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**“NOW I MAKE MY OWN PICTURES”  
VISUALIZATION IN READING INTERVENTION**

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## ABSTRACT

This qualitative research study examined the effects of explicit instruction in visualization strategies within a fourth-grade Read 180 reading intervention classroom. The study's nine participants were taught visualization strategies in hopes of increasing their reading comprehension and reading motivation. The study's lessons consisted of teaching visualization within three categories: Drawing (creating images based on author description), Watching (seeing the story unfold), and Living (experiencing the story).

The study was conducted in an urban neighborhood elementary school with a high population of at-risk learners. The nine participants were a ethnically heterogeneous group of below grade-level readers, which included economically disadvantaged students, males and females, English Language Learners, and students with Individualized Education Plans. The participants were also enrolled in the Read 180 program, which included differentiated instructional software, leveled independent texts, and comprehension instruction.

The study's findings suggest that explicit instruction of visualization techniques can have positive impacts on struggling readers' comprehension. The study also suggests that providing students with explicit visualization instruction can have a positive impact on students' self-reported reading enjoyment and motivation to read independently.

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## RESEARCHER STANCE

My interest in the field of visualization stems from my own educational experiences. My path was a strange one and was certainly not like most teachers. I was expelled in middle school, home-schooled into high school, obtained a GED, enrolled in two different community colleges and Kutztown University, and finally became teacher for at risk readers. This is a weird history for a teacher, to be sure. And yet, in many respects, my story isn't so different from those of other teachers. I, too, encountered incredible teachers along the way who influenced me and helped shape me into who I am today.

The teachers who were able to connect with me were few, but their impact was more powerful for it. They inspired me to see the powerful positive impact a teacher could have. They showed me the value of bringing learning to life... of making it real... of connecting to students and giving them the power to make connections of their own. And along the way, they truly helped save my life.

And for me, that's what visualization is all about. I believe it can transform the act of reading from boring to thrilling. It can make stories come to life. It can make a story change the reader; and the power that can have to affect someone's life is immeasurable!

## **The Need**

I've taught reading intervention to struggling readers for the past six years and I see myself in my students, both my strengths and my weaknesses. The effects of the high-poverty environment in which my students live and the social isolation they experience has incredible repercussions. They have obstacles to overcome that most of us struggle to even understand. To some of them, gangs, drugs, violence, and neglect are regular parts of everyday life. For them to succeed, for them to break the cycle of poverty, can seem like an impossible and even unimaginable challenge.

I don't claim to know exactly what each of my students is facing, but I do think my own struggles give me the ability to see things from their shoes. I know what it's like to hate school. I know what it's like to feel like success is impossible. But I also know what it takes to change your life.

I am a firm believer in the Read 180 reading intervention program that I teach. I have seen students transformed from reluctant readers to avid readers as they progress through the program. I have witnessed many children storm through years of progress in amazingly short amounts of time. And yet, I recognize that no program is foolproof.

I am often troubled by my students' inability to delve deeply into the texts they read. Their comprehension scores may improve over time, but all

too often their reading experience, and therefore their true understanding, remains shallow.

Scholastic's Read 180 program utilizes high degrees of technology to help students acquire the foundational literacy skills they might have missed during their early elementary careers. These students often have severe deficiencies and may be often reading two, three, or even more years below grade level by the time they enter my fourth grade classroom. For these students, words on a page can fail to tap into their imaginations. Stories too often do not invoke memories from their past, and books fail to sweep them away to other worlds. For them, reading is no source of knowledge or escape, only a code they struggle to crack.

I do not blame the students for these shortcomings. Many of these students' deficiencies stem from their environments. Most come from extremely low-print environments, where they didn't have rich reading experiences before they came to school, if they had any at all, and there were few resources to encourage independent reading. Many also have extremely limited experiences outside their neighborhoods. These students, whether labeled English Language Learners, special education students, economically disadvantaged, or combinations of all three, initially have neither the fluency nor decoding skills to enter into a text, nor the vocabulary and background knowledge to understand it.

The Read 180 program was designed specifically with these gaps in mind. The program provides topic videos in order to deepen students' background knowledge of subject matter before they begin to read. It also provides opportunities for repeated readings, translation of key words into more than half a dozen languages, and targeted and individualized spelling, phonics, and sight-word practice. Many of the program's texts are accompanied by audio CDs that utilize reading coaches to model critical thinking skills. Other texts are leveled to each individual student's reading range. The teaching routines are designed to teach key vocabulary, comprehension, and writing skills that are vital to successful readers.

In the five years I have taught this intervention program, I have seen dramatic improvement in my students. However, I have also found a pressing need to increase the depth of my students' reading experience. With this in mind, I began to question how to encourage my students to experience reading in a way that would help them to discover a genuine love for it. I began to believe that the key to this might be the use of visualization skills.

\*

My own reading experience, and those of the most avid readers I know, is one where the readers are pulled into the world of the story they are reading. And yet, most elementary school reading curricula fail to adequately teach students the necessary visualization skills needed to really delve into a

text. In fact, many curricula I've encountered fail to cover visualization at all. I thought that if I could get students to tap into their imaginations while they read, perhaps I could get them to read in the way that proficient readers do so naturally. I wondered if there were systematic ways to take their reading from "words on a page" to "worlds in their minds."

My early research in the area of visualization uncovered many studies about how proficient readers visualize when they read and many stand-alone activities to use visualization as a method to improve comprehension. These were useful discoveries, but often these studies and activities centered around proficient readers. What I couldn't find was a systematic way to teach visualization to students reading below or far-below grade level.

During my graduate work at Moravian College, I have had the opportunity to conduct a mini-research study on the effects explicit visualization instruction can have on my at-risk population. The positive results I encountered have led me to a desire to delve deeper into this path of instruction. During this time, I also encountered a study that would come to form the foundations of my own thesis work. In her research paper, *Visualizing Worlds From Words on a Page*, Parsons (2006) conducted research with proficient readers to examine the things that they felt allowed them to immerse themselves in a story. The readers in this study sighted the importance of seeing the story form around them as the key to getting into a

story. They identified three key levels of visualization: picturing, watching, and seeing. The students defined these levels and discussed how and when they were employed during reading.

As I planned my own study, I decided to use Parsons' findings as the basis for my work. I would explicitly teach the three skills her subjects had identified and try to explicitly teach my students how to utilize them. Thus, my research question is: *What are the effects of teaching visualization strategies on reading comprehension and motivation within a fourth grade Read 180 classroom?*

## LITERATURE REVIEW

“Mental imagery is a troublesome concept because it has never been explainable,” wrote Eugene Cramer in *Mental Imagery, Reading Attitude, and Comprehension* (1980). If it is so difficult to understand visualization, which is defined by Tomlinson as the ability to build mental pictures or images while reading (1998), how much harder is the task of administering instruction and determining and designing proper assessments? How can we teach something that is inherently difficult, even impossible, to detect? And once we’ve taught this troubling skill, how can we hope to assess it with true validity and reliability?

Visualization, or mental imagery, is a crucial step in the reading process and an important component in reading comprehension (Naughton, 2008). Visualization allows proficient readers to constantly create images of stories as they read various texts (Lapin, 2003) and it allows them to experience those texts from multiple perspectives (Parsons, 2006). Visualization can help form relationships between concepts (Fisher, 2000), and has been shown to aid in vocabulary development (Naughton, 2008). It is associated with effective learning and data recall, and may help provide a critical link in explaining the progression between a beginner reader and an advanced reader (Gambrell, 1980). “Visualization is crucial as readers create

and experience the world of the story,” states Linda Parsons (2006, p. 493).

“It allows readers to feel they are present in the story world or that they have actually become one of the characters.”

Researchers have discussed the assortment of benefits that visualization can have on students’ reading comprehension (Duke & Pearson, 2002). As visualization skills advance and readers are able to elaborate on the images they have produced while engaged in a text, the story world becomes more concrete, and greater comprehension and interest in the story generally result (Parsons, 2006).

“Research shows that students who visualize before, during, and after reading enhance their comprehension” (Guerrero, 2003, p.3). By engaging in visualization, readers begin to engage in reading as an actual experience and this is crucial if we want them to become lifelong readers. It empowers them to go beyond the written page and find themselves experiencing the lives of the characters they read about (Parsons, 2006).

However, studies have also noted that only a certain percentage of the population uses mental images (Finch, 1982; Gambrell, 1980). Proficient readers constantly utilize visualization as they read (Lapin, 2003) and when confusion arises, these readers will make a conscious attempt to visualize what they have read (Tovani, 2000).

Yet, this is not the case for many struggling readers. Struggling readers do not instinctively use mental imagery as they read like many proficient readers tend to do (Finch, 1982). And, since visualization skills are rarely adequately emphasized as part of most schools' regular reading curriculums, these readers have few, if any, opportunities to ever learn these important skills. This discrepancy between proficient, instinctive readers' behavior and the experiences of other less naturally gifted readers could help to explain why the results of many visualization studies have been inconclusive, often termed "not statistically significant" (Burke, 1997) or "weak" (Cramer, 1980). It even led Gambrell (1980) to write that, "The research to date on induced mental imagery does not provide a direct comparison of the effects of mental imagery upon listening and reading comprehension" (p. 3).

Visualization, like all aspects of reading related to comprehension in which proficient readers engage, needs to be explicitly taught if students are to be expected to utilize it (Duke & Pearson, 2002). Students need step-by-step instruction to ensure that they are aware of how to apply visualization skills to their reading (Clark, 1984; Danko, 1992; Finch, 1982; Gambrell, 1980). The instruction of comprehension strategies is especially effective for students who demonstrate poor comprehension levels (Fielding, L.G., & Pearson, P.D.,1994), so, if correctly carried out, positive acquisition of visualization

skills can be expected. Yet, to teach visualization, we must first gain an understanding of how visualization works, how proficient readers utilize it, and how it relates to comprehension.

