a week. In the beginning of the school year this church also donates school supplies and clothing to children in need. However, within the entire school district there is ample community support available ranging from tutoring to scholarship opportunities.

School

The vision of the school is, “Through the lenses of academic excellence, we are capturing a new image.” Student-centered learning experiences are provided by expecting high academic standards, providing quality instruction, promoting a safe learning environment for academic, social, emotional, and physical development, and reinforcing the value of parent participation and community support. The students’ population is large containing 572 students with a 92% attendance rate. The building is ethnically diverse with 64% African American, 27% Hispanic and 19% Caucasian. There are a reported dozen languages spoken by students in the school. Ninety-eight

percent of the students' population receives free or reduced-price lunch. This again supports the low-socioeconomic status of the surrounding neighborhoods.

This school uses the *America's Choice* school model to help all students meet academic standards in reading and math. This school is part of the *Reading First Initiative* which focuses on scientifically-based reading interventions. The school promotes a safe school environment and supports character building through Positive Behavioral Intervention Support (PBIS) and conflict resolution. The school encourages parental involvement through organized parent groups (PTA and PAT—Parent Action Team), parent membership on other school committees, and a parent newsletter, *The Bellringer*. Last year's academic performance, 2009-2010, was below proficiency levels on the New York State tests. In English and math the school had twenty-four percent of its population meeting or exceeding proficient levels. The scores in science and social studies were much higher; Science was fifty-nine percent meeting proficiency and social studies was seventy-five percent meeting proficiency.

Class

The fifth grade classroom is an inclusion room with nine special education students and twelve general education students. Maria Prestigiacomio is the special education teacher and the general education teacher is another female. The classroom is a safe-learning environment and child friendly. Everything is accessible for the children to use. There are strict rules and routines in our room to maintain

consistency and classroom management. There are silent helpers, anchor charts, and reminders hanging on the walls for the children to refer to during instruction. Every child has a different job each week. This promotes responsibility and team-work in the classroom. There are visuals and interactive activities which are displayed around our room to support all the learners. Both teachers co-teach in a partnership and have great communication to maintain consistency with lessons, students, and parents. They also plan lessons together prior to teaching to amplify the amount of skills taught and receive the greatest amount of understanding from the students.

The class has twenty-two children and is evenly split between male and female. The classroom is ethnically diverse having 62% African American, 24% Hispanic and 19% Caucasian. The classroom is student centered with a variety of technology available for the children to interact with. There are three computers, a SMART Board, and a television with a DVD/VHS player. The children have a 40 minute work period in the computer lab every week where they reinforce skills learned the previous week. The learning environment is calm and welcoming with many resources for the students to use such as, a classroom library, math and literacy learning centers, designated areas for whole group instruction, small group learning, partner working, and independent activities.

The English Language Arts block is broken into four learning centers. There is an independent reading center when the children select books on their level, log their reading, and respond to prompts. The second station has two guided reading groups with both teachers focusing on skills the specific groups need in order to be

successful in reading and comprehension. The third station is creative arts where the children can draw and describe a character and/or design a book jacket independently. The fourth station has hands-on reading comprehension games where children work in partners while completing activities. These games focus on a variety of skills from basic (5 W's) to higher level thinking such as inference.

Focal Students

The first focal child is an eleven year old male, John, is an outgoing fifth grader who enjoys participating in all subject areas. John is also diagnosed with Attention Deficit Hyperactivity Disorder and needs to be constantly interacting with peers and materials. He is extremely social and learns best while working with others. John takes pleasure in hands-on activities and games. He enjoys drawing, and reading funny texts and football magazines.

John is extremely strong academically in many content areas and is currently reading at a sixth grade level. In fourth grade he scored a three on his NYS ELA and Math tests. He takes his time to locate a problem and searches for a plausible solution. Though John is a fluent reader, higher level comprehension questions seem to give him difficulty

John currently lives with his younger sister, mom and dad. He is the only child who attends the elementary school. From past experiences, his mother seems

dedicated and involved in John's education. However, in the two years of having John in my classroom I have never spoken or met his father.

My second focal child is a ten year old fifth grader named Megan. Megan is a quiet girl who enjoys reading and writing about creative topics. Megan is currently reading on grade level (fifth grade). She is a quiet student, but puts in great effort in completing assignments and assessments. Though this child appears proficient in applying skills in the learning process, it is predicted that she will benefit from the peer interactions

Megan learns in whole group, small group and one-on-one interactions. She seems to enjoy reading and science. She likes partner activities and working with manipulatives, but can achieve the same outcomes without these tools.

Megan is a likeable peer in the classroom. Megan has a close circle of friends in the classroom whom she confides her ideas and thoughts. She participates mildly in the classroom, but when called upon she always has useful insights and thoughts to share. She is liked well by her peers and has an older brother who attends the same school. In the classroom she seems to get along well with everyone. She is respectful to all adults and classmates.

Looking at my interactions with Megan from the past two years, she seems to have an exceeding level of family support. Megan's older brother is a role model in his actions and academics. She gets along well with him and his friends. Mom and dad are very supportive and keep communication open with concerns and questions.

There is total confidentiality in my study. There are pseudo names for all locations and participants. I have a letter, parental consent, and consent from the minors who will be participating (Appendix A, B, and C). No information will be released which can be traced back to locations or participants.

Teacher Researcher

I grew up in the same city where my school is located. I attended a large suburban school for elementary and high school in Western New York. I attended SUNY Brockport for my undergraduate and graduate degrees. My major for my undergraduate work was childhood education with a dual certification in special education and general education. I graduate with a Grade Point Average of a 3.8. I am currently working on my masters on Literacy (birth-6). Through my entirety in the program, which is six semesters thus far, I have maintained a Grade Point Average of a 4.0. I have been teaching as a special education teacher in a fourth grade inclusion classroom for the past two years. I have also been a full time building substitute where I taught grades from pre-Kindergarten to seventh grade. In my past I have had a variety of experiences with students of all ages with a variety of disabilities. I have worked in a variety of teaching environments such as Push-In, Pull-Out, Co-Teach, Self-Contained, and traditional classrooms. I have always found an interest in developing comprehension skills in elementary aged children.

Data Collection Instruments

In the six week long qualitative study, I used a variety of instrumentation to collect data. I first started with an unstructured interview (Appendix D) with two-fifth grade teachers on different activities they did in their classroom focusing on comprehension. I wanted to know what current practices and/or activities teachers had in the rooms and if they seemed to have an impact on developing the children's comprehension skills. I also wanted to ask the teachers if they saw the students enjoying and participating when practicing comprehension skills.

Then I had an unstructured interview with two students in my classroom on my current teaching practices on comprehension (Appendix E). My unstructured interview was a relaxed interview where I asked four overarching questions. After I implemented the new hands-on games and activities I re-interviewed the same children to see if their view points of their comprehension skills had changed (Appendix F). I asked the children what their favorite games or activities were and had them explain why they enjoyed these the most. I also asked them what games or activities helped them the most and had them explain why.

I made informal observations throughout the six week period of the implementation of the new games and activities in my classroom. I watched for participation, interest, and outcome of games/activities. My informal observations were anecdotal notes and records along with a teacher-made observation sheet I created for this specific purpose (Appendix G).

As a baseline assessment, which was given half way through the study to monitor the progression of the focal children, I used the novel, *Frindle* by Andrew Clements. As a formal final assessment, I gave the children a test focusing on the skills they had learned (Appendix H). The test focused on the novel *The Pinballs*, by Betsy Byars which the children had read independently in the classroom. I used the same skills the children had been practiced and developed during the literacy centers and formed a series of short-answer comprehension questions. These questions focused on the skills from the hands-on comprehension games based on the novel, *The Pinballs*. As an informal final assessment (see Appendices I and J), I gave the children a comprehension worksheet based on the skills they practiced during the game to see if they could transfer their knowledge to real-life practices.

Procedure of Study

The layout of my classroom is broken into blocks. In my classroom we have a reading block, four days a week, where we have different stations and centers around the room (listening, creative arts, games, guided reading, independent) focusing on reading skills. These centers are broken into two- twenty minute rotations per day. I used the game station to implement the games and activities I found. I previously modeled, taught through guided practice, and observed the children using the games and activities independently to make sure they were using them correctly. As the children played the games I took anecdotal notes about their participation, enjoyment,

and outcomes of the game chosen to play. I focused my observations on a variety of learners and academic levels. I selected two children to focus on as case studies. I conducted my observations three to four times a week depending on my group rotations for the specific week. I broke apart my study into the following time line:

3.1 Data Collection Procedures

Week	Data Collected
Week One	<ul style="list-style-type: none"> • Schedule and begin teacher interview • Schedule and begin Pre-Interview with both focal children
Week Two	<ul style="list-style-type: none"> • Complete teacher interview • Complete Pre-Interview with both focal children
Week Three	<ul style="list-style-type: none"> • Informal observations of the two focal children
Week Four	<ul style="list-style-type: none"> • Informal observation of the two focal children • Baseline assessment of <i>Frindle</i>, by Andrew Clements
Week Five	<ul style="list-style-type: none"> • Informal observation of the two focal children
Week Six	<ul style="list-style-type: none"> • Final Assessment of skills practiced (both formal and informal) using the novel, <i>The Pinballs</i>, by Betsy Byars • Post-Interview with both focal children

In order to implement my study I needed two weeks to interview my two focal children and interview the teachers. After the initial interviews were concluded I needed three weeks to perform my observations. I also needed one week to complete my informal and formal assessments. I then needed six-eight weeks to perform my analysis of the data I collected. Lastly, I needed an additional four weeks to compound my information and write up my thesis results.

Data Analysis

First, I have a thorough description of the two games I have chosen to include in my study. The first was Connections which was used with a barrel of monkeys (Appendix J). The children needed to state a pertinent connection from the text in order to connect a monkey to his/her chain. The second game was called Why, oh Why? (Appendix I). In the game there was a paperclip spinner with the “5 W’s” labeled. The children needed to ask a question about the text to another child which would build on making an inference and drawing conclusions. I focused my study on these two games and observed the interactions and outcomes which the games had on the children’s reading comprehension. The description will assist me in answering the first research question: *what type of reading and writing activities do the games contain?*

Then, I looked at my observation notes of the children while interacting with the games and recorded what I noticed. These notes along with my pre-interview

questions helped me to answer my second research question: *how do the students become engaged in the games?*

Next, I used my final assessment results and post-interview questions to answer the third research question: *in what ways do these games support or hinder reading comprehension?* Lastly, I looked at the observation forms, the pre and post-interviews with the focal students, and the assessment results to answer my last research question: *how do the games affect other reading and writing activities during the reading block?*

Reliability and Validity

Triangulation increased the reliability and validity of the study. I used multiple domains to support my investigation of hands-on activities and its effect on reading comprehension. I analyzed the information across multiple domains including, unstructured interviews for professionals, pre-interview questions, post-interview questions, observations, and a final assessment.

Limitations

In any type of research, there will understandably be limitations. These limitations may occur during formal and informal interviews, observations data collection strategies, data analysis, interpretations and representation of data collected.

Interviews were essential in my study and provided an insight into which strategies have and have not worked in the past; however, they were susceptible to interpretation during recording and analysis. The questions I asked both the teachers and focal children remained open-ended. I also planned to hold the interview as unstructured to make the participants comfortable and ensured the interviews were into the direction of the participants.

There were also limitations to any observations. Children may have altered their behavior and actions when they had an adult recording their activities nearby. Though I have taught the students when they were in fourth grade, they may still have adjusted actions and conversations under the observations.