### **Operational Foundation**

In her research study, *Visualizing Worlds from Words on a Page*, Linda T. Parsons (2006) resolved to “explore the private act of engaged, aesthetic reading.” Parsons met with a group of ten fourth-grade subjects as part of a volunteer “Readers as Researchers Club.” Parsons and her group met twice a week for one hour during recess and during their lunch period from May until February during the regular school calendar. The Readers as Researchers Club also met for four two-hour sessions during the summer of that year.

Over the ten months of the study, Parsons’ students discussed their readings in terms of their visualization experiences, utilizing memory work, group discussions, and visual protocol as data gathering methods. From these discussions Parsons’ students identified six themes that illustrated their engagement as they created, entered, and sustained the worlds of their stories. The themes Parsons’ students identified were “being in a book, connecting to the characters, experiencing emotions, physical reactions, wondering and predicting, visualizing, and turning out” (p. 494).

Parsons reports that it was during the analysis process of those themes that her students began reflecting and about the different aspects of visualization. Her group developed ways of categorizing different types of reported visualization techniques and identified three major strands of mental imagery that occurred during their independent reading: Picturing, Watching, and Seeing. The children reported using these three ever-changing types of visualization as their reading experiences adapted and flowed with their stories.

The act of Picturing was defined as the visualization that takes place during initial world creation, or after focus has been lost, and can be thought of as more intentional or thoughtful mental imagery creation. I would go on to term this phase of visualization as “Drawing” in my work with my students and would often describe it as the act of consciously drawing the picture based on the author’s descriptions.

Parsons and her students defined the act of Watching as the visualization that occurs when the reader watches the story unfold “as if on T.V.” During this phase of visualization, mental images take on dynamic motion based on an author’s descriptions of unfolding scenes. I kept Parsons’ definition for this phase of visualization in my study, often telling my students that Watching was like making a movie of the story in their minds as they read.

The act of Seeing was the deepest level of visualization discussed by Parsons' Readers as Researchers Club. Parsons' group defined Seeing as experiencing the story as if it were happening to the reader. In this phase of visualization, the scenes an author describes not only come to life with motion, but also activate other senses such as smell, hearing, touch and movement, taste, and even empathy. In my study, I used the term "Living" to relate this phase of visualization to my students, often explaining that Living is like being actually dropped into the story so that you are experiencing the same things as the characters you are reading about. Living can be experienced either as one of the characters themselves, as if you are in their shoes, or as an onlooker who follows the characters through the settings of the book.

Some prior research studies have found the impact of visualization on reading comprehension to be inconclusive, weak, or statistically insignificant (Burke, 1997; Cramer, 1980). However, Parsons work with proficient readers found that not only was visualization a key and important set of skills, but visualization was "the thread that wove through" all the other important aspects of her students' reading. "Visualization was directly linked to the perspective from which they could view the story world," writes Parsons, "and their relationship to the characters was indicative of their position in the world of the story" (p. 495).

## **Operational Considerations**

Parsons' work was instrumental in the development of my own study. As I formulated the details of my study, her work would serve as the foundation that I would build upon. Parsons had taken a crucial step in uncovering the underlying types of visualization in which proficient readers engage.

Subjects in many other visualization studies were given little instruction, or even explanation, about what visualization was or how to implement it. Instead, subjects were simply told to visualize by the researcher with little or no explanation about what that entailed, let alone, how to go about doing it (Divine-Hawkins & Levin, 1973; Gambrell, 1980). And it can be reasonably assumed that this lack of explicit instruction had at least some negative impact on those studies' results.

When teaching any reading strategy, it is crucial for the teacher to model the strategy being taught in a way that the students can first understand and then emulate (Tovani, 2000, Fielding, L.G., & Pearson, P.D., 1994), and visualization is no exception to this rule. As might be expected, the studies that did include explicit visualization instruction found more significant results (Clark, 1984; Danko, 1992).

Parsons' work, by providing insight into proficient readers' intimate reading experiences, provides a framework that can be used to create explicit

visualization lessons necessary to accurately understand mental imagery's impact on comprehension (2006). Parsons' research sets up the scaffolding whereby, as it relates to visualization, students can be made to understand that there are things that good readers do and that those things can be learned (Tovani, 2000). The next step in the formulation of my study was to determine the best way to build a visualization curriculum around Parsons' findings.

The first barrier faced by many struggling readers is their difficulty decoding text (Tovani, 2000). Therefore, the availability of a variety of appropriate types of texts is crucial to any course of reading instruction (Pinnel). Texts should be selected to match students' instructional or independent reading levels, as appropriate, and should not place undue demands on other aspects of the students' reading abilities, such as background knowledge, vocabulary, or decoding skills. Also, texts should be carefully chosen to match the comprehension skill being taught and, since student motivation can dramatically impact how well any comprehension skill is learned and eventually implemented, texts need to be chosen to be as motivating to the majority of students in the classroom as possible (Duke & Pearson, 2002).

The research shows that the delivery mode of the texts used to teach a certain comprehension skill is equally as important as level and content of

those texts. Gambrell's research into visualization found that the increases in learning from using mental imagery skills during the consumption of written texts tends to be small, while the results when using mental imagery strategies for increasing listening comprehension have been more substantial (1980). Therefore, introduction of mental imagery strategies is recommended initially during audio story telling only. This is preferable because it allows students to both acquire and apply visualization skills without accompanying illustrations, which can distract them from their own image creation, or having to engage in taxing decoding exertion (McTigue, 2010).

As students attempt to apply a learned comprehension skill to texts, they must be aware when they have failed to immerse themselves in that text (Parsons, 2006). They also must be aware of what they can and should do to correct the problems they encounter (Tovani, 2000). Though the focus of instruction might fall on one particular comprehension strategy, other strategies, such as self-correction and monitoring for understanding, should be modeled and encouraged throughout the instruction process so that students can accurately monitor and correct their reading when needed (Duke & Pearson, 2002).

The goal of any comprehension instruction is to ensure mastery of the comprehension skill where the students will eventually be able to use the skill independently. To this end, the research suggests the benefits of the gradual

release model, whereby, teachers gradually transition from a situation where they assume almost all the responsibility while the students assume almost none to a situation where the students are responsible for the vast majority of work (Duke & Pearson, 2002).

### **Moving from Definition to Instruction**

My job, as I began my study, was to take a risky step away from the research and into uncertain practice. My launching point was firm, based on the research of many top scholars, but my landing was shrouded in mystery. Parsons had discovered the processes by which proficient readers visualize. Others' research provided me with a scope and sequence of best practices to follow.

My task was to trust in Parsons' discoveries and see if I could teach my struggling readers to do what they experienced so naturally. I would use Parsons' revelations and definitions as my main guide, and I would base my plan of action on the foundation provided by many other researchers, endeavoring to systematically teach my students the three levels of visualization Parsons and her students had differentiated.

Yet in doing so, I was taking a leap of faith, trusting the work of a teacher and students that I had never met. I was basing the whole of my research on the assumption that their discoveries could be used to improve my own instruction and my own students' reading comprehension.

## **RESEARCH DESIGN AND METHODOLOGY**

The general purpose of this study was to research and reflect upon my own teaching practice and how adaptations in my instruction would impact my students' learning. Throughout the study the highest regard for student safety and student confidentiality was taken into account. Great emphasis was also placed on making sure that the results of the study were reported as objectively as possible and that the highest standards of trustworthiness were maintained.

### **Ensuring Ethical Guidelines**

Prior to implementation, this study was approved by the Human Subject Internal Review Board of Moravian College. The principal of the elementary school where the study was carried out was notified about the study's content, methodology, and intention prior to implementation and provided her consent (See Appendix A). The parents and guardians of the students involved in the study were provided written explanation of the study's purpose, and asked to provide permission for their child to participate (See Appendix B). All students received the same instruction whether or not their data were collected as part of this study.

## **Research Data Gathering Methods and Trustworthiness**

In order to ensure trustworthiness, this research study took place over an extended period of time: eight-weeks. A variety of low inference descriptors and participant feedback were collected, analyzed, and used for data triangulation. These forms of data collection included low inference descriptors in the form of a double entry journal, student surveys, and subject interviews. Student artifacts were collected and analyzed in order to widen data variety and were used to further triangulate findings (Maclean, & Mohr, 1999). Improvements in comprehension were based on Lexile growth as measured by Scholastic's Scholastic Reading Inventory (SRI).

The sources used to triangulate the data in this study were a double entry journal, student surveys, subject interviews, student artifacts, and SRI comprehension growth. Prolonged and persistent observation was maintained throughout the study in the form of a double entry journal. The double entry journal included accurate and objective descriptions of student and teacher actions, statements, and interactions, as well as the teacher's interpretations and reflections of those instances.

The students in this study were presented with a pre and post visualization survey designed to study any change in student perception as it pertains to their own visualization during reading. The first survey inquired about pre-instruction use of visualization techniques and strategies. At the

conclusion of the study, an identical survey was given and the differences between the two surveys were analyzed. Student artifacts were also be used in order to triangulate data. All student artifacts collected during the study remained anonymous. Where necessary, pseudonyms were used to ensure subject anonymity.

Growth in reading comprehension was measured by using the Scholastic Reading Inventory (SRI) to measure Lexile growth during the period of the study. Prior to strategy instruction, students took the SRI reading assessment in order to gage their pre-intervention Lexile reading level. At the conclusion of the study, the students were administered another SRI assessment and the results of their growth in comprehension were analyzed and discussed.

Subject interviews were conducted at the conclusion of the study. Participants were asked how the activities and lessons included in the study impacted their reading and/or schooling. Throughout the study, all student artifacts and data were kept in a secure locked place to ensure confidentiality. At the conclusion of the study, all student artifacts and data not directly used in the write up of the study were destroyed.