Summary

This study was designed to look at hands-on games and activities and determine if they could help build and improve comprehension skills. The school where the study was conducted focused on student-centered learning experiences which were provided by high academic standards, provided quality instruction, promoted a safe learning environment for academic, social, emotional, and physical development, and reinforced the value of parent participation and community support. In the classroom, the literacy block was broken into four stations which the students rotated between daily. At one of these stations I implemented the hands-on games I used in the study. The two focal children were on different levels in reading comprehension; on grade level, and above grade level. In the six week long qualitative study, I used a variety of instrumentation to collect data. I used unstructured interviews for professionals, pre-interview questions for focal children, post-interview questions for focal children, observations, a baseline assessment, and a final assessment. I used the findings to answer my research questions.

Chapter Four

Interpretation of Data

Introduction

Considering the technology our students are exposed to on a daily basis, it makes sense that students exhibit difficulty remaining focused on worksheet-based reading comprehension tasks independently. Getting children to read is one thing but, building comprehension skills is a different obstacle. Based on this information, I performed a six-week long qualitative study focused on building skills in comprehension using hands-on activities. I observed and analyzed the work of two fifth graders. In the process I implemented two reading-center games focused on building comprehension skills. My overall objective was to determine if hands-on games or activities had an impact on building comprehension skills.

In the research study, I examined how hands-on reading games and activities affect fifth graders' reading comprehension. This study involved looking at four research questions. The first research question looked at the reading and writing activities involved in both games. The second research question focused on the level of engagement the children exhibited when interacting in the games. The third research question investigated ways the games supported or hindered reading comprehension. The last research question examined how the games affected other reading and writing activities during the reading block.

Research Question 1: What kind of reading and writing activities do the games contain?

Game 1: Connections

Reading in the Game Connections

While observing the two hands-on reading comprehension games I learned there is a great deal of reading and writing implemented throughout the use of the games. The first game was called Connections which was used with a barrel of monkeys (Appendix J). The children needed to state a pertinent connection from the text in order to connect a monkey to his/her chain.

Though the reading was not implicit during the game, the children needed to agree upon a text to use. The selection of text was important in determining the kind of reading skills the children exhibited based on the content presented. For example, if the children selected an informational text, their reading would be slower so they could properly interpret and comprehend the information (Harvey, 1998). If they had chosen a fictional or narrative piece to read, their reading would be faster to maintain meaning and comprehension in the text. “Narrative texts have a common structure and also use a story grammar (setting, plot, characters, conflict, etc.)” (Fisher, Frey &, Lapp, 2008). Depending upon the text they selected, the pace, interpretation, and

word solving strategies would vary. “The text structure refers to the way the writer ‘builds’ and organizes a text” (Fountas & Pinnell, 2009).

In the game Connections, the participants needed to connect the selected text to themselves, other texts, or the world. Fountas and Pinnell (2009) talk about the importance of genre and form when building connections. They state, “Readers familiar with a genre can make connections to other examples of the genre. These connections can enrich their comprehension and their appreciation of the writer’s craft. By reading lots of examples [of a genre], young children [can] learn what to expect” (Fountas & Pinnell, 2009, p. 98-99).

Literacy Proficiency Levels in the Game Connections

Once the text was selected, it was crucial to determine the proficiency of the reader who interacted with the games. Proficiency levels take into consideration how much the child reads in and out of school. Fountas and Pinnell (2009) are concerned with the limited amount of experiences in hearing and discussing books at home. The lack of teachers reading aloud in school also proves to severely deprive students in making connections to different genres (Fountas & Pinnell, 2009).

Depending upon the text they selected, the pace, interpretation, and word solving strategies will fluctuate. “The text structure refers to the way the writer ‘builds’ and organizes a text” (Fountas & Pinnell, 2009). Literacy proficiency levels

aided the students in comprehending the text. Efficient and experienced readers intuitively determined the skills they needed in reading the text structure based on their past experiences with the genre.

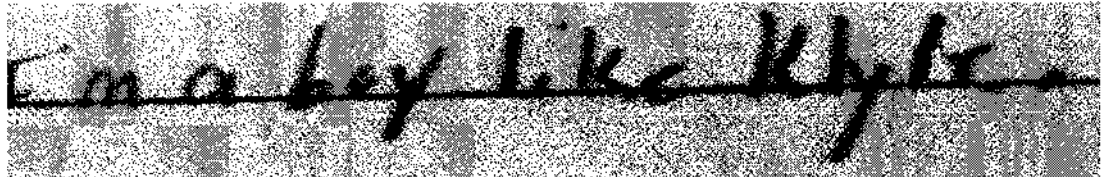
The background information and schema the child brought to the game also impacted their proficiency level. Fountas and Pinnell (2009) state, “Readers build their knowledge of the world through direct experiences and by reading about other people’s experiences” (p. 99). Children who do not have direct experiences, from either the world or a text, had a difficult time comprehending the material, thus made it a struggle to build connections.

Writing in the Game Connections

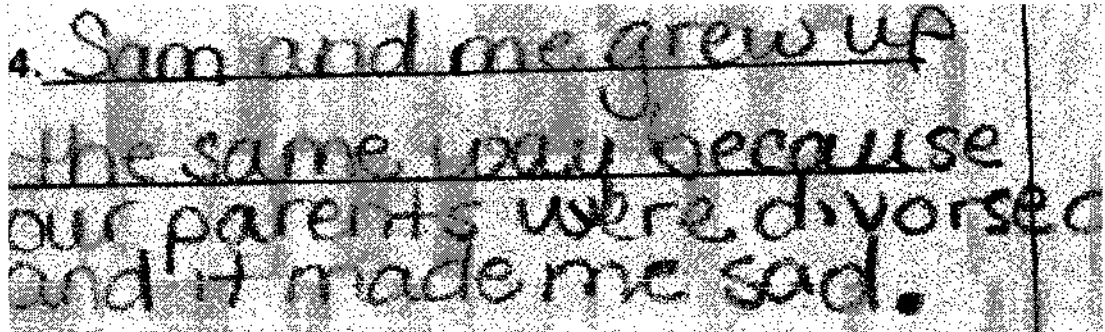
In the game Connections, the children had to write out their answers on a graphic organizer. In order to receive a point for their connection to add a monkey, the child must have had correct capitalization, punctuation, and grammar. In the beginning when I modeled to the children how to play the game, I kept my connections simple. Sometimes I did not include the characters names or locations. Towards the end of the guided practice the children began to intertwine their use of vocabulary from everyday life to the words the author selected to use. The children took the author’s common vocabulary used throughout the text and brought them into their writing of their connections. Lucy Calkins (1994) states, “... learn to listen for the voice of a story, to look for language...” (p. 259). As the weeks progressed while

the children played the hands-on games, their writing became more sophisticated and focused more on the literature being read (See Illustrations 4.1 and 4.2).

4.1: Week 1 Simple connection



4.2: Week 4 Complex connection



Strategies to Use in the Game Connections

I observed different strategies the children used while playing the game Connections. In the beginning the children compromised on genres and text they were both familiar with reading. This way they both had a fair chance at making connections. However, as the weeks progressed the children began to select texts they knew their opponent would struggle with. For example, Megan knew John did not read genres focused on romance. As a strategy she purposely used texts in this

genre because she knew John struggled to make connections to the characters, thus increased the chances of her winning.

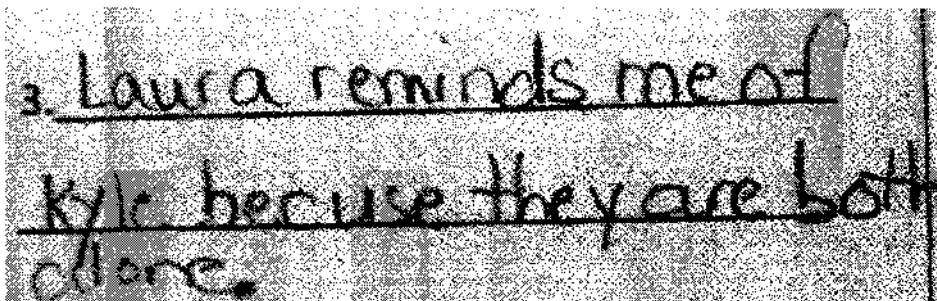
Another strategy I observed is the change in connections they were forming. In the beginning, the children formed basic connections to the text. Mostly the connections were text to self (See Illustration 4.3).

4.3: Basic Connection Text-to-Self



However, as the weeks progressed I saw changes in the way they formed their connections to move away from basic connections to becoming more deeply rooted in the world and other texts (See Illustration 4.4).

4.4: Deeper Connection Text-to-Text



Though the goal of the game was to see who can connect their monkeys the fastest and touch the ground first, the children began to change their connections. The children began to try and out-do their opponents last connection. They tried to make the connections more complex such as text-to-world and text-to-text.

Game II: Why, oh Why?

Reading in the Game Why, oh Why?

The second game was called Why, oh Why? (Appendix I). In this game there was a paperclip spinner with the “5 Ws” (Who, What, Where, Why, When) labeled. The children needed to ask a question about the text to another child which built on making an inference and drawing conclusions. Selection of text in this game was also vital. Fountas and Pinnell (2009) talk about the importance of genre and form of a text and its impact on all types of readers (struggling, proficient, and advanced). Children needed to be paying attention to the structure and features of the text to assist them in comprehension. The vocabulary in the selected text also impacted the success of the game. Children needed to be able to solve unknown words, but also identify the meaning of the words (Fountas & Pinnell, 2009). If the children selected a text too difficult to maintain comprehension they would struggle to play the game correctly.

In order for the children to be successful in the game they must be able to identify the overarching theme and understand the important ideas of the text (Fountas & Pinnell, 2009). The players needed to be able to interpret information and follow the story in order to compose questions to stump their opponents. Fountas and Pinnell (2009) stress the importance of students listening, reading and talking about a text to recognize important ideas.

Literacy Proficiency in the Game Why, oh Why?

Literacy proficiency was also important in this game. The children needed to be successful when reading the text in order to develop higher level reading comprehension questions. To be a proficient reader the child must have exhibited certain skills. Fountas and Pinnell (2009) discuss a variety of strategic actions the readers should be involved with. For example, maintaining meaning and monitoring your understanding assisted the child in forming comprehension questions based on thinking within the text skills.

Struggling readers must pay careful attention to the book they have selected. If the child was not reading at the level of the text he/she must apply skills they used when reading at an instructional level. They must have determined important information the text is giving by looking at the text features. Text features such as headings, captions, illustrations, boldface words, graphs and diagrams can aid the

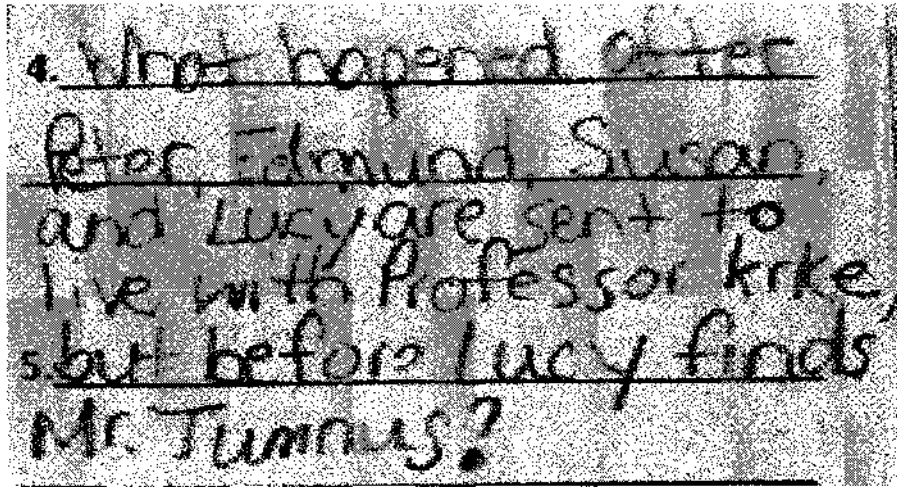
child in developing comprehension questions to stump their opponent (Fisher, Frey, & Lapp, 2008).