### **Researcher Bias**

All researchers bring personal and professional biases into their work. These biases must be acknowledged and analyzed up front (Maclean, & More,

1999). Researchers should identify biases and address how they relate to their observations and reflections (Hendricks, 2009). Like any researcher who is an intimate part of the research environment, I brought with me certain beliefs about teaching practices and classroom interactions that could have impacted my lessons and my findings (Maclean, & More, 1999).

I believe that visualization has a profound impact on both reading comprehension and student motivation. I believe that students who use mental imagery during reading are able to remember it and enjoy it more. This belief is rooted in the way in which I experience texts and I must remember that it is possible that others may gain less from the visualization experience than I do. I also believe that creating and maintaining an environment that fosters student engagement is crucial to student progress. The lessons in this study are designed to be fun and exciting, and so I carry into the study a belief that students will enjoy it. I expect this to have a positive impact on my results.

Since there were dangers in seeing what I wanted to see in the data, I had to be willing to change my beliefs and assumptions to match any unexpected findings and engaged in constant reflection about these shifting viewpoints as the study unfolded (Maclean, & More, 1999).

The double entry journal, separated into objective observations and reflections, served as one important tool to outweigh any bias. The

triangulation of data, or the use of multiple forms, helped ensure validity and trustworthiness, while revisions of my research question helped ensure validity by refocusing on student learning and my own teaching practices (Maclean, & More, 1999). I also used reflective memos from my field log, considered multiple points of view during reflection and analysis, and discussed methodologies and findings with my research support group (Maclean, & More, 1999) to ensure that I was looking at the data from all angles and taking my own bias into account at all times.

I followed Hendrick's (2009) advice in order to ensure validity throughout my study. I engaged in persistent and prolonged observations over a period of eight weeks. I also engaged in ongoing peer review through a research support group, meeting once a week with a fellow action researcher at Moravian College, comparing research findings and taking suggestions and critical observations into account. Member checks were used periodically throughout my study in the form of student surveys, student interviews, ongoing observations, and classroom discussions. I engaged in reflective planning by analyzing my observations and reflections in order to ensure I adapted my teaching to meet my students' needs. I also kept descriptive accounts of all lessons, observations, and reflections, as well as detailed descriptions of the environment in which those lessons and observations were made.

## THIS YEAR'S STORY

“Now I Make My Own Pictures!”

The converted office, which used to house our elementary school's guidance counselor, is buzzing with quiet activity. The students lining the row of computers are hard at work on their Read 180 software, recording their passages, watching their videos, and punching in their spelling words. The students who are spread across the black sofa and beanbag chairs in the corner are lost within their books. It's one those rare moments when everything in my reading intervention class is going right. I hate to interrupt it.

“Elena,” I call, my words drawing glances from half the students in the room.

Elena keeps her nose in her book. She doesn't even flinch. She either doesn't hear me or is intentionally ignoring me... both have happened before.

“Elena,” I call a little louder. “Press pause and come over here.”

She lets out a groan and pulls the headphones from her curly black hair. She gives me an annoyed look.

“It'll only take a second,” I promise.

Is this the same girl who told me that she hated reading more than anything else in the world? That was just two months ago.

Elena presses pause and stomps over to me. She's a good actress. She looks pretty mad. But I can see the smirk she's trying to hide.

When she gets to my desk, she raises her eyebrows at me.

"Like the book?" I ask.

"I did," she says with an amount of sass that would make any full-grown woman proud. "Till you made me stop."

"I just need to ask you a question for my college class," I tell her, failing to hide my own smirk. I told them I would be doing this about ten minutes ago, and Elena is not one to forget. But she likes picking on me. Why mess with a good thing?

She cocks her head impatiently.

I hold up the paper with my interview question on it. This is my first attempt at action research and I'm trying to make sure I do everything by the book. I read the question word for word. "How have the visualization activities we've done over the last few weeks affected your reading?"

Elena furrows her brow for a second, like I've just asked her something in Japanese. Then, something clicks. "You mean all that drawing stuff?"

I nod.

She reaches back and tugs at her hair with both hands. “Well,” she says thoughtfully, “I used to be able to read little books with pictures. You know, like kid books. But now I don’t have to anymore.”

She can tell that I’m hanging on every word. I can tell she likes it.

“Now, I read without no pictures,” she continues. “I read any books I wants. Now, I make my own pictures.”

Elena’s words, to her ever-lasting delight, leave me dumbstruck. Before I hear her words, I don’t really understand what visualization is or what it can do for struggling readers. I taught a few lessons as part of my very first graduate class and reflected upon their effects because my professor required it. I chose to do those lessons on visualization because I thought it would be fun, and yes, relatively easy. I read a couple of stories with the kids and had them make little sketches. I wasn’t expecting much more than a good grade.

As Elena turns and strolls back to her book, it hits me for the first time. I have stumbled on something that can dramatically impact my students... something that can do more than increase comprehension... something that can change lives.

### **My Last Chance?**

Awards and accommodations don’t get you very far in an education these days. In the past six years, my Read 180 and System 44 students and

have been recognized multiple times. One of my students won Scholastic's national System 44 All-Star Award. I've been honored with Scholastic's national Outstanding Educator Award, Bethlehem Area School District's Certificate of Excellence, and my classroom was chosen as a model classroom for the System 44 Implementation DVD. And yet, last year both System 44 and Read 180 programs were cut at my school due to budget constraints.

I thought of changing careers. I got my resume ready and sent it out. But, just when I had given up hope, I was given a second chance.

I made a plea to my district's superintendent and our head of curriculum. I told them it was a mistake to cut these programs. I called System 44 and Read 180 "rays of hope in our students' lives." And, much to my delight and surprise, they not only listened... they took action. They found a grant to fund Read 180 and System 44 at my school for another year.

My respite might be short lived. My title as a Literacy Coach, instead of Reading Specialist, makes my position one of the first in the district on the chopping block. With future budget cuts looming and grants becoming harder to find, it's possible that next year will find me in a different class, different school, or even in a different career.

This could be my last shot to help the underprivileged children at my school. It could be my last chance to teach the programs I love and believe in so much. I might only have one more year to continue the visualization

research Elena inspired me to continue five years ago. And I'm not going to waste it.

### **Back to School**

When I last saw the kids, I thought it was going to be my last time. I said sad goodbyes and they wrote me letters telling me to stay. Now, their faces light up when they see me. I don't think I really appreciated how much I would have missed them.

I spend the first fifteen days of school doing nothing but testing. Kindergarten placement comes first and Dibels isn't far behind. As a member of the "SWAT," or official testing team, I give one-minute phonics and fluency tests to every student in the school until I think I'll go mad.

The kids help me survive. Peter stops me in the hall every time he sees me. "Am I coming with you?" he asks hopefully every time our paths cross. "Do I get to do Read 180 this year?" Crystal wonders. They were in my System 44 class in third grade and have been chomping at the bit to move into Read 180 since they saw it at the end of the year. Their excitement is contagious.

\*

With Dibels testing finally finished, I begin my own round of assessments. Every prospective Read 180 student needs to take the Scholastic Reading Inventory, or SRI. This computerized comprehension test measures

student reading levels in terms of Lexiles and the technology behind it enables me to organize student results into proficiency levels, target reading charts, and progress since the last exam.

I pull the lowest students in fourth grade and test them. Students are chosen for testing based poor performance on the state reading exams, low Dibels scores, teacher recommendations, or low DRA levels. Usually, for my students, it's a combination of all four.

The grouping for this year's fourth grade is relatively easy. The principal tells me she'd like students to continue from System 44 into Read 180, unless there is a conflict with English Language Learner or Individual Education Plan support. The only exception to this rule is for students who scored Proficient on last year's state exam. Unfortunately, none of last year's third grade students qualify for the exception. None of them passed last year's test. Most scored Below-Basic.

The SRI results for my fourth grade research group are not surprising (Table 1). More than 50% of the students score below grade level. The rest score far-below grade level.

	Grade	Lexile®	Date	Normative Data		
				Percentile Rank	NCE	Stanine
<b>Advanced</b>						
<b>Proficient</b>						
<b>Basic</b>	4	395	09/12/11	16	29	3
Below Grade Level	4	407	09/12/11	16	29	3
	4	409	09/12/11	17	30	3
	4	442	09/12/11	20	32	3
<b>Below Basic</b>	4	<b>BR (0)</b>	09/14/11	1	1	1
Far Below Grade Level	4	138	09/12/11	1	1	1
	4	140	09/12/11	1	1	1
	4	250	09/12/11	5	15	2
	4	318	09/12/11	10	23	2

*Table 1: Pre-Study Scholastic Reading Inventory Results*

From the top: Peter, Ronnie, Polly, and Crystal score Basic. MayMay, Jasmine, Samantha, Justin, and String score far below grade level. Ronnie, Polly, and Crystal's results show them reading at a second grade level, more than two full years below grade level. The rest are even lower.

A smarter man would be worried. Not only are their reading levels extremely low, many have much bigger factors impacting their lives. Jasmine and Polly are both English Language Learners. Justin and Samantha have Individualized Education Plans. Justin, MayMay, Crystal, String, Samantha, Jasmine, Ronnie, Polly, and Peter are all minorities and every one of them is labeled economically disadvantaged. A smarter man would definitely be worried.

I'm not a smarter man. I am not worried. I know these students, and I know what they can do. All but one was in my System 44 class in third grade. The phonological and phonetic foundation we laid last year will serve them well, whether it shows up on their test or not. There's bedrock there. We've got something to build on. The difficulties they've been through in their personal lives may make reaching these students hard at times, but it can also give them unexpected strengths. My kids live in a very tough neighborhood. Just surviving day to day can take courage. If I can get them to care, if I can get them to try, they can accomplish the impossible. I'm characteristically overoptimistic.

My new student, however, gives me a little pause. MayMay scored so poorly the software can't accurately find her reading level. Her zero jumps off the page. The computer tells me where to start, which software to use, and which books to hand her. I meet with our building's Special Education Specialist and she tells me of MayMay's strengths and weaknesses. But I know that with these kids, I've got to delve deeper than numbers. I've got to connect with them if I hope to really help them.

I'm hoping to make this year something special, and I know that means getting off to the right start. Time is not on my side. I've taught Read 180 for five years. I know the first three weeks can make or break an entire year.

### **The First Three Weeks of Read 180**

The first weeks of Read 180 are all about setting the stage. I show them videos about how great Read 180 is and tell them about the miracles it can do in their lives. I show them the books they'll be reading and talk up how much they'll love reading them. I speak about the success other students have had in the past and assure them they can do the same. I promise them the world... and I always read them Dr. Seuss' *Oh! The Places You'll Go!*

The first three weeks of Read 180 are also about teaching routine. They'll be spending their time rotating through three instructional stations: the Instructional Software, Independent Reading Group, and the Small-Group Instruction. They need to know the ins and outs of each group, and how to get from one to another. Where do the headphones go? How do the CD players work? Where can they find the worksheet for their book? How do they log onto the computer? I can't expect them to operate successfully until they can answer all of these questions.

Instructional routines are just as important. We go over the vocabulary routine using nonsense words we make up. We practice think-write-pair-share routines with questions about the value of homework and how much recess they should get. They need to be comfortable with how I teach before I can start teaching.

It's an incredible amount of prep work. But, I've been through this process before and I know it's worth it. A minute of prep work now, pays off in hours of instructional time later!

\*

As we begin our first few days of full rotations, my observations reaffirm the need for my visualization intervention. The students are asked to make notes in their reading logs about what the audio books they read in the Independent Reading Group that day. They all struggle.

Jasmine tells me that she doesn't know what she read about. MayMay gets so frustrated that I won't tell her what to write she nearly breaks down in tears. Polly's note of, "It was nice," is not exactly what I was hoping to see.

The students are following my directions in the reading group, or at least seem to be. They are following along as the story is read to them. They are listening to the coach and looking at the words, but they are not getting into the story.

Some, like Crystal and Ronnie, have some surface levels of comprehension and are able to get down a decent note about the book without help. Yet, even these students are not really connecting. They are only making surface observations. Some, like Peter, are just spitting the words they read right back onto the log.

It's not the plagiarism I'm worried about. It's the lack of life in what they're recalling. I don't want their reading to be this superficial. I want it to have depth and color.

I cannot wait to get started with my study.

### **Study Introduction**

I tell the class that I've been going to Moravian College to learn how to become a better teacher. "This is the last class I need to take before I graduate," I explain. "I'll be teaching you all about this special skill called visualization." I give the new word a few seconds to sink in before. "And I'm actually going to be writing a book about all the work we do together."

Most of the kids seem excited. Justin and Peter gasp and share a wide-eyed glare.

Polly is more practical. "You're going to write about all the bad stuff we do?"

I can't help but laugh. "I'm going to write about everything we do," I tell him with a wink. "But don't worry, I'm not going to use your real names and it's not really going to be about behavior. It'll be more about the lessons we do together."

Crystal's hand shoots up. "Can we pick out our own names?"

I told them about a paper I did a few years ago when I let the kids back then pick their own pennames. I wasn't planning on letting this group,

wanting instead to choose names that I felt fit their personality and demonstrated the diversity of the class. But her smile is hard to resist.

“Sure,” I concede. “As long as they’re not too silly.”

I pass out the Parent Consent Forms. As I go over the letter, I explain what visualization is and I start to explain the three different levels.

“When you’re reading and you really get into the story,” I explain carefully, “sometimes you can see what you’re reading in your imagination. Sometimes, you make the drawing up as you go, like when the author is describing one of the characters. Sometimes, you can picture the story in motion, like you’re watching it on television. And sometimes, when you’re really into a story, you feel like you’re in the story.”

The children do not look convinced. String is the first to raise her hand, “I don’t understand you, mister.”

“Don’t worry,” I promise her. “You will. I’m going to show you how. We’re going to get to do all sorts of fun stuff. We’re going to get to draw and play games and hear some of the stories I’ve written myself.”

“The first thing we’re going to do,” I press on, “is something called a survey.”

I pass the Visualization Survey out, explaining that I want them to be totally honest with their answers (See Appendix C). “Don’t try and put down what you think I want you to,” I tell them. “And don’t worry about anyone

else's answers. Just be honest. The more honest you are the better it will help me."

Polly eyes the paper suspiciously. "You're going to put our answers down in your book?" He looks up at me. "Is this thing graded?"

Crystal has other concerns. "Can we put fake names on it?"

"I want mine to be MayMay," says her friend excitedly.

The next few minutes are spent helping the kids try and figure out how to spell their new names. When I'm asked how to spell String, my first instinct is to tell her to pick something else. But, she thinks it's so funny that I can't bring myself to say no. I write it on the board as the rest of the class laughs.

When all the fake names are in place, I begin to read off each survey question. "When you are reading and the author is describing something, do you picture what the author says in your mind?" I read. Then, I clarify, "So if the book your reading is describing a monster or what a building looks like, do you imagine what it looks like."

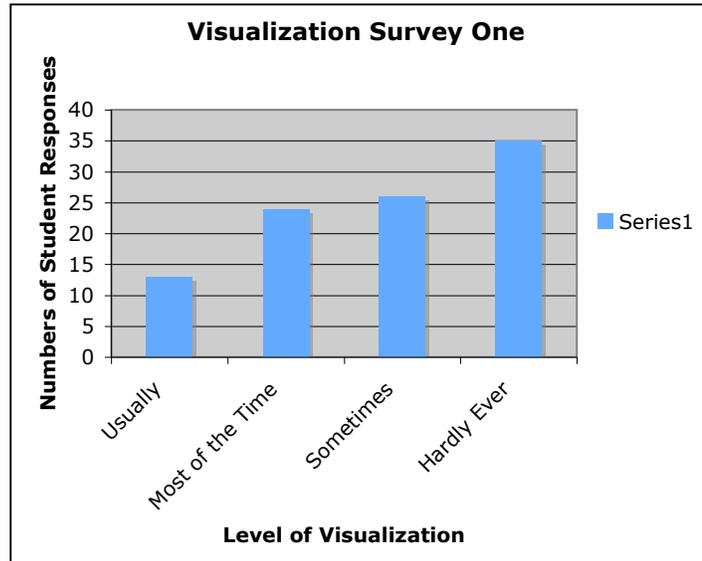
As we move from question to question, the children share confused looks. Despite my instructions, many start leaning over to see what the people around them have put. I catch Justin copying MayMay's answers.

About halfway through, String raises her hand and confronts me directly. “I confused about what it is.” I try to explain again, but I can tell its not sinking in.

Ronnie seems to be one of the few students that understands what I am trying to get at. But even he isn’t sure. He raises his hand as we near the last question. “Mr. Toonder,” he wonders. “The vization thing, is it like the same thing as daydreaming?”

I try to take advantage of the teachable moment. I try to use his insight to help the others. “It’s very similar,” I say. “Except that when I daydream, I kind of just let my mind wonder wherever it wants. When I visualize, I get that kind of escaping, dreaming experience, only it’s the author who’s telling my mind what to imagine. I’m not letting my mind go, I’m letting it sink into the story. I really need to concentrate on the story in order to visualize.” Many of the students nod as if my explanation makes complete sense. Johnny gasps. “Oh, now I get it,” he tells me. But when the class leaves I know most are still very confused.

After school, I sit at my desk and look over the survey results (Table 2).



*Table 2: Visualization Survey One*

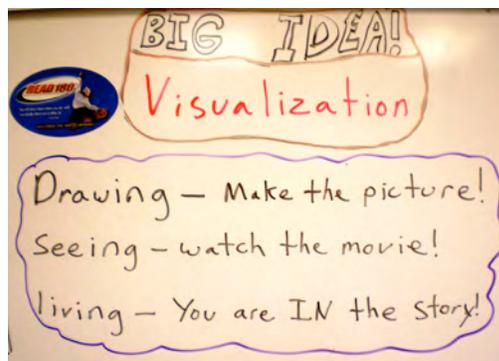
I look them over with a skeptical eye. The students’ confusion makes me question the results. Still, the numbers, along with the students’ uncertainty itself, shows the strong need for the intervention. These struggling students have never really been taught visualization. Not only do they not seem to use mental imagery when they read, they seem to struggle to even comprehend what it is. From what I can tell, they are starting from a nearly clean slate. And I’ve got a lot of work ahead of me.

\*

I have the students read “The Five Snakes” on audio recording. For large portions of the study, we will be using my series of Vietnamese folk

tales to practice various visualization skills and the illustrated picture book will provide the students with important background knowledge. I'm hoping the pictures will help them create a foundation for creating their own images of the characters and oriental scenes depicted in the series.

The following day, we're ready to get started with our first real lesson. I start by reviewing the three different levels of visualization we'll be working on. I jot the three levels on the board (Figure 1).

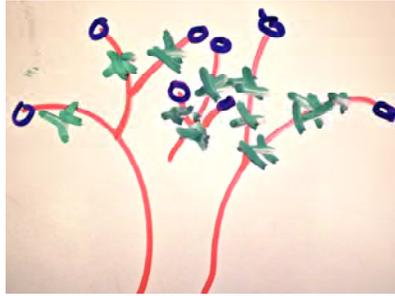


*Figure 1*

After we define Drawing, I read the class a short passage.

“A giant red tree stood before us. It had huge green leaves shaped like stars and the end of each branch was capped with a purple flower.”

With the students' input, I draw a picture on the whiteboard to match the story, explaining how I add details to my mental image as I read like I am drawing a picture in art class (Figure 2).



*Figure 2*

Most of the students are able to describe the details accurately. String and Jasmine have a little trouble, confusing the colors.