The goal of the game Connections was to prepare the students to develop skills to infer and draw conclusions based on a text. To be able to infer the reader must think beyond the text to look at motives and feelings a character exhibits (Fountas & Pinnell, 2009). Children also needed to be able to discuss the text through their analysis of the material. To accomplish this, proficient readers must have thought and reflected about the text.

Writing in the Game Why, oh Why?

Writing was also important in the hands-on game Why, oh Why. The children had to score each other's questions based on writing skills. They must have had correct punctuation, capitalization, and grammar. In order to win this game the children needed to form a question to ask their opponent, while their opponent must answer it correctly. In the beginning of the implementation of the game the children asked simple questions, "Who is the main character?" or "Where did the story take place?" However, as the weeks progressed the children learned if they "spice up" their questions, they can stump their opponent and receive a point, thus improving their chances of winning. The children's questions began to shift into more complex wording. An example is when Megan asked John a question about the novel, *The Lion, the Witch, and the Wardrobe* (Lewis, 1950) (See Illustration 4.5),

4.5: The Lion, the Witch, and the Wardrobe



The level of developing this question was much higher than the previous basic questions. This question has the children focusing on sequencing in comprehension. The question also entails several character names which supports reading comprehension. The higher the level of formulating questions, the higher the level of vigilance in their reading comprehension.

Strategies to Use in the Game Why, oh Why?

As I observed the children week after week play the game Why, oh Why, I began to notice strategies they used to defeat their opponent. The first strategy I noticed was the change in the selection of text. In the beginning, the children would agree upon a text to use during the games. However, as the weeks progressed the children began to take turns selecting the text. They realized if they chose a text they

were more familiar with, their opponent would struggle to develop questions. For example, John knew Megan struggles with comprehending informational text, so he continued to choose non-fiction texts. On the other hand, Megan knew John did not like the series the *Magic Tree House*, by Mary Pope Osborne, so she continued to choose those texts. Selecting a text one partner excels in, but that the other partner struggles with proved to be a successful strategy.

The second strategy I witnessed was the development of higher level questions. In the beginning their questions were simple and basic (See Illustration 4.6)

4.6: Basic Question

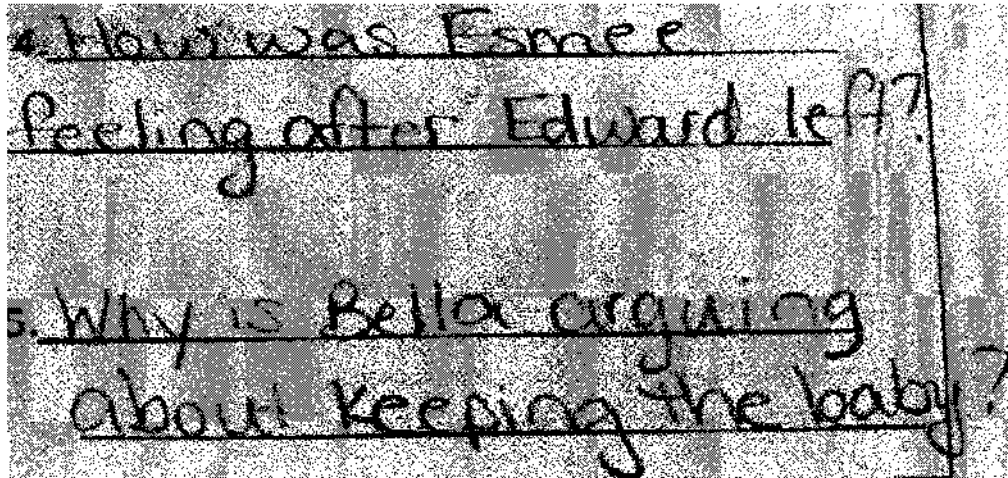
Question:

What is the main character?

Where was the setting?

However, as the weeks progressed, the children discovered if they changed their wording and inserted different words, they could score higher on their question, thus winning the game (See Illustration 4.7).

4.7: Complex Question



Interpretation of Data

The games Connection and Why, oh Why were deeply rooted in reading and writing. John and Megan selected books from a genre they were familiar with and interacted with one another. They also had to keep the text structure in mind when choosing a book. In the beginning, the children only asked questions based on the information found in the paragraphs. However, towards the end of the study, John and Megan began to ask questions based on information found in captions and titles. The children read the book and developed connections and questions based on the information they had read. John and Megan were able to incorporate character names, places, language, and details from the text as their interactions with the games progressed. As their participation with the games proceeded, their connections moved away from basic connections to becoming more deeply rooted in the world

and other texts. These connections also moved away from text-to-self to text-to-world and text-to-text.

At the conclusion of the six weeks of interacting with Why, oh Why, John and Megan were also able to draw conclusions and infer about situations based on events from the text. They were able to refer back to events in the text and formulate what they thought someone was feeling based on the information or why they thought someone would do something. John and Megan also focused on sequencing in comprehension when building their questions to ask to one another. The children developed new strategies and refined old strategies to assist them in playing the games successfully. This showed John and Megan's ability to use strategies to assist in maintaining comprehension while reading.

Research Question 2: How do the students get engaged in the games?

Introduction

As I observed Megan and John playing the two games, I noticed some trends as they became engaged in the hands-on games. First, there were distractions throughout the use of the games. Some distractions came from one another, peers in the classroom, daily events, or the selected text. Megan and John attempted to avoid some of the distractions as best they could, while other times they gave into temptation. The second trend I noticed were changes in Megan and John's interest levels. The amount of effort Megan and John would put into the games depended on their peers around them, their moods, or the selected text chosen to play the games.

Classroom

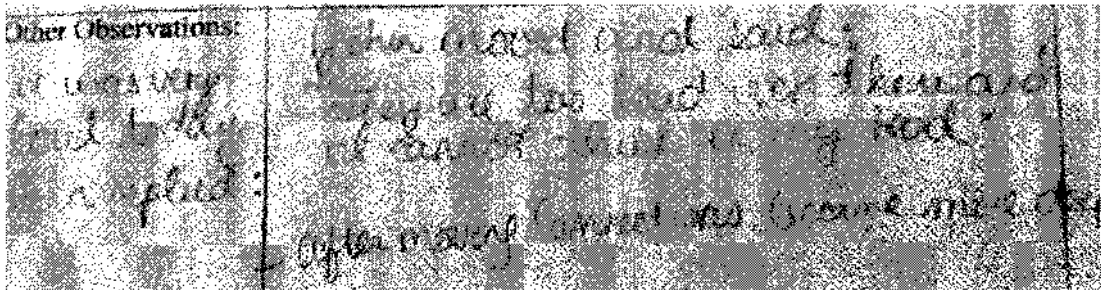
The English Language Arts block was broken into four learning centers. There was an independent reading center where the children selected books on their level, logged their reading, and responded to prompts. The second station had two guided reading groups with both teachers focused on skills the specific groups needed in order to be successful in reading and comprehension. The third station was creative arts where the children drew and described a character and/or designed a book jacket independently. The fourth station had hands-on reading comprehension

games where children worked in partners while completing activities. These games focused on a variety of skills from basic (5 W's) to higher level thinking such as inference.

Distractions impacting Engagement

Megan and John had to deal with several distractions while they were playing the hands-on games. They would try to avoid distractions and minimize the amount of distractions around. For example, while John and Megan played Connections they decided to move their game to a different corner in the room. I asked John why he decided to move their game and he replied with, "They are too loud over there and I can't think in my head" (See Illustration 4.8).

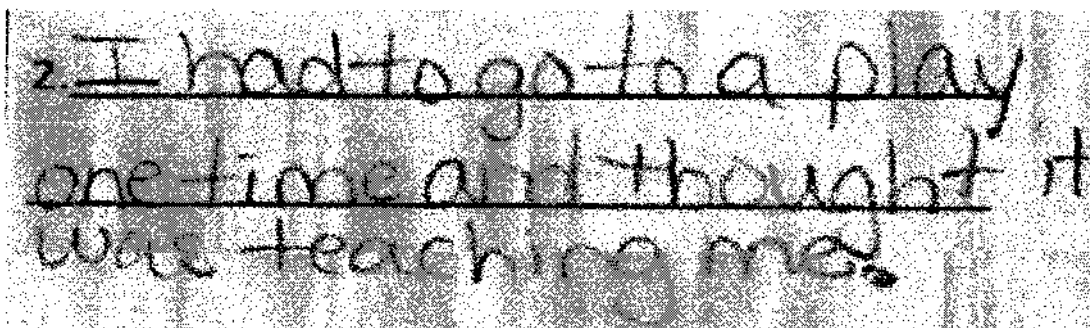
4.8: Loud Comment



When they sat down in their new location and continued to play, their responses to Connections were much more detailed. In the beginning their connections being

made were vague and lacked in depth. However, after they moved to their new location their connections became deeply rooted in the text (See Illustration 4.9).

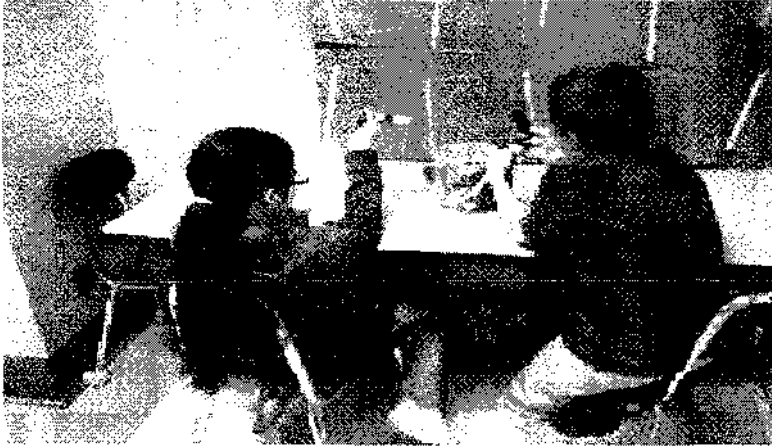
4.9: Deeper Connection



This provided evidence for me to believe they both tried to keep their engagement levels high during their interactions with the games.

Another observation I had which was based on a distraction was when Megan and John played Why, oh Why together. They were sitting at two desks across from one another, but were having a difficult time hearing the questions they were asking. During the reading block there were other small groups and activities around them which made it harder for them to hear each other when they were sitting across from each other in desks. After a few minutes of them struggling to hear one another they decided to move to a table in the hallway and sit side by side (See Illustration 4.10).

4.10: John and Megan



John and Megan moved to a table in the hallway which helped to minimize the distractions around them since they were closer to one another and away from distractions. When I asked Megan why they decided to move she said, “I couldn’t hear John because the red group was so loud. I moved to the table so I could sit closer to John and hear his questions better so I can answer them right.”