I reread the picture one more time before moving on, pointing to the details in our picture and keeping my eyes on Jasmine and String. Jasmine nods in understanding. String lets out a gasp. “Oh,” she says, grabbing the sides of her head, “purple flowers.”

Satisfied, I press on. “Now, sometimes the picture I make goes in motion.” I turn my attention on Ronnie.

“Ronnie ran through the forest as fast as he could. The trees were a blur around him and the ground seemed to be rolling beneath his feet.”

I point to the television. “When I read that it was like I was *Watching* a movie.” I point to the word on the board to add emphasis. “I imagined Ronnie sprinting through the forest.”

I let Ronnie soak up his moment in the sun. Then, I read the next example.

“The air felt cold inside the pitch black room. And, as I heard footsteps in front of me, a chill ran down my spine and my heart started thudding inside my chest.”

I do my best to act out the words as I read them, shivering like I’m spooked and tapping my chest. “Now, I feel like I’m in the story,” I tell them, pointing at the word ‘Living’ on the board. “I can feel what the character feels. I can almost sense the cold air. When his heart starts to beat, I feel my speed up, too. I feel scared because he feels scared.”

I explain how Living is the deepest level of visualization, but that none are really better than the others. “The three different kinds of Visualization lead into each other and all three are necessary. When I read, I’m constantly switching from one kind to another, depending on what’s happening in the story and how interested I am in it.”

\*

“I’m going to read another Quynh story to you,” I tell the class. “As I read it, I want you to close your eyes and try to imagine the story.”

They look at me like I’m crazy.

“You actually want us to close our eyes?” Ronnie asks.

The class shares a giggle, but with a little effort the kids settle down and put their heads on their desks.

I stop periodically throughout the story and draw the most important scenes from the story on the board (Figure 3). I complete the first one for the kids, but for the rest I call on the students for input.

I'm no artist and I tell the kids that's not the point. "I can't draw everything in my imagination," I tell them, "even if I was a really good artist. It would take forever. What we're trying to do is get the big ideas down."



*Figure 3*

As we wrap up the lesson and rotate into our groups, I ask the students in the reading group to try and get a picture of their audio books as they follow along. When each group cleans up, I ask them if they got any images while they were reading. I want to see if they're applying any of things we've just gone over. They have a lot to share.

“I saw the dog was got crashed by a Texas cab,” String tells me excitedly.

Justin almost shoves her aside to get to me. “The guy in my book kissed thirty-three girls. I saw him in my head.”

“I was in the forest and I saw the dinosaur with big razor sharp teeth. It was a T-Rex,” Polly tells me as I help him put his book away. “I was Living it!”

Even the students who don’t discuss using visualization seem to show stronger recall. But most have applied the skills right away. Some have even written about their experience in their reading log.

“I was picturing Mila talking when they put pictures in front of her,” Crystal reads with a grin. Crystal has chosen a very important part of the story to write about, and one that is often overlooked by the students. I’m excited she’s emphasizing it. “But Shay wasn’t talking.”

Overall, I notice a marked improvement in the students’ comments. They had a lot more to say and were very excited to say it. I’m not sure if it’s due to increased comprehension, increased motivation, or both, but regardless of the cause it is certainly a very positive sign. Not bad for the first day of our study.

## **Drawing**

Explaining what's happening in your imagination is tricky business. Teaching others to use their imaginations in a certain way is even trickier. I begin with the most concrete activity I can think of.

### *I Spy*

"I have as many legs as a dog," I read to the students (See Appendix D), "but I can't move. My top is flat and tan. People slide chairs under me. I am the..."

Peter's hand shoots up, "A dog," he says before I call on him.

"A cat," String chimes in.

"Dogs isn't flat," Samantha tells them with a roll of her eyes.

I jump in before an argument breaks out. "Samantha's right," I say. "Even though she also forgot to raise her hand. But I like that String and Peter were listening to the details. Dogs and cats do have four legs, so they were on the right track, but when we're reading we have to make sure that what we're picturing in our heads matches everything the author is telling us. Otherwise we can get very confused."

I read the riddle again.

"It's the table," Samantha says. We might have to have a lesson on raising our hands.

"Yeah," I say. "But which one?"

There are two tables crammed into my room, a long rectangular table with a tan top and a small round table with a white top.

Ronnie calls out the correct answer, but I wait for someone who's actually got a hand up.

“Which one, Jasmine?”

She stares down shyly. I wait. She's reluctant to answer any question in front of the whole group and the wait-time is pretty standard. “This one?” She looks up at me uncertainly.

“That's right,” I say. I reread the riddle one last time pointing out the details as I say them. “What Jasmine just did is what we are going to call Drawing,” I remind them. “She made the picture in her head as I read the clues and was able to match it up with the table.”

Jasmine smiles triumphantly. It's a good confident boost for a girl who's still in the process of learning the language.

“Let's try one more together. Listen close, Peter. I'm calling on you.” I read the next riddle. “The *blank* is blue and fuzzy. It's flat. Sometimes pencil shavings get all over it and kids walk on it all the time.”

“The ocean!” Justin calls out.

I give him my ‘angry teacher glare.’ “Why isn't Justin right, Peter?”

He scratches his short black hair. “Cause probably oceans ain't fuzzy.”

“Very good,” I tell him. “So what could it be?”

Several students are so excited to blurt out the answer they have to cover their mouths with their hands to stop themselves.

Peter looks around the room. “Can you read it again?” he asks.

When I’m finished, he shrugs his shoulders.

“Can somebody help him out?”

Polly jumps out of his seat and runs over to the blue carpet. He points down with both hands. “It’s the carpet. That’s easy.”

After discussing how he figured it out, I break the children up into pairs and set them to work on the next five riddles. At first, the groups are asking me for help on every question, and I have to remind them that I am not one of their partners. But, as they realize I’m not going to do the work for them, the children begin working well together. Engagement is high and most are able to figure the correct answers without too much assistance.

I have the kids try out the last three questions on their own and then make up their own I-Spy riddles. I am surprised by how much trouble they have. Jasmine and Justin, in particular don’t seem to be connecting the clues to the objects. I have to walk Jasmine through every question and have to add extra clues before she figures them out. It’s hard to make sense out of Justin’s clues.

“it black you were it what is is is what you where and Down on you to you feet what are there,” he writes. It takes me a few long moments to figure out he is talking about my shoes.

We end the lesson by sharing our riddles and trying to solve them. I read them to the kids, doing my best to make them make sense as I read.

I’m even more surprised by how much trouble they are having. Sometimes, they seem to be only picking out one clue instead of trying to get the whole picture. Other times, their answers have almost nothing to do with the riddle.

I wonder how much their limited reading skills are affecting the lesson. It’s hard to really separate visualization from comprehension. Are they weak in the Drawing skill or just weak readers? As they shuffle out for the day, I reflect that the two skills might be more intimately connected than I ever considered. If they can’t picture it, how can they comprehend it? If they can’t comprehend it, how are they supposed to picture it?

I decide to add more Drawing lessons than I originally planned and I’m going to have to be much more careful about how I implement them. I know that I can’t move on until they’ve really mastered the skill. If they can’t Draw the picture, they’ll never be able to make it move.

\*

MayMay runs in unannounced. She still has her coat on and she's waving a *Diary of a Wimpy Kid* book above her head. "I read the whole thing this weekend," MayMay brags, running the zipper of her jacket up and down her coat excitedly. "I got the movies."

"You mean you watched the movies, too?" I ask. The second 'Diary of a Wimpy Kid' movie has recently come out on video. I'm planning on using it for one of my later lessons and have the film on my brain. I automatically assume that's what she's talking about.

"No, crazy," she tells me like I'm being ridiculous. "In my head."

Her words give me the boost I need to press on. The children might be having more troubles than I thought they would, but something is sticking. At least for MayMay, our work is paying off.

#### *Drawing What You Read*

The two days are spent with colored pencils in hand. I'm intentionally methodical in my teaching, showing the kids how to draw out each detail together before I let them try anything on their own.

"The house looked funny," we read together (See Appendix E). "It had a big round door in the middle and three square-windows running across the top. Even the front lawn looked weird. It was shaped like a big star."

The kids draw the details on their worksheets as I put mine on the whiteboard. String adds some extra color (Figure 4):



*Figure 4*

“There were three mountains,” we read. “Two were bright blue and looked peaceful. But the one in the center looked evil. It was much bigger. It was red and a cloud of black rose up from its peak.”

Polly leaves out the volcano’s smoke and has to add it after I point it out (Figure 5):



*Figure 5*

We read the next one together, but this time the students try the picture on their own. “When Mark walked outside his house,” Crystal reads for us, “and found that his brand new bike was gone. In the grass where it had been sitting there was only a strange pink note shaped like a heart. ‘Come find me!’ was all it said.”

MayMay adds in some extra details, but she’s accurate with the details from the story (Figure 6):



*Figure 6*

The other student’s pictures also show the major details. I’m pretty confident the kids are getting the idea, so I let them try a few on their own. Their first independent practice passage is a little tricky for most of them.

*It was hard taking my dog Bill for a walk. He was twice as tall as me and three times as wide. The top of my head barely reached up to his belly. I*

*needed to use a huge black chain for his leash just to keep him from running away.*

Most students struggle with the size of the dog (Figure 7).



*Figure 7*

But as we move into the next day, the kids start getting the hang of things (See Appendix F).

Samantha gets all the details correct, even if poor Tim looks a little like a girl (Figure 8):

*Tim had curly yellow hair. Tim had bright blue eyes. He was never mean and he always smiled.*



*Figure 8*

Jasmine draws each detail very carefully, checking with me before she draws anything to make sure she is reading it right (Figure 9):

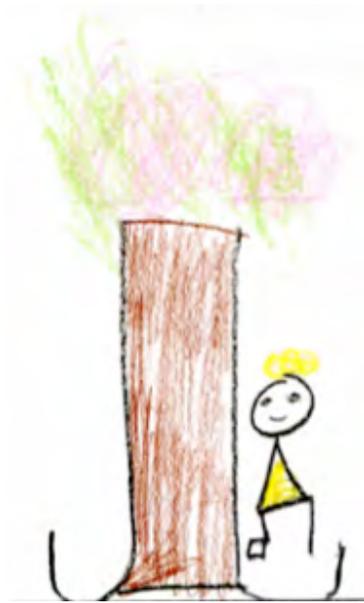
*The red car was underneath the tree. It had black wheels and a big orange spot painted on the side.*



*Figure 9*

Ronnie asks me “If it matters how good the drawing is?” before attempting his tree (Figure 10):

*Tiff sat with her back against the trunk of the tree. She had a yellow dress on and a yellow bow in her long brown hair.*



*Figure 10*

The last passage tells it's time to assess if the group is ready to move on to a new visualization skill. The details in the passage, particularly some of the colors, were intentionally chosen to make it a little harder than the earlier passages.

*The pink boat was in the middle of the lake. The water around it was green and had lots of red and orange leaves floating on top of it.*

Justin's isn't the most colorful, and I make him label it so people can tell his pink circle is a boat, but the details are all there (Figure 11):



*Figure 11*

The improvement from a few days ago is dramatic.

#### *Drawing Quiz*

I try to alleviate Polly and Ronnie's concerns about the fact that the paper in front of them says 'Visualization Quiz' by explaining its purpose (See Appendix G). "Before we move on to the next skill, I need to make sure that everyone is ready." I hold up my copy of the quiz. "This is the paper that's going to tell me if we should move on or if we need to do more Drawing lessons. So, it's important that everyone does their best. Read carefully and make sure all of your details match."

I spread the children around the room and set them to work.

*Three sisters were standing beside their red car. One of the sisters had yellow hair. One of the sisters had black hair. The third sister had bright red hair. They were all holding hands.*

String's hand goes up as soon as she's finished reading the passage. "Are the girls wearing dresses?" she needs to know. Justin has a similar question about the color of the car's wheels. "What color do I have to make the tires?" he asks me. "It doesn't say?"

I stop class and make sure everyone is on the same page. "What should you do if the author leaves out a detail?" I ask them. "How can I fill in the gaps?"

"You can put down anything you want," Ronnie reminds everyone.

His answer satisfies everyone and the students quickly begin drawing.

String (Figure 12):



Figure 12

MayMay (Figure 13):



Figure 13

Samantha (Figure 14):



*Figure 14*

With every student accurately portraying the details, I'm fairly sure the students are ready to move on to the next stage of the study. The next day, Polly and Crystal cement my decision.

Polly barges into my room during my prep-period. "Last night, I was picturing my book in my head and I wasn't even reading," he tells me with a wide smile. "I was dreaming about it!"

Crystal comes in less than five minutes later, "I was reading yesterday and seen the story like I was in it. The girl drove her bike down a hill and fell in the pond. It's strange. I was hearded all the noise and feeling the twisting."

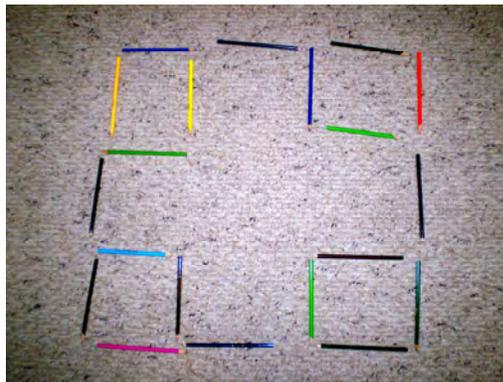
The students seem to be taking the next step by themselves. I better catch up with them!

## Mid Study

As the halfway point of my study approaches, I decide to take a few days to practice with real stories and not just the short passages we've been working on over the past several lessons. I want to make sure the students have a clear understanding of when to apply the Drawing skills they've acquired so far. I also want to take the opportunity to distinguish Drawing from the other types of visualization and use the examples we encounter to lead the students toward our next target skill.

### *Practice with Folktales*

“Out of all the Quynh stories I've written,” I tell the children, “this is probably my favorite.” I've already lured them in by adamantly demanding that no one touches the “puzzles” I've set up on the two tables and the reading carpet as they came into class, and I know I've got them hooked (Figure 15).



*Figure 15*

“Quynh and the Seven Squares,” I begin, “by the coolest teacher in the world.” My corny joke elicits an eye roll from String.

The kids follow along as I read aloud, calling out the next word whenever I pause. The kids seem into the story. They gasp as they hear about the enormous sum of money our hero Quynh will win for his school if he can solve the king’s challenge.

We pause periodically and depict what we are visualizing (See Appendix H). At each point we discuss whether Drawing, Watching, or Living is taking place. I point out that as we read we will constantly be moving in and out of different levels at different times.

“For me,” I said as we completed one of the parts, “I did a mixture of all three levels of visualization. When I was reading the description of Mr. Tri, I was Drawing. When they described Quynh pushing his way through the crowd, I felt like I was there. I was Living. It was like I was in the story nudging my way past people. But, most of the time, I was Watching the story take place.”

I transition the kids into independent pictures and descriptions for the fourth and fifth parts. Their pictures and descriptions are right on target. Crystal’s are some of the best (Figure 16).

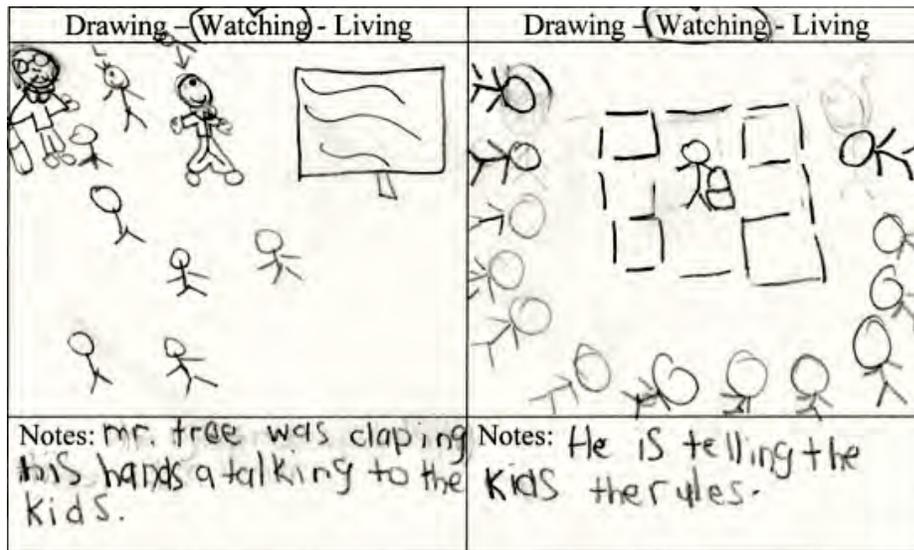


Figure 16

We stop one last time right when Quynh is about to solve the puzzle. I break the kids up into three groups and review the rules. “You have to make seven squares,” I tell them, pointing at the version I’ve draw on the board (Figure 17).

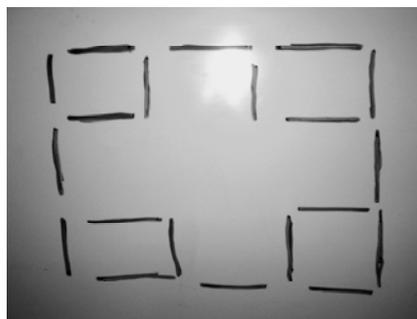
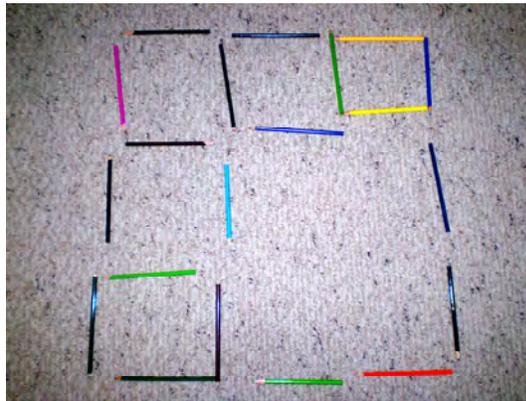


Figure 17

“But you can only move two of the sticks and only get one try.”

I walk around as each of the students try their hand at the challenge. Engagement is incredibly high, but I’m most impressed by the cooperation I’m seeing. The children are patiently waiting their turn, calling out words of encouragement to each other, and laughing hysterically when each person fails.

When everybody has had their turn, I call everyone to the carpet and show them the solution by reading the ending and having a student pretend to be Quynh and Live the described actions (Figure 18).



*Figure 18*

There is a lot of head slapping and groaning as we count out the seventh square that includes the outside perimeter. But as the students Draw their final scene, I couldn’t be happier. The students are distinguishing

between the different levels of visualization better than I could have hope for this early on. We haven't delved into Watching or Living, but many relate the acting out of the puzzle to the story (Figure 19).



*Figure 19*

The next day's lesson goes just as well. As we read about Quynh's clever trick that gets him free ferry rides and makes the ferry master rich at the same time, the students are able to distinguish, describe, and depict which visualization strategy they are using.

String's drawings and descriptions show her transitioning through all three levels of visualization throughout the story (Figure 20).