Another distraction I observed was in Megan and John’s selection of text. They had chosen a book titled, *How I Became a Pirate* by, Melinda Long and David Shannon. Throughout the novel the main character talked about the different things a pirate partakes with in life. During the game Connections, Megan made a connection to the movie, “Pirates of the Caribbean.” After she made this connection, the rest of the time allotted for the game (twelve minutes) was dedicated to talking about the movies and the actor Johnny Depp. This proved to be a complete distraction for both

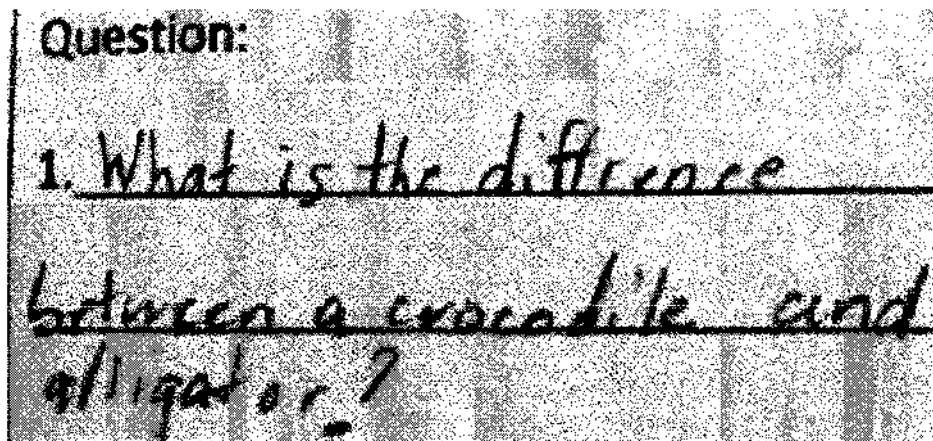
John and Megan. They could not bring their conversation and engagement back to the hands-on game, Connections.

The last distraction I observed of Megan and John having impacted their high interest level was when they were preoccupied with their daily lives. John's birthday was over a weekend in January. When he returned to school and it was time to play the hands-on games, he was so intent and focused on telling Megan about his birthday. For the twenty minutes of time they were allotted to play the games, John told Megan about his birthday party, who was in attendance, the theme, the decorations on the cake, and the presents received. When I asked John afterwards how the games went that particular day he responded with, "We didn't have time to play today because I was telling Megan about my eleventh birthday!" There was also another time when Megan was in an argument with another girl from class and could not focus on playing either game with John. She instead used the time to decompress her thoughts and frustrations to John about the dilemma with her friend. These distractions impacted Megan and John's engagement levels while playing the hands-on games, Connections and Why, oh Why.

Interests impacting Engagement

There were also high engagement levels exhibited by Megan and John when encountering something with a high interest level. If the topic or genre of the novel they selected was interesting to them, they would exhibit more effort and stay focused longer. Megan and John both seemed interested in books about mystery and animals. During one observation Megan and John decided to use the information text titled *Crocodiles and Alligators*, by Seymour Simon. The children enjoyed reading the informational text and were building great questions for the hands-on game, Why, oh Why. John created great questions comparing the two reptiles (See Illustration 4.11).

4.11: Crocodile and Alligator Question

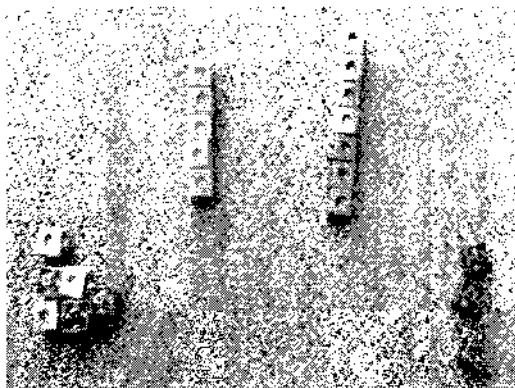


John asked Megan, “What is the difference between a crocodile and an alligator?” In order for Megan to answer this question correctly, she would have had to comprehend the difference between the two crocodiles while reading. While the children were

playing the game they were also having side conversations about what they already previously knew about alligators and crocodiles.

Another example of Megan and John having a high interest level which impacted their engagement was when they decided to use building blocks instead of connecting monkeys together in the game Connections. They seemed to be getting bored of playing the game Connections with the same props (monkeys), so they decided to trade in the monkeys for math manipulatives they were using earlier in the day, snap cubes. They each chose colors to use and separated those colors from the rest available (See Illustration 4.12). When I asked them about their choice in colors they replied with “Megan chose red because she’s a girl and John chose blue because he’s a boy.” They decided the person who could essentially build the highest tower based on the amount of connections they could make in the twenty minutes provided won. This twist on the game completely engaged and motivated the children to participate.

4.12: Snap Cubes

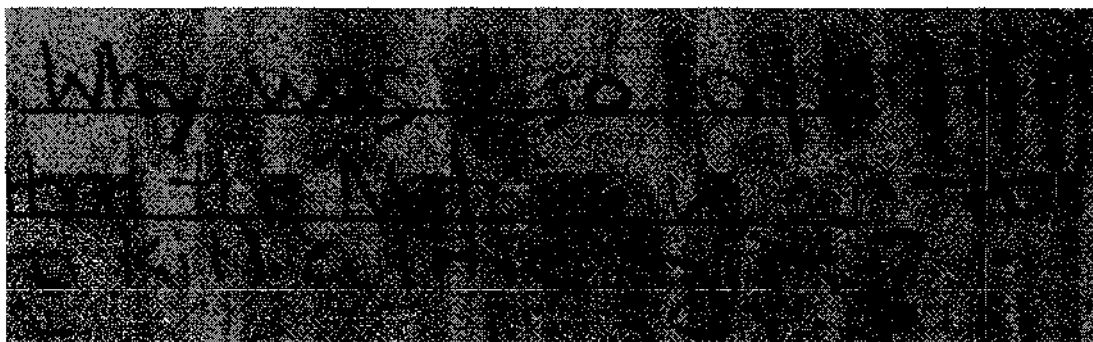


Competition impacting Engagement

Megan and John also had a high level of engagement when they were focusing on the competition aspect involved in playing the two games. They are both competitive children. John showed his emotions in a more extroverted physical manner. For example, when John won he jumped up and down shouting, “I won! I beat you Megan! Haha!” On the contrary, when Megan lost she expressed her feelings in a more introverted manner. For example, when Megan won a game she smiled and walked over to their score board, which entailed placing a sticker in the column when you won the game, and chose a sticker saying “Number 1” to put on the board.

Another observation where I viewed competition was during Megan and John playing Why, oh Why. The previous day, John beat Megan while playing the same game and was now reminding Megan of his victory. John lead Megan by a point and began to tantalize her about his previous accomplishments, “I’m going to cream you again, just like I did yesterday!” However, instead of defeating Megan’s efforts, this motivated her to think of a higher level question to stump John. The game was based on the novel, *The Diary of Anne Frank*. Megan asked John, “Why was it so important that the Nazis wanted to kill a little girl?” (See Illustration 4.13).

4.13: *The Diary of Anne Frank*



John could not give his answer based on previously learned knowledge about World War II. Thus, Megan won the game with her highly developed question.

The last observation I witnessed had the questions becoming more difficult. In the beginning weeks of introducing the games the questions were basic, “Who was the main character?” or “What happened at the end of the book?” However, as the weeks of playing the games progressed the questions became higher level thinking based on the Bloom’s Taxonomy (Bloom, 1956). They began to ask one another harder questions to try and stump their opponents. They wanted to win and realized the harder the question, the harder it was to construe a correct response. For example, while playing Why, Oh, Why John chose to use the novel *Frindle* by Clements. John asked Megan, “What type of school did John go to?” This was not explicitly given in the reading. Instead, Megan had to think about the details she learned about the school and infer the type of school John attended. Due to the higher level thinking and difficulty of the question, Megan responded incorrectly giving John the lead. As a response Megan asked John a higher level comprehension question as well. Megan

asked, “Why did Nick write the letter at the end and make it look like a fifth grader wrote it?” John had to infer the answer and think about the evidence provided from the text. Unfortunately, John answered the question incorrectly which gave Megan the win to the game.

Competition had the children trying to outdo one another. They were constantly assessing their own questions and figuring out how they can word them to make their opponent struggle with a response. On the contrary, when answering the questions they listened to what the question was asking and went back to the text for support. They developed a new strategy while playing, when the text is in front of you, utilize the resource.

Interpretation of Data

John’s and Megan’s engagement levels increased as the weeks progressed. As any activity in the classroom, there were some distractions. Other activities and students in the classroom seemed to draw the attention of Megan and John. However, half way through the study John and Megan began to separate themselves from the distractions in the classroom so they could concentrate on their hands-on reading comprehension games.

The idea of a competition engaged John and Megan for the entire twenty minutes of the reading block. They would try to outdo one another by making their

connections more deeply rooted. Their connections became more concentrated in text-to-text and text-to-world, rather than text-to-self. Their actions and discussions were more competitive. When one would win he/she would jump up and down to celebrate and make comments about how they beat their opponent. In the hands-on game, Why, oh Why, the questions became higher level thinking based on the Bloom's Taxonomy (Bloom, 1956). They began to ask one another harder questions to try and stump their opponents. They wanted to win and realized the harder the question, the harder it was to construct a correct response.

There were also high engagement levels exhibited by Megan and John when encountering something with a high interest level. If the topic or genre of the novel they selected was interesting to them, they would exhibit more effort and stay focused longer. There are many work samples of John and Megan choosing books they were familiar with and focusing on genres of interest. When the children were more interested in the book selected, their questions and connections displayed higher level thinking.

Distractions in the classroom, levels of interest, and competition were all factors in the engagement level the children showed while participating in the hands-on games. When the children's engagement was high their participation level would increase.

Research Question 3: In what ways do these games support or hinder reading comprehension?

Introduction

I had an unstructured interview with two students in my classroom on my current teaching practices focusing on comprehension. My unstructured interview was a relaxed interview where I asked four overarching questions. I asked Megan and John how they understood a book while they are reading. I also asked about their likes and dislikes of current practices and if they used these strategies while reading and/or testing. After I implemented new hands-on games and activities I re-interviewed Megan and John to see if their view points of their comprehension skills had changed. I asked the children what their favorite games or activities were and had them explain why they enjoyed these the most. I also asked them which games or activities helped them the most when reading and had them explain why. I introduce the data from an interview with John in the following section:

John's Pre-Interview

Question 1: How do you understand a book when you are reading?

"I just read it and think in my head. I see it in my head."

*Question 2: What do you like about reading comprehension?
What do you not like?*

"I like reading books. I like non-fiction books."

"I don't like reading fiction books."

Question 3: When you are reading and answering questions what do you do when you are stuck with answering a question?

"I skip the questions and go back to it. (I) go back and read the story."

Questions 4: What do you do on a test when you do not know the correct answer?

"I ask for help. I ask someone else. I sometimes guess."

John's Post-Interview

Question 1: How do you understand a book when you are reading?

“I picture it in my head and make up the characters. I go back to pages and read them again if I’m stuck.”

Question 2: What was your favorite game or activity? Why?

“I liked Who, oh Why the best. It was a lot of fun when I was trying to beat Megan. I won a lot of games because I asked really hard questions to her that she would miss because she wasn’t paying attention when she was reading”

Question 3: What strategies do you use while reading independently or taking tests?

“I go back to the story when I’m stuck. I find the page it happened and read it again.”

“I can ask questions about the characters in my head like I’m trying to trick someone.”

Question 4: Do these games help you when testing? If so, which ones?

“Yes. Why, oh Why was a lot of fun and I can ask hard questions to Megan to trick her. If she didn’t pay attention when she was reading, she wouldn’t be able to answer my question because they were really hard.”

Interpretation of Interviews

John's approaches to reading have altered after his experiences while playing the hands-on reading comprehension games. He now monitors his reading for comprehension. For example, before John interacted with the games, he would try to picture the book in his head to help monitor comprehension, however, after playing *Why, oh Why* and *Connections* he replied with, "I picture it in my head and make up the characters. I go back to pages and read them again if I'm stuck." He used this strategy often when he was trying to form difficult comprehension questions for *Why, oh Why*. He would open the book and look through the pages to find parts of the text he wanted to reread for comprehension. John is now visualizing and rereading the text for support in monitoring his reading comprehension.