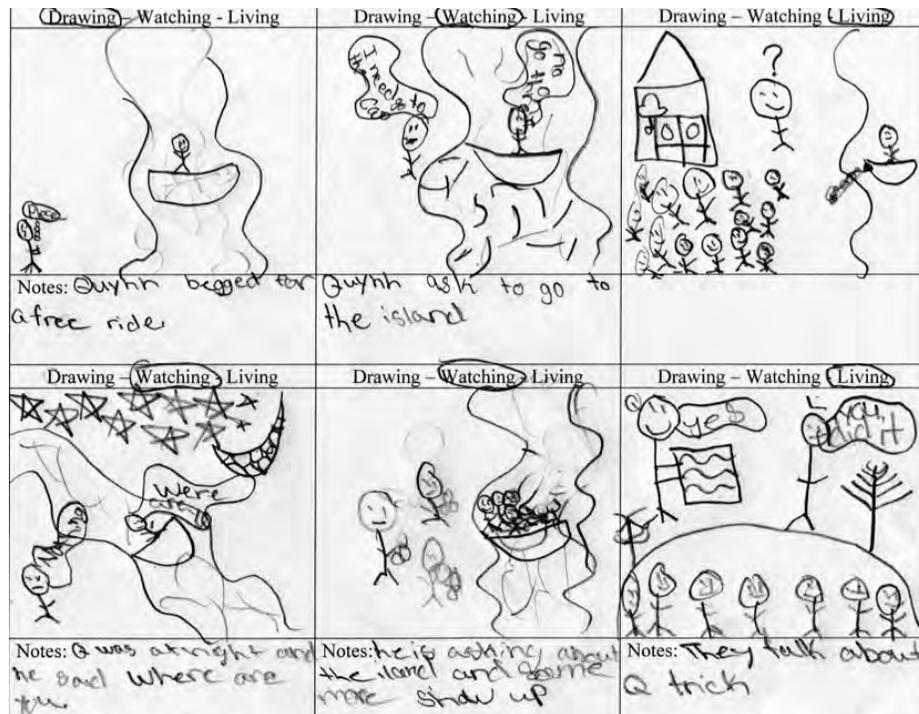


Figure 20

Other students' work isn't as neat or quite as accurate, but I'm confident that once the mid-study testing is over we'll be more than ready to move on.

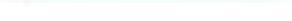
#### Mid-Study Testing

The November Scholastic Reading Inventory results show all the students in great need of improving their overall reading level (Table 3).

Grade	Lexile®	Date	Normative Data		
			Percentile Rank	NCE	Stanine
4	481	11/03/11	22	34	3
4	468	11/03/11	22	34	3
4	457	11/04/11	21	33	3
4	423	11/03/11	18	31	3
4	351	11/03/11	11	24	2
4	319	11/03/11	10	23	2
4	318	11/04/11	10	23	2
4	204	11/03/11	2	7	1
4	135	11/03/11	1	1	1

*Table 3: Mid-Study Scholastic Reading Inventory Results*

From the top, Peter, Ronnie, Crystal, Polly, and String score Basic. Samantha, Justin, Jasmine, and MayMay score Below Basic. At first glance, the results don't look very different than the SRI taking at the beginning of the study. Only String has progressed to the next proficiency level. It's not until I examine their "Growth Report" that the extent of their progress comes through.

Grade	First Test in selected time period		Last Test in selected time period		Growth in Lexile®*
	Lexile®	Date	Lexile®	Date	
4	140	09/12/11	319	11/03/11	179 
4	BR (0)	09/14/11	135	11/03/11	135 
4	395	09/12/11	481	11/03/11	86 
4	250	09/12/11	318	11/04/11	68 
4	138	09/12/11	204	11/03/11	66 
4	407	09/12/11	468	11/03/11	61 
4	318	09/12/11	351	11/03/11	33 
4	442	09/12/11	457	11/04/11	15 
4	409	09/12/11	423	11/03/11	14 

*Table 4: Mid-Study Scholastic Reading Inventory Growth Report*

In Table 4, MayMay and Samantha’s results jump out at me. MayMay has broken away from the cellar. In the past, students who managed to climb away from the “BR” label that shows the student cannot be accurately measured by the test because they are unable to perform sufficiently on the test have gone on to soar as the year progresses. I am confident that her hundred and thirty-five point jump is only the beginning. Samantha’s results are equally as encouraging. She has shown more progress in her reading level in the past weeks than in she did in the previous year.

The rest of the students’ results are more typical. Still, after less than two months of Read 180 and visualization intervention, the fact that all nine students have shown positive growth is very encouraging.

The question of how to interpret the students’ growth is more problematic. It seems impossible to determine whether the growth seen is

attributable to the visualization intervention I have implemented or the result of the regular Read 180 scope and sequence the students are completing as the study progresses. The overall class growth is impressive, but not so different from past years that I can pinpoint the visualization skills as the reason.

In addition to Lexile growth, I have witnessed strong improvements on test scores within the Read 180 program (Table 5). Many students were struggling in the areas of comprehension and vocabulary when the study was undertaken and had low grades in various areas that reflected those struggles. As the days have passed, the students have pulled those grades up dramatically. Currently, no students have failing scores in any area. This is an impressive feat for any group, but gains special meaning when the high number of ESOL and Special Education students is taken into account.

READ 180 Software Progress							Independent Reading	Teacher-Directed Instruction
Level	Comprehension Score	Vocabulary Score	Word Fluency	Final Fluency Recapturing (Out of 6)	Spelling Score	Context Passage	Book Quiz Average (No. of Books)	Whole- and Small-Group
1	72%	74%	90%	1	97%	78%	80% (1)	N/A
1	88%	73%	85%	4	97%	88%	N/A	N/A
1	85%	85%	87%	4	96%	88%	90% (1)	N/A
1	89%	75%	91%	4	98%	92%	70% (3)	N/A
1	89%	71%	93%	4	98%	92%	N/A	N/A
2	73%	73%	85%	5	98%	97%	N/A	N/A
2	95%	84%	86%	5	98%	92%	N/A	N/A
2	91%	82%	88%	5	99%	100%	95% (2)	N/A
2	73%	80%	100%	4	96%	94%	77% (3)	N/A

*Table 5: Read 180 1<sup>st</sup> Quarter Grading Report*

Once again, however, it proves extremely difficult to determine the degree to which students' progress is due to the acquisition of visualization skills. For now, I'll have to trust my own instincts and informal observations that the study is having a positive impact on my students' learning and that it is worth their time to press on.

### **Watching**

I'm ready to attempt the teaching of something that is inherently even more difficult to frame than what we've already tackled. It's a little unsettling. I think of the most concrete way to show the students the abstract process of watching events unfold in the imagination. And I cross my fingers.

#### *Getting the Pictures Moving*

I scratch my chin like I'm deep in thought as I stand in front of the class. "She was wearing a yellow dress," I say, trying not to look directly at the girl I'm describing. "She had white boots and a yellow flower in her hair."

Samantha's hand goes up before I can ask the question. "It's Crystal," she says. She smiles at me. "That's easy."

"Great!" I say. "And what kind of visualization would that be?"

"Drawing," Justin answers correctly.

"Excellent," I tell him. I move to the white board, where I've got the three levels of visualization written in big letters. "Like we talked about last

week, Drawing is often the first type of visualization to occur. It sort of sets the stage for the action.” I slide my hand down from *Drawing* to *Watching*. “But when I’m reading, I usually don’t stay in Drawing. When action is happening, when the characters are moving around... when the girl in the yellow dress sprints through the woods or her bike slides out from under her and she goes tumbling down a hill... the things I’m picturing in my head start to move. I start to Watch them happen. Today, I’m going to read you some short stories (See Appendix I). As I read it, I want you to try and watch the story happen in your imaginations.” I stroll over to the television and tap the screen. “I want you to see if you can make it so it’s like you’re watching a movie in your mind.”

*The bell rang, the gates sprang open, and the horses bounded out onto the racetrack. They ran in a tight pack, each horse’s legs swinging wildly as they tried to get ahead.*

*A few of the horses began to pull away. The crowd cheered as they rounded the first turn and two horses took a commanding lead. They raced past the guardrail neck and neck, matching each other stride for stride.*

I write a description of what I was imagining on the board. “As I listened to the story,” I write and the students copy it down on their worksheets (See Appendix J). “I pictured the horses running down the track. I saw them kicking up dirt as they ran. Then, two horses took the lead.”

I play a short video clip of a horserace for the students. Then, we discuss the similarities between what we were imagining and what we saw in the video.

“Let’s try another one,” I tell them. “But this time I’m going to have you write down what you see by yourself. Then, we’ll watch the video and see how close you got.”

*The yellow racecar’s engine screamed as it rolled. Its first spin through the air brought it crashing, upside down onto the racetrack. But its violent trip wasn’t over yet.*

*Its wheels smashed into the ground and sent the car spinning again. It tumbled off the track, spraying dirt and car parts through the air as it rolled across the grass.*

*It came to a final rest several hundred feet from where the crash began, its tires bent, its driver still seated upside down in the exposed cockpit. It was impossible to tell if he was still alive.*

As I walk around to monitor the students’ writing, there are some clear signs of confusion. “I saw that the first horse felled down,” Peter writes, for some reason still focused on the previous story, “and the other horse won the race.”

Ronnie’s description shows that he is Drawing the scene, not putting it in motion. “As I listened to the story, I seen the man upside down wen he was in the car.” The rest of the class seem to have gotten at least part of the story in motion, but their details are limited and show the strong need for more practice.

When I play the video of the high-speed car crash, the kids realize they were pretty far off the mark. “Just like when I’m Drawing,” I tell them as we compare what they imagined to the video, “I’ve got to make sure I’m trying to picture all the details the author gives.”

“Can we still fill in stuff if they leave stuff out?” Ronnie asks me.

“Not just can you,” I tell him. “You have to. There’s no way an author can put all the details in. You’ve got to fill in the blanks or you won’t have enough to make the movie.”

I’m encouraged by Ronnie’s perceptive question. So, we try the next one.