John also expressed a new skill he acquired to monitor his comprehension, questioning. John said, "I can ask questions about the characters in my head like I'm trying to trick someone." He developed this skill from interacting in the game *Connections*. John now looks at character development when reading and asks himself questions about the characters actions and thoughts. John also understands the importance of paying attention to the text when reading. This is how he developed his questions to stump Megan, by asking intricate questions which required details from the text.

Comparing John's pre-interview with his post-interview I saw a substantial growth and change in the refinement of his reading comprehension skills. John now reads for meaning by asking himself questions, rereads the text for understanding and

clarification, visualizes the story in his head, and refers back to the text as a resource for misinterpretation.

I introduced the data from an interview with Megan in the following section:

Megan's Pre-Interview

Question 1: How do you understand a book when you are reading?

“I picture it in my head and predict.”

***Question 2: What do you like about reading comprehension?
What do you not like?***

“I like when we discuss books. On reading tests the multiple choice questions as okay. I don't like when I have to write a lot.”

Question 3: When you are reading and answering questions what do you do when you are stuck with answering a question?

“Sometimes I go back to the book.”

Questions 4: What do you do on a test when you do not know the correct answer?

“I go back to the book. If I still can't find it (the answer) I just guess.”

Megan's Post-Interview

Question 1: How do you understand a book when you are reading?

“I watch it like a movie in my head and ask questions.”

Question 2: What was your favorite game or activity? Why?

“Why, oh Why because it was fun to play and I got to get points when I asked a hard question that John couldn't answer and then win.”

Question 3: What strategies do you use while reading independently or taking tests?

“I have a movie in my head of the book. When I get confused I go back to the page and ask a question. I think about other books like the book I read and I pretend I can be the character in my head.”

Question 4: Do these games help you when testing? If so, which ones?

“I like Connections because I can be the same as the people in the book, but sometimes I wouldn't do the things the people do. I like when I am the same as a character.”

“Why, oh Why was fun to play because I got to beat John. I found hard questions in the book to ask him that I knew he wouldn't remember.”

Interpretation of Interviews

Looking at Megan's responses from her pre-interview to her post-interview, I noticed significant growth and refinement in her strategies she used to monitor her reading comprehension. In her pre-interview she said, "I picture it in my head." However, in her post interview she expanded on this strategy saying, "I watch it like a movie in my head and ask questions." Megan visualized the characters and the scene in the book which assisted her in monitoring her reading comprehension. The characters go through the motions in her head which helped her keep track of who is doing what and how it looked. She also asked herself questions in her head when she did not understand something. Questioning was a useful strategy to use when monitoring reading comprehension.

Megan also talked about her changes in reading comprehension strategies. Her repertoire of strategies had dramatically increased. In her pre-interview Megan said, "I picture it in my head and predict and sometimes I go back to the book." In Megan's post-interview she said, "I have a movie in my head of the book. When I get confused I go back to the page and ask a question. I think about other books like the book I read and I pretend I can be the character in my head." Megan used the text as a reference to go back to when she was confused about a topic or character. She now used text-to-text connections and text-to-self connections to monitor comprehension.

Megan was also comparing and contrasting the novel to other novels and pulling information from her life related to the characters and events. These text-to-self connections helped Megan relate to the characters' feelings and reasons for their actions. Megan preferred to play the Connections game because, "I can be the same as the people in the book, but sometimes I wouldn't do the things the people do. I like when I am the same as a character." Megan related to the characters throughout the text which assisted her in maintaining meaning while reading.

Interpretation of Data

Megan's and John's interactions with the games Connection and Why, oh Why has dramatically altered their strategies used for monitoring reading comprehension. In the pre-interview they both referred to using a couple strategies, but the description of the strategies were vague. In the post-interview the strategies became more refined and detailed in its use to assist in monitoring reading comprehension. Megan and John also described new reading comprehension strategies they developed after interacting with the hands-on comprehension games in their post-interview. Megan began to use text-to-text connections, text-to-self connections, visualization, rereading, and using the text as a resource. John also developed new strategies in monitoring his comprehension. John now rereads the text, visualizes events and characters, uses the text as a resource, and makes text-to-self connections. The games, Connections and Why, oh Why, have introduced and refined reading comprehension strategies for Megan and John to utilize.

Research Question 4: How do these games affect other reading and writing activities during the reading block?

Introduction

I wanted to progress monitor John and Megan's progression through the implementation of the hands-on reading comprehension games. After I conducted the pre-interview with both participants, I provided the children two weeks to participate in both games, Connections and Why, oh Why. After having two weeks to practice these skills, I distributed a baseline assessment using the novel *Pinballs*, by Betsy Byars. Looking at the data, I could see the beginning stages of higher level thinking in some questions. However, other responses to the questions were more vague and basic. I analyzed these data to find common themes and strategies.

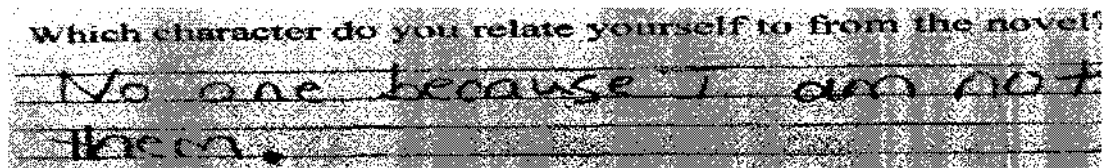
After I completed the baseline assessment, I provided the students with another two weeks of practice interacting in the two hands-on reading comprehension games. Throughout these weeks I completed informal observations in how John and Megan were interacting in the games. At the conclusion of a four week long interaction with the games and practicing these skills I conducted a final assessment using the novel *Frindle*, by Andrew Clements. After I looked at these data I could see how the children's thinking had become deeper and their answers now supported higher level thinking.

Baseline Assessment: Pinballs

I decided to distribute a baseline assessment to track the amount of progress John and Megan were making throughout the implementation of the games. The baseline assessment included questions focused on every skill the two students were practicing. For example, in the hands-on reading comprehension game Why, oh Why, Megan and John focused on building questions containing the 5 W's (who, what, where, when, why) as key words. The baseline assessment had one question focused on each key word, who, what, where, why, when. There was also a question where the students had to make a connection from the text. This skill was practiced in the game Connections. The purpose of the baseline assessment was to see the progression the students are making thus far in their interactions with the hands-on reading comprehension games and the skills they focused.

The first question focused on building connections in the text. It states, "Which character do you relate yourself to from the novel?" Megan did not make a connection to any character in the novel. She responded with (Illustration 4.14),

4.14: Megan's Connection

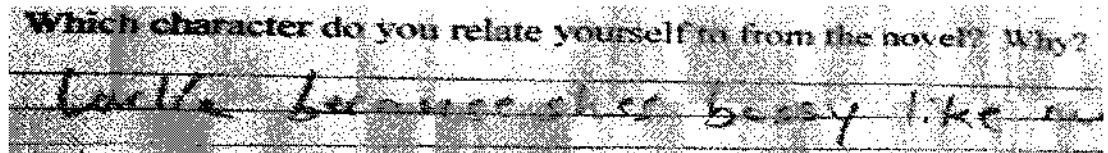
A photograph of a student's handwritten response on lined paper. The question at the top reads, "Which character do you relate yourself to from the novel?". The student has written, "No one because I am not them." in cursive handwriting. The paper has horizontal lines and a dotted midline.

Which character do you relate yourself to from the novel?
No one because I am not
them.

John however, made a basic connection with the novel. He enjoyed and connected to the character Carlie because they shared the same personality trait of being bossy

(Illustration 4.15). Though this is a basic connection, John is able to think about the characters and name their characteristics and traits. He then took these characteristics and traits he had named and compared them to himself. In this case John found similarities between himself and the character from the novel.

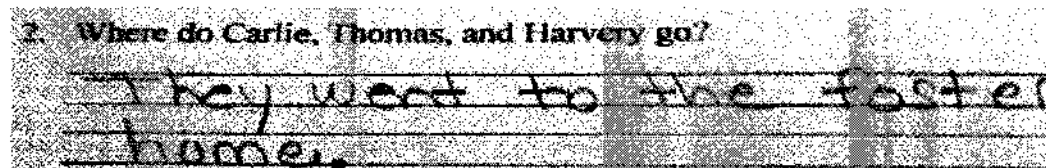
4.15: John's Connection



Which character do you relate yourself to from the novel? Why?
Larkin because she's busy like me

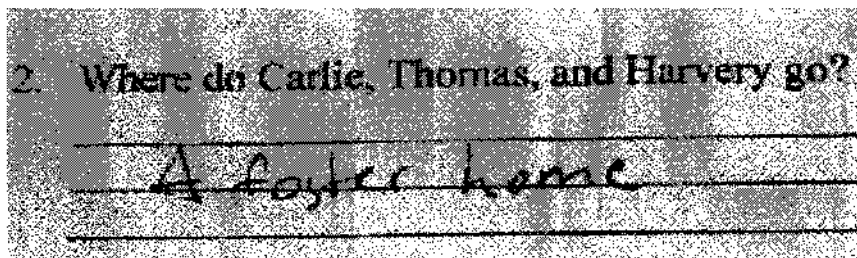
Questions two through six focused on the skills learned from the hands-on reading comprehension game Why, oh Why. The second question was literal about events in the novel. It asked, “Where do Carlie, Thomas, and Harvery go?” Megan and John were both able to respond to this question successfully. Megan wrote her response in a complete sentence (Illustration 4.16), where John simply wrote his answer (Illustration 4.17). Their ability to recall factual information from the text was pertinent in answering this question correctly.

4.16: Megan's Question Two



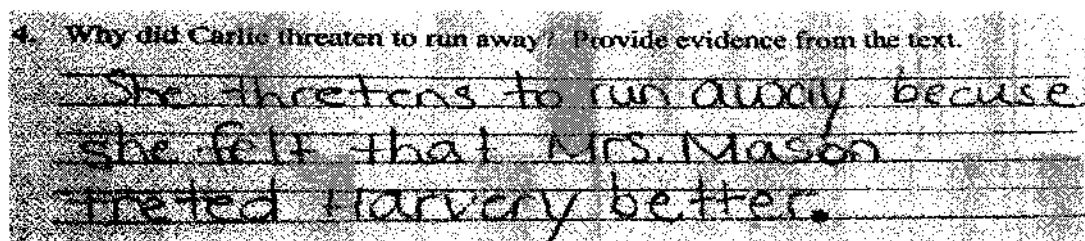
2. Where do Carlie, Thomas, and Harvery go?
They went to the foster home.

4.17: John's Question Two

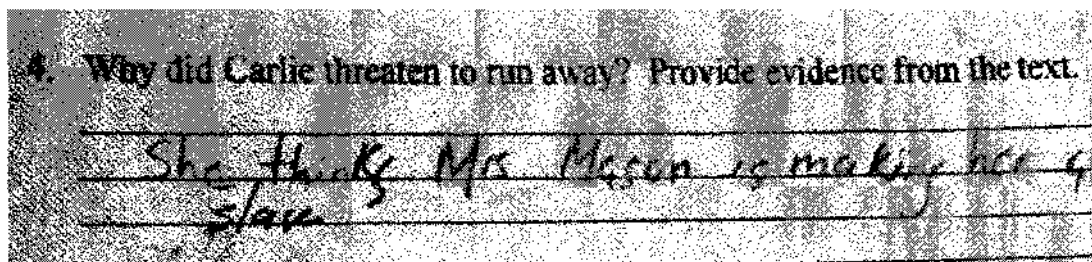


The last question in the baseline assessment which showed some deeper level thinking was question four. Question four stated, “Why did Carlie threaten to run away? Provide evidence from the text.” John and Megan both answered the question correctly, but they both approached it from a different point-of-view. Megan responded by comparing Carlie to the way Mrs. Mason treated Harvery (Illustration 4.18). In comparison, John responded by solely looking at how Mrs. Mason treated Carlie (Illustration 4.19). Both students came to the same conclusion, but reached this conclusion in different ways.

4.18: Megan's Question Four



4.19: John's Question Four



Interpretation of Data

After I looked at the data collected from the baseline assessment I could see John and Megan beginning to apply the skills they had learned through participating in the hands-on games. John was able to make a connection to a character by determining the character traits and comparing them to his own traits. Megan was not yet able to find a connection with a character in this novel. I monitored her ability to make connections to the text through informal observations and again in the final assessment to see if there was progression made.

Megan and John were both able to answer the questions focused on the hands-on comprehension game, Why, oh Why. Though they were both able to answer the literal questions without apprehension, they had different points-of-view in answering a question asking why. They had different perspectives to this answer because it was open to their own personal interpretation. They had to think about the novel and how they comprehended the text, characters, and events to come to a conclusion. I was pleased to see them both reach the same conclusion by taking different paths.

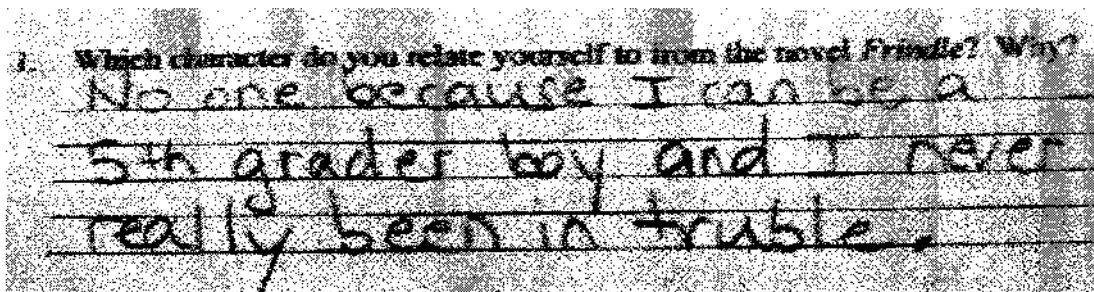
Final Assessment: Frindle

John and Megan had four weeks to participate and interact in the two hands-on comprehension games to develop and strengthen strategies to assist in building reading comprehension. At the conclusion of the four weeks they were given a final assessment. The final assessment was based on the novel *Frindle*, by Andrew Clements. The assessment had seven questions which each focused on the skills the games entailed. For example, question one developed from the hands-on game Connections where the child had to relate themselves by making a connection to a character in the text.

The remaining six questions focused on skills developed from the hands-on game, Why, oh Why. These questions were asked within the 5 W's framework, who, what, where, why, and when. Three of the question could be answered through evidence in the text. To be successful with these three questions the children needed to maintain comprehension throughout the novel. There were three questions which were higher level thinking. These questions were designed to expect the child to infer about a character's feelings and actions. The mixture of lower and higher level questions resembles John's and Megan's interaction with the hands-on game Why, oh Why. They would ask one another higher level thinking questions and then interchange them with lower level thinking questions, or literal comprehension questions.

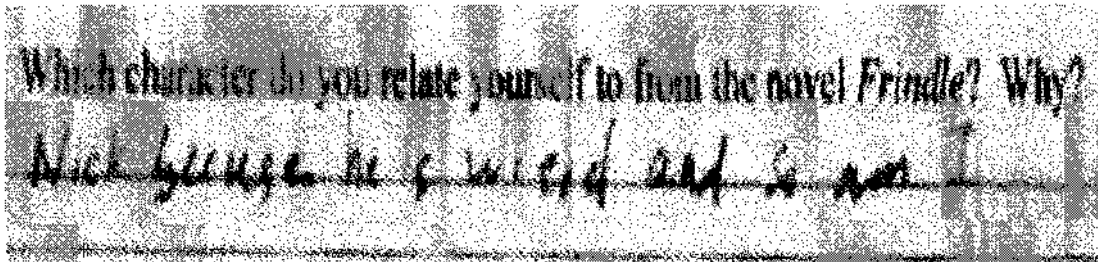
The first question focused on building a connection with a character from *Frindle*. I looked at Megan's response to the question which stated, "Which character do you relate yourself to from the novel *Frindle*? Why?" Megan's response lacked a personal connection with a character from the text (Illustration 4.20). I remembered back to the baseline assessment where Megan could not make a personal connection to a character in the novel *Pinballs*. Megan's response to *Frindle*, though lacking in a connection, thought about character traits, actions, and personality to rule out who she could not make a connection. Megan exhibited strengths in determining which character she could not make personal connections. This showed Megan understood which characteristics were needed in making connections with other characters. It also provided evidence she was not making impersonal, physical, or basic connections with characters as she was in the beginning of her interactions with the hands-on comprehension game Connections. Megan had strengthened her skills and refined the components needed in making meaningful connections to characters in a text.

4.20: Megan's Connection to *Frindle*



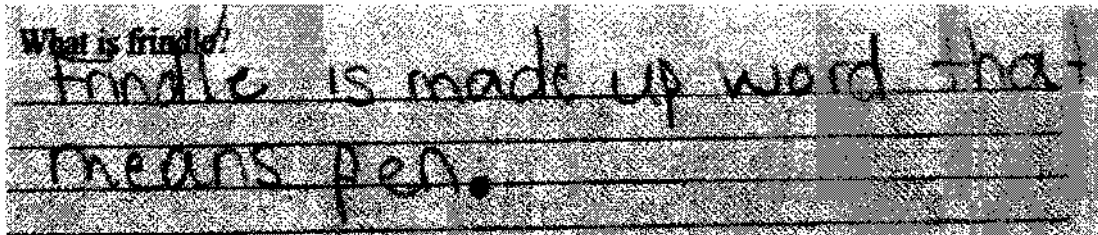
John was also able to answer question one which inquired him in making a connection to the text *Frindle*. As in the baseline assessment, John was able to make a personal connection with a character by identifying characteristics and personality traits (Illustration 4.21).

4.21: John's Connection to *Frindle*

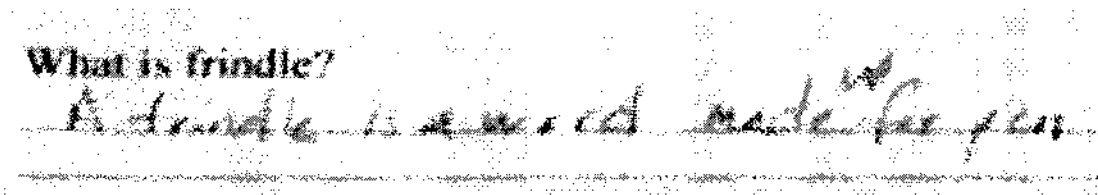


Questions two and four focused on skills developed through playing the hands-on compression game Why, oh Why. Question two stated, "What is frindle?" John and Megan were both able to answer this question correctly and easily (Illustration 4.22 and 4.23). This was a literal question asked about a direct element from the novel. Through reading the novel carefully and checking for meaning, both focal children were able to successfully answer question two.

4.22: Megan's Question Two in *Frindle*



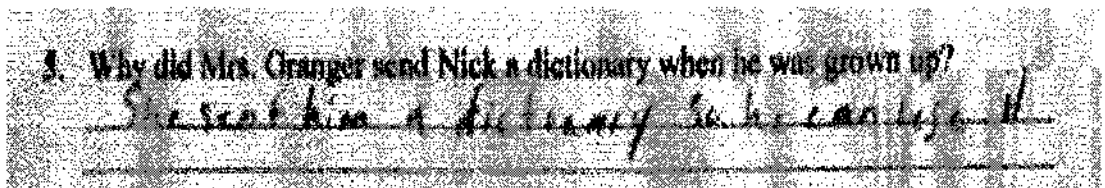
4.23: John's Question Two in *Frindle*



Question four stated, “Who would stick gum on a bright yellow index card and pin it to their shirt if they caught a student chewing gum in class?” This was another literal question based from the text. Megan and John both responded with “Mrs. Granger.”

As the final assessment progresses, the questions become higher level thinking. Questions five, six, and seven required thinking within the text and beyond the text. Question five stated, “Why did Mrs. Granger send Nick a dictionary when he was grown up?” John struggled to infer how the character was feeling. Instead, John made a text-to-world connection and included what he knew about dictionaries (Illustration 4.24). John knew dictionaries were used when people read and write, so he believed Mrs. Granger was sending Nick a dictionary to use.

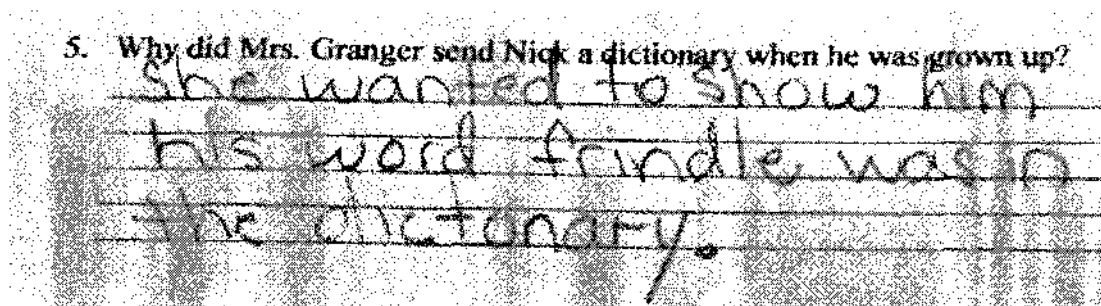
4.24: John's Question Five in *Frindle*



However, Megan was able to answer this question successfully by gathering evidence from the text in supporting her reasoning. Megan remembered from the beginning of the text how Nick was curious as to how words became selected to be in the

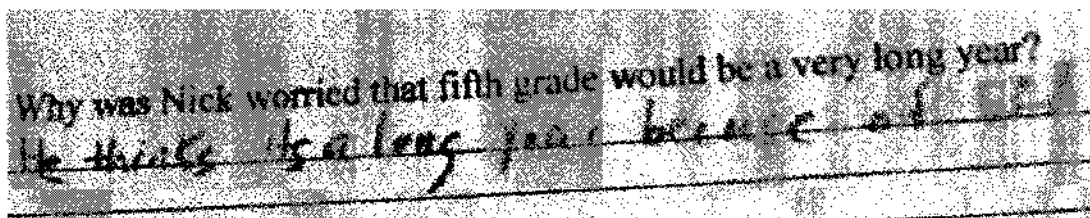
dictionary. Nick renamed the pen, frindle and Mrs. Granger wanted to show Nick the word made it to the dictionary (Illustration 4.25). Megan was able to recall pertinent information from the beginning of the text and analyze the information with the characters actions.

4.25: Megan's Question Five in *Frindle*

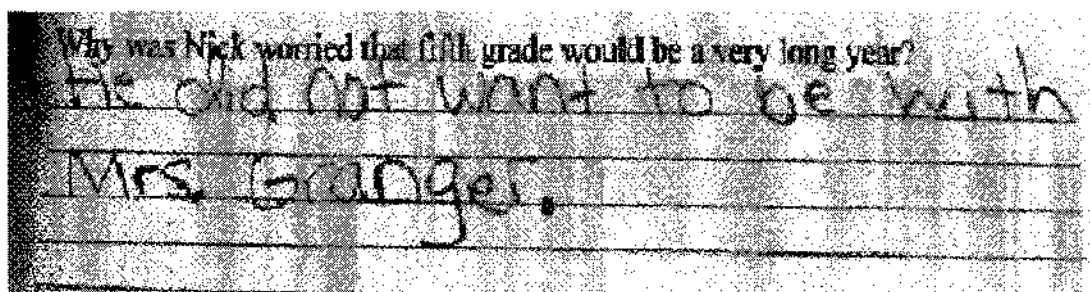


Question six required John and Megan to draw a conclusion about an event in the text. The question stated, “Why was Nick worried that fifth grade would be a very long year?” John took outside information about English Language Arts and information he read in the text to reach his answer (Illustration 4.26). He came to his own conclusion by thinking about the feelings Nick exhibited when discussing fifth grade. Megan also reached her conclusion by thinking about the characters in the novel and Nick’s feelings towards these characters (Illustration 4.27). She came to this conclusion by recalling information from the text and applying it to what she knew about the character, Nick.

4.26: John's question Six in *Frindle*



4.27: Megan's Question Six in *Frindle*



The last question also asked for Megan and John to infer about how characters were feeling. The question stated, “Why did Nick feel badly for Janet Fisk?” John and Megan both answered this question correctly; however Megan’s explanation was more concise. John’s response was based on the exterior of the problem (Illustration 4.28). He simply said because she did not make the noises. Though the answer is correct, John did not provide more textual evidence to support his reasoning as Megan. Megan’s response gave a reason why Nick felt badly of the situation. Megan understood Nick was the one making the noises, but Janet was accused and blamed by Mrs. Granger (Illustration 4.29).

4.28: John's Question Seven in *Frindle*

7. Why did Nick feel bad for Janet Fisk?
He feels bad because wasn't making the
prep wise

4.29: Megan's Question Seven in *Frindle*

7. Why did Nick feel bad for Janet Fisk?
He felt bad cause he is
the one who kept doing
peep and the teacher blamed
her.

Interpretation of Data

Megan and John both showed growth and refinement in their reading comprehension skills developed from the hands-on games Connections and Why, oh Why. Comparing the baseline assessment with the final assessment there was much growth and development in the sophistication of their answers. John's and Megan's responses to the questions were more thought out and were engrained with providing

evidence from the text. They used the text as a resource to aide them in answering the questions correctly.

John's and Megan's ability to infer a character's feelings were also supported from evidence it the text. They conceptualized how a character was feeling by thinking about the character's actions, dialogue, and characteristics. They were also able to build connections with the characters by naming the character traits each character portrayed. With this information John and Megan were able to relate these traits with their own personal traits and experiences.

The extra two weeks John and Megan had between the baseline assessment and the formal assessment showed great improvement in their skills needed to maintain reading comprehension. This also demonstrated how they were both able to take skills they practiced in isolation during hands-on interactions and apply the skills to real-life assessments in their school work.

Summary

John and Megan both displayed progress in the skills practiced in the hands-on games through the six week long study. Looking at the game Connections, John was able to make a connection to a character by determining the character traits and comparing them to his own traits. As the weeks progressed John's connections grew deeper and exhibited him thinking about his own traits compared to the characters. During the first few weeks, Megan was not yet able to find a connection with a

character in this novel. However, towards the end of the study she was able to find character traits she did not have similar to the characters from the novel. This proved to me that Megan knows how to build connections and what goes into a connection, even though she was not yet able to formulate a personal connection to a character.

John and Megan were also able to improve their reading comprehension skills through their interaction with the game Why, oh Why. John's and Megan's responses to the questions were more thought out and were engrained with providing evidence from the text. They used the text as a resource to aide them in answering the questions correctly. This proves to me throughout the interaction with the hands-on games and one another, they were able to develop and refine strategies to use to assist them in monitoring their comprehension in reading.

Chapter Five

Implications

Introduction

At the conclusion of the study I assessed the games and their purposes. The hands-on reading comprehension games I incorporated in my study, Connections and Why, oh Why, were successful in impacting the children's reading comprehension positively. There was ample writing in both games which gave Megan and John opportunities to practice their writing skills. The high level of participation made the games fun and interactive. Their skills in developing higher level thinking questions were dramatically increased, as well as their responses to these higher level thinking questions. Megan and John both developed new strategies while interacting in the games. For example, they used the book as a resource in assisting in the finding of answers, they were able to identify which genres they were most comfortable in reading, they familiarized with text structure when searching for answers, refined previous reading comprehension strategies, developed new reading comprehension strategies, and were able to apply these new skills and strategies to real life assessments. In the following section, I present implications of the findings for students, teachers, and literacy education.

Suggestions for Students

As I watched Megan and John playing I began to see themes in their choice of books. When students are playing these hands-on games be sure they choose a book with a high interest level. This can be based on the like of one novel or based on the approval of a genre. When students choose books and genres of interest, they seem to have higher participation levels because they are excited about the topic of text.

While the students are playing be sure to interact with one another and the novels and discuss the content with each other. Discussing novels help to clarify confusion, support ideas, and show others point-of-view. However, while the students are discussing ideas and topics, be sure to stay on task. Try to avoid distractions, whether it is from conversations or the peers in the classroom. Stay focused on the topic and game. Move to a quiet spot in the classroom where you will be able to hear each other and avoid distractions as best you can.

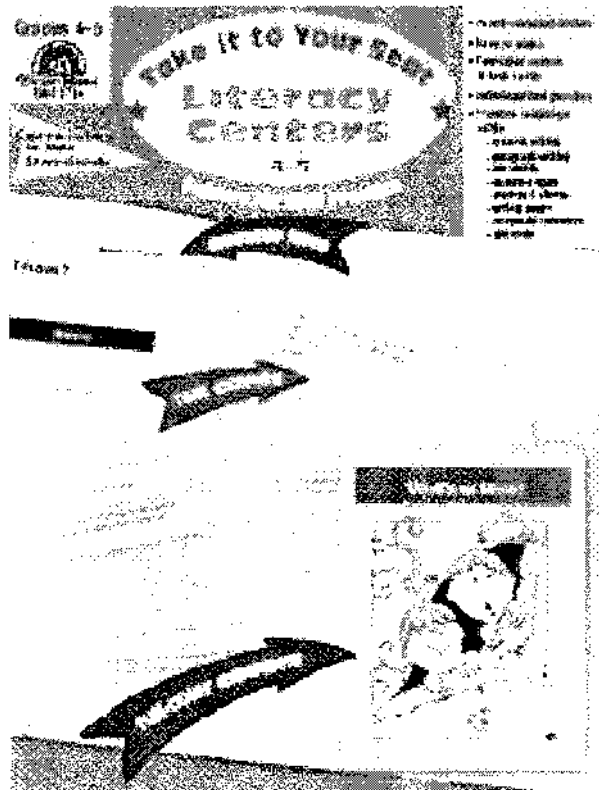
These hands-on games are fun, competitive, interactive, and interesting for all ages and reading levels to participate. Be sure to read the directions before playing and pick a reading or text both students are familiar. These hands-on games are great for different texts of interest such as, different genres, themes, fiction, non-fiction, narrative, informational, summaries, articles, poems, etc.

Suggestions for Teachers

It is always difficult to find hands-on games which included reading and writing for all learners; proficient, struggling, advances. These games focus on a single skill which gives the teacher the opportunity to select certain students who would benefit from the practice. These hands-on games can be completely independent or involve up to four players. The children's reading levels do not have to be as strongly matched to one another. The only stipulation is they need to pick a reading passage or text they are both able to read independently. As the teacher you may given them choices of readings to select from or you can have the students select the reading independently. A key point is to make sure the reading or text is of interest to the children interacting in the hands-on games. When children are interested in a topic they put forth more effort and participate more often.

The hands-on games are easy to apply during a reading block with center rotations. Children can take the games and find a quiet place to play such as a desk, table, or floor space. The games are also easy to make and store. I recommend using the Scholastic editions which break apart the games based on grade level skills (Table 5.1). Jo Ellen Moore has published several workbooks for a variety of grades focusing on different skills (Table 5.2).

5.1: Jo Ellen Moore, Take it to Your Seat Literacy Centers Grades 4-5



5.2: Resources for Hands-on Games by Jo Ellen Moore

Title	Grade Level	Skills
Take it to You Seat: Literacy Centers (2003)	Kindergarten - First	<ul style="list-style-type: none"> • Find the pairs • Colored words • Positional words • Rhyming words • Word families • Follow directions • Alphabetical order • Categorization • Real and make-believe • initial and final consonants • Beginning writing
Take it to You Seat: Literacy Centers (2004)	Second - Third	<ul style="list-style-type: none"> • Sentence sort • Spelling • Real or make-believe • Alphabetical order • Riddles • Antonym • Synonyms • Idioms • Writing letters • Homophones
Take it to You Seat: Literacy Centers (2003)	Third - Fourth	<ul style="list-style-type: none"> • Analogies • Multiple meaning words • Prefixes • Suffixes • Main idea and supporting details • Combining sentences • Alphabetical order • Writing descriptive paragraphs • Similes • Fact or opinion • Parts of speech
Take it to You Seat: Literacy Centers (2004)	Fourth - Fifth	<ul style="list-style-type: none"> • Antonyms • Alphabetical order • Parts of speech • Synonyms • Combining sentences • Idioms • Main idea and supporting details • Kinds of sentences

		<ul style="list-style-type: none"> • Metaphors and similes • Multiple-meaning words • Persuasive paragraphs • Syllogisms • Root words • Using commas • Write a story • Homophones • Poetry
--	--	---

The games are quick to assemble. The games come colored, perforated, include kid friendly direction, and sheets to record answers. Once you select the game you can laminate the pieces to ensure stability and put each individual game into a designated folder. The folders can easily fit into a crate and can be divided by skill or grade level.

Implementing these games in the classroom takes little teacher assistance. They are meant to be completed without adult supervision. Using Pat Johnson’s (2006) Gradual Release of Responsibility ensures children will develop the skills needed to play the hands-on games independently. First, select a handful of students to model and teach the game. After you have modeled the game, guide the students in practice. Watch to see if they are playing it correctly and answer any questions they may have about the game. After the children have mastered the game, send them to different groups of students to teach them how to play the game. Those students can be your “chief” to the game. Whenever a group is struggling to play a game they can find and ask one of the “chiefs” to clarify their confusion.

As a teacher you want the highest level of participation with the hands-on games. This means distractions should be limited in the classroom. Make sure the children playing the hands-on games have a quiet corner to interact with minimal distractions surrounding. They need a quiet area to be able to concentrate while reading and writing. It is also important for teachers to be able to assess and monitor students' progression in interacting with the hands-on games. Every game comes with a sheet to record answers which hold the child responsible in his/her learning. The teacher can collect and check the progression of the skill for each student.

Suggestions for Literacy Education

The term literacy educators can apply to any teacher who has their students reading while they are in the classroom. The grade level and content area are not the only factors when teaching and thinking about literacy education. Based on an article written by Brozo and Flynt (2008), they list evidence-based principles in motivating students to read. One principle is evaluating self-efficacy where students believe and have confidence in themselves to produce in the academic setting. This can be accomplished by having fun, interactive hands-on games in the classroom. Another principle is expanding choices and options. Allowing students an input in the texts they read and the learning experiences they might participate in will increase autonomy and agency (Freeman, McPhail, & Berndt, 2002; Lee, 1999). The last principle is structuring collaboration for motivation. "Increased attention in social

motivation in the classroom can lead to more intrinsically motivated readers and to increase achievement in reading” (Guthrie & Wigfield, 2000, p. 413). Teachers need to create opportunities for students to work together in the classroom to pursuit new knowledge.

Literacy education has to be fun, interactive, and enjoyable for the students while being productive, easy to assess and monitor, and time sensitive for teachers. Many children in the twenty-first century are tactile learners. Incorporating hands-on activities can reach this group of kinesthetic learners. Having children move manipulatives around and categorize information can stimulate the brain which leaves a greater impression on the memory. The hands-on games can also be played individually or incorporate up to four players. Small groups can be pulled for a more intensive and structured program. This interaction between peers arouses discussion and participation.

The selection of skills is an important piece in literacy education. Classroom teachers and specialists need to make sure the skill is in the child’s Zone of Proximal Development (Vygotsky, 1962). The child needs to be ready to learn and practice the skill. With these hands-on games, you can select which skills to focus and reinforce through independent practice. Most of the games also incorporate writing which assists the children in developing language skills both orally and written. Having the games focus on a specific skill is beneficial in progress monitoring. If a child has an Individualized Education Program or receives Academic Intervention Services, it is important for the adults working with the child to monitor his/her progress. By

utilizing these games, the adults can choose a specific skill, practice and reinforce the skill, and assess the skill. The games focusing on one skill at a time makes assessing and progress monitoring more manageable.

Summary

Hands-on games can be beneficial for students, teachers, and literacy educators. Incorporating hands-on learning in the classroom promotes discussion, participation, strategies, skills, and interest levels. Hands-on games can not only include and focus on reading comprehension skills but also a wide variety of literacy skills. Some on these skills can include, but are not limited to; homophones, parts of speech, writing stories, idioms, poetry, etc. Incorporating educational, hands-on interactions in the classroom can assist in increasing motivation, interest levels, and development of literacy skills which ultimately result in higher test scores.

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Appendices

Appendix A

Letter to Parent/Guardians Explaining Participation in Study

Dear Parent or Guardian,

I am a graduate student in the department of Education and Human Development at The College at Brockport, SUNY. I am conducting a study regarding students' interactions with hands-on comprehension games. As part of my study, I will be observing in your child's fifth grade classroom during his/her reading block.

If you grant consent for your child to participate in this study, she or he may be observed for 30 minutes once a week over a four week long study during his/her reading block time. Observation will focus on the interaction with the hands-on reading games.

I will be collecting data through the use of note taking. The collection of data will be approximately three days a week for four weeks. No information recorded will be assessed or graded by the classroom teacher.

The enclosed Guardian Consent form includes information about your child's rights as a project participant, including how I will protect his/her privacy. Please read the form carefully. If you are willing to allow your child's participation, please indicate your consent by signing the attached statement.

Thank you in advance for your consideration.

Sincerely,

Maria Prestigiacomo
Graduate Student, The College at Brockport, SUNY

Dr. Dong-shin Shin
Thesis Advisor at The College at Brockport, SUNY

Appendix B

Consent for Observation of Participants to Parents/Guardians

This form describes a research study being conducted with students about the impact of hands-on games and activities on reading comprehension. This purpose of this research is to explore if hands-on activities and games affect reading comprehension skills negatively or positively. The person conducting the research is a student at The College at Brockport, SUNY. If you agree to have your child participate in this study, s/he will be interviewed about the skills s/he uses while comprehending and her/his attitudes and feelings about the new hands-on games and activities.

The possible benefit from being in this study could be that information will be learned that would allow teachers to better prepare children in developing reading comprehension skills.

Your child's participation in this study is completely voluntary. Being in it or refusing to be in it, will not affect your child's grades or class standing. S/he is free to change her/his mind or stop being in the study at any time.

I understand that:

1. My child's participation is voluntary and s/he has the right to refuse to answer any questions. S/he will have a chance to discuss any questions s/he has about the study with the researcher.
2. My child's confidentiality is **protected**. Her/his name will not be written on the survey or in the study. There will be no way to connect my child to the written survey. If any publication results from this research, s/he would not be identified by name. Results will be given anonymously and in group form only, so that neither the participants nor their schools can be identified. Participation will have no effect on grades status.
3. There will be no anticipated personal risks or benefits because of participation in this project.
4. My child's participation involves verbally answering questions before and after the study is completed and partaking in observations. It is estimated that the interviews will each take approximately 15 minutes to complete.
5. Approximately 19 people will take part in this study. The results will be used for the completion of a research project by the primary researcher.

6. Data and consent forms will be kept separately in a locked filing cabinet by the investigator and will be destroyed by shredding when the research has been completed.

You are being asked whether or not you will permit your child to participate in this study. If you wish to give permission to participate, and you agree with the statement below, please sign in the space provided. Remember, you may change your mind at any point and withdraw your child from the study. Your child can refuse to participate even if you have given permission for her/him to participate.

I understand the information provided in this form and agree to allow my child to participate as a participant in this project. I am 18 years of age or older. I have read and understand the above statements. All my questions about my child's participation in this study have been answered to my satisfaction.

If you have any questions you may contact:

<u>Primary researcher</u>	<u>Faculty Advisor</u>
Maria Prestigiacomio	Dr. Dong-shin Shin
	Education and Human Development (585) 395-5007

Signature of Parent

Date

Child's name _____

Appendix C
To Be Read to Fifth Grade Students

My name is Maria Prestigiacomio. I am a graduate student at The College at Brockport, SUNY. I came to your classroom to learn about hands-on comprehension games. I would like to find out if the hands-on games help you with your reading comprehension during tests. You may see me writing in my notebook or looking at what you are playing the games with your peers.

The possible benefit from being in this study could be that information will be learned that would allow teachers to better prepare children in developing reading comprehension skills.

If you decide to let me observe you while you play the hands-on comprehension games, I won't write down your name or let anyone else know who you are. When I write about my study, I will only say what you and your classmates did during your interactions in the hands-on games.

Your participation in this study is completely voluntary. Being in it or refusing to be in it, will not affect your grades or class standing. You are free to change your mind or stop being in the study at any time.

Your parent or guardian has given permission for you to take part in this study, but it is up to you to decide if you would like to. If you would like to take part in my study, but change your mind later on, you can tell your teacher or me that you have changed your mind. It is okay to change your mind at any time.

If it is okay with you for me to observe you interacting with the hands-on comprehension games, you can write your name on the first line below. Under your name you can write today's date which is _____.

Thank you very much,

Maria Prestigiacomio
Graduate Student, The College at Brockport, SUNY

Name: _____

Date: _____

Appendix D:

Teacher Interview

Teacher name: _____

Grade level: _____

Date: _____

1. How do you teach reading comprehension skills in your classroom?

2. How is classroom participation when teaching comprehension skills?

3. Do you think these methods are effective?

Appendix G:
Observation Forms:

Child's name: _____

Date: _____

Game played: _____

Classroom atmosphere	
Location	
Other participants	

Participation	
Interest Levels	
Outcomes	
Other Observations:	

Appendix H:
Baseline Assessment

Name _____

Date _____

The Pinballs Assessment

1. Which character do you relate yourself to from the novel? Why?

2. Where do Carlie, Thomas, and Harvery go?

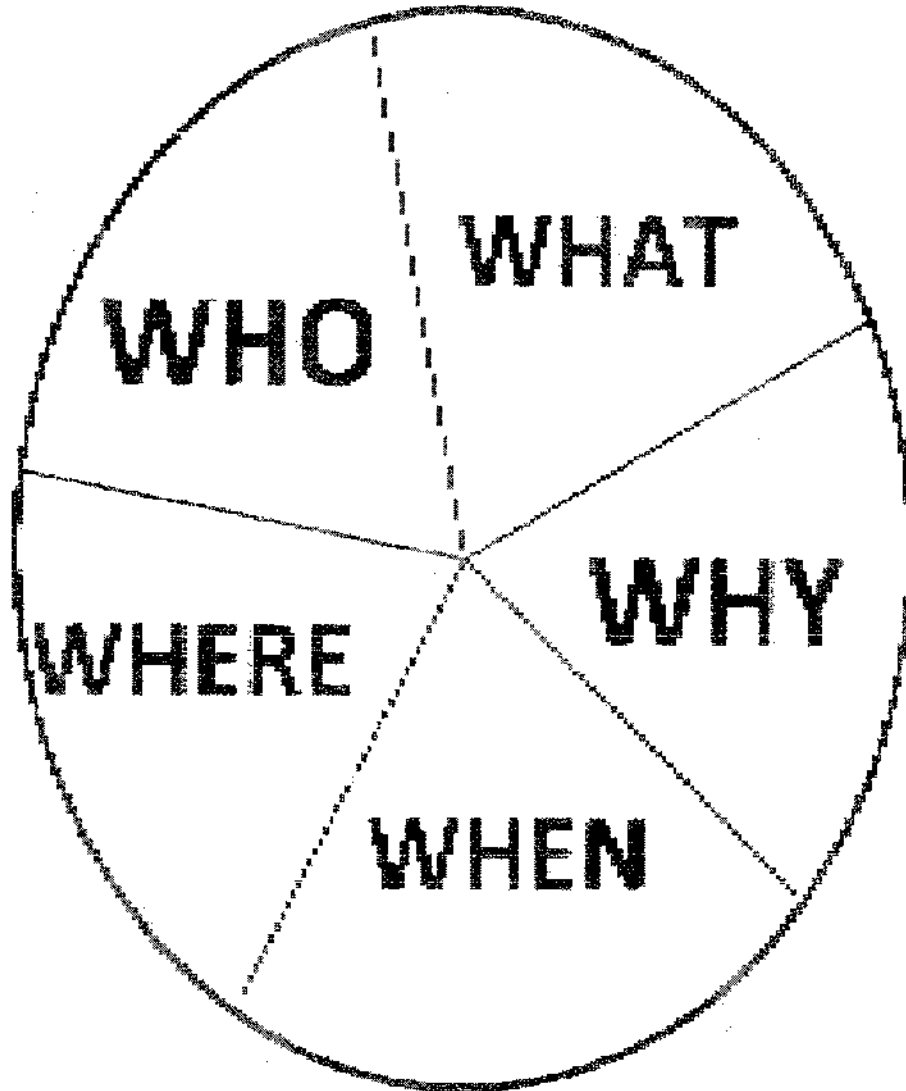
3. Who did Carlie accuse of stealing her earring? Why did she accuse this person? Provide evidence from the text.

4. Why did Carlie threaten to run away? Provide evidence from the text.

5. What did Carlie say she was going to bring to the hospital every day when she becomes a nurse?

6. When Thomas J. was abandoned as a baby by his parents, where did he live?

Appendix I:
"Why, Oh Why" Game



Appendix I:
Continued

Player 1	Player 2
Question:	Question:
1. _____ _____	1. _____ _____
2. _____ _____	2. _____ _____
3. _____ _____	3. _____ _____
4. _____ _____	4. _____ _____
5. _____ _____	5. _____ _____

Appendix J:
“Connection” Game

Connecting: Record your connections to the text.

Player 1	Player 2
Question: 1. _____ _____	Question: 1. _____ _____
2. _____ _____	2. _____ _____
3. _____ _____	3. _____ _____
4. _____ _____	4. _____ _____
5. _____ _____	5. _____ _____

Appendix K:
Final Assessment

Name _____

Date _____

Frindle Assessment

1. Which character do you relate yourself to from the novel *Frindle*? Why?

2. What is frindle?

3. What special assignment did Mrs. Granger give Nick? Why?

4. Who would stick gum on a bright yellow index card and pin it to their shirt if they caught a student chewing gum in class?

5. Why did Mrs. Granger send Nick a dictionary when he was grown up?

6. Why was Nick worried that fifth grade would be a very long year?

7. Why did Nick feel bad for Janet Fisk?