*The cheetah led her hungry cubs across the grassland. They were surrounded by hundreds of large grazing buffalo, but it wasn’t them she was hunting. She was after the newborn calves.*

*She waited patiently as they walked by, choosing her target carefully. And then, she sprung. She raced across the dry grass. Her claws kicked up tiny clouds of dust as she charged.*

*The buffalo began to panic. They started to run.*

*The cheetah paid no attention to the adults. She had her target in her sights.*

*She reached the tiny buffalo and dug her claws into the baby’s back. The calf rolled as it fell. The cheetah pounced on top of it. The cheetah and her cubs would live to eat another the day. The poor calf would not be so lucky.*

The children’s reactions tell me they’re starting to get the idea. The girls let out sad “awes” as I read about the baby calf’s capture and Polly cringes. Most of their descriptions confirm my assessment.

“I was picturing the bufalos was nex to the cheetahs,” Samantha writes. “When the big bufalos left the cheetahs ateing the little buffalo.”

Ronnie’s is much improved from the last story. “As I listened to the story, I seen the cheetah ran to the baby buffalo claf and dug its claws in its back.”

Still, others are lacking sufficient detail and show the need for more practice. “I imainding (imagined) that she was hunting the buffalobaby,” MayMay writes. “that she killde him.”

I decide to add another day of these activities. I spend my night searching for more videos and writing more of my little actions scenes to match them.

\*

After we compare the students’ descriptions to my passage about a space shuttle launch and the matching video (See Appendixes K and L), I’m convinced I’ve made the correct decision. Polly’s description is imaginative, but it doesn’t match the story. “I was in the shuttle and I was saying I am going to the moon. And I seen Jupiter.” Justin’s description doesn’t show any detail. “I watching the spacecraft was blasting off.” And Jasmine’s seems to have only been able to pick out one part of the story. “The red part fell back to Erath,” is all she writes and when I ask her what else she imagined she tells me she doesn’t remember.

The next story and video are about an avalanche storming down a mountain. Peter describes this action scene correctly, but he is still missing the key elements of the trees being knocked over. “I watched the snow falling down the mountain. And anything that stand in its way it will disappear.”

Jasmine’s description is slightly improved as well. “I seen the snow falling down like water,” she writes. “The snow is geting bigger. I seen the snow coming down the muntin.” Still, on the second day of the same type of activity, I’m hoping for more.

As we compare the final video and passage to their written accounts of their visualization, I become even more concerned. The Watching skill isn’t setting in. The students aren’t drawing out the details and I wonder if limited comprehension is stopping them from creating moving images. Is the problem with the stories I’ve written? Is the reading level simply too high? Or have I failed to appropriately demonstrate the Watching skill?

Still, there are some bright moments. After I read my account of a skateboarder’s rail-slide, Polly’s description leads us into a conversation about multiple senses being used during visualization. “I was watching the skateboarde jump on the railing,” he writes, “and I herd the screech it herted my eres.”

It’s a great chance to discuss the bridge from Watching into Living and we take the time to talk about how Watching includes seeing and hearing “just

like watching a movie,” but how Living tends to include more senses “like smelling, tasting, and feeling.”

As we finish up our discussion and rotate into our Read 180 groups, I reflect on the day’s lesson. I decide to move on to the next lesson despite today’s stumbling. Perhaps, coming at the Watching skill in a slightly different manner and using more authentic texts will decrease the difficulties we’ve encountered today.

#### *Comparing and Contrasting Texts and Videos*

None of Jeff Kinney’s *Diary of a Wimpy Kid* books last very long on my bookshelf. I’m hoping the students’ high interest in the series and their familiarity with the two movies that have been released will help aid them in developing a firmer understanding of what Watching is supposed to be and how to use it.

I read a scene from *Diary of a Wimpy Kid, Rodrick Rules* without letting the kids see the pictures. The scene describes the main character Greg’s attempt to get out of summer swim practice by locking himself in the bathroom. Greg wraps toilet paper around himself to keep warm.

We talk about what we were Watching while we listened to the story. Then, we do a picture and matching description together on the white board (See Appendix M). Our picture is a funny, showing a stick figure sitting on a toilet wrapped in swirls of paper. Justin reminds me that I “have to show him

shivering,” so I add tiny marks around Greg’s body to make it look like he is shaking.

We watch the same scene from the movie *Diary of a Wimpy Kid, Rodick Rules*. Then, we fill out a Venn diagram, noting the similarities and differences between the movie and our own mental images.

I’m pleased with the students’ answers. They note all the important differences without much assistance from me. It shows a much better grasp of details than our previous Watching lessons.

“Let’s do one more of these,” I say. “This time, I’m going to have you try it by yourselves.” I read a selection from the same Wimpy Kid book. This time Greg is playing a prank on a friend. He tells the kids at school to pretend that his friend is invisible, ranting about the “floating corndog hovering above” the table.

The children laugh as I read. And when I’m finished they all start drawing without me needing to tell them. Gone are the confused stares that brought me so much anxiety about moving forward with the study.

Some of their work, like MayMay’s picture, makes the details fairly easy to spot and are a good match for their descriptions (Figure 21).



Figure 21

Others, like Jasmine's picture and description, rival my own limited drawing skills and lack important details (Figure 22).

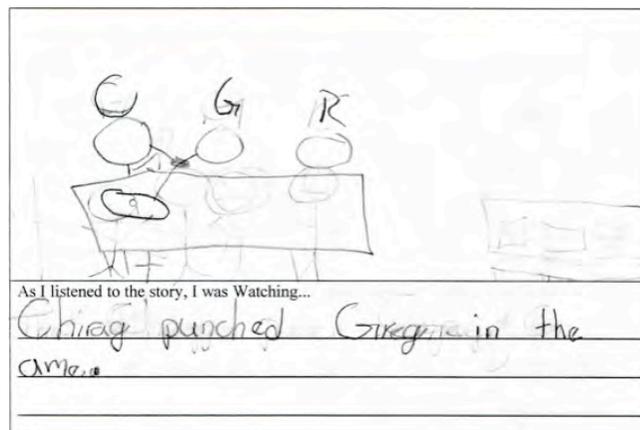


Figure 22

At first glance, I'm a little worried about some of their work. But after we watch the video and fill out our compare and contrast graphic organizer, I believe they're understanding more than their drawings and writing show. The details they discriminate between show a deeper level of proficiency. Jasmine's diagram is actually one of the most complete (Figure 23):

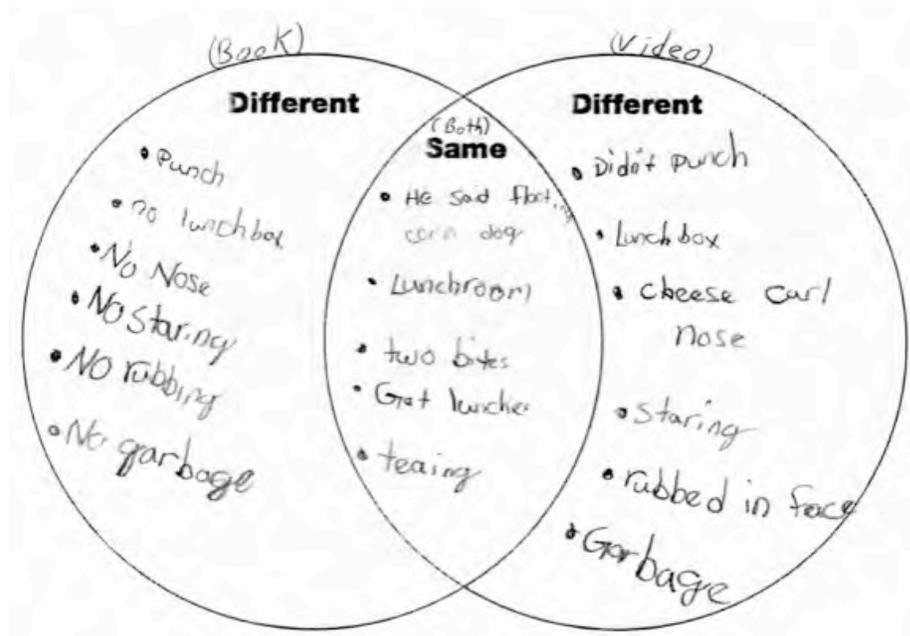


Figure 23

\*

I feel torn as I look over my journal from the past few days. The students are being very inconsistent in their demonstrations of the Watching skills and my failure at pinpointing the cause makes me hesitant to move on to

the next strategy. At times, they seem to be performing beautifully. At other times, they seem to be lost in the dark.

I consider adding more Watching lessons into the study. Yet, two things keep me from writing the updated plans. The first is a simple matter of time. The time remaining to complete the study is rapidly dwindling. If I'm going to be able to complete the third stage of visualization lessons with enough time to assess and apply the skills, I've got to keep moving. The second consideration is the strong link between Watching and Living. In my experience, the two levels of visualization are so intertwined they often seem like different shades of the same color. And it is that thought that gives me the resolve to move on. The lessons I have planned for the Living phase of the study all have aspects of Watching built into them. The students will be reviewing old skills as they acquire new ones, and any gaps will have the chance to be filled in along the way.

### **Living**

It's been several days since our last visualization lesson, so I start with a quick review.

"I'm reading," I say, "and the author is describing what the main character's room looks like. As I read about what color his walls are painted, what his bed looks like, and where his television is, I create a picture of his room in my mind. What kind of visualization am I doing?"

Hands go up before I even ask the question.

“That’s Drawing,” Justin says. He gives MayMay a strange I-said-it-before-you-could smile.

I manage to move on without laughing. “I read about a deer running away from a wolf. As I read, I can see the deer darting in and out of the trees just like I’m watching a movie. What kind of…”

“You gave it,” Samantha calls out. “You said you was watching.”

“Great,” I tell her. “So what’s the next level of visualization? What am I doing if I go even deeper into the story?”

“Then you’s living,” String answers.

“And what’s that mean?” I prod.

“That’s when you are in the book,” Ronnie answers for her.

“That’s right!” I confirm excitedly. “And that’s exactly what we’re going to start to learn how to do. I’m going to read you a story. And you’re going to be the actors.”

*Polly stood up and looked at the door.*

I start to read without telling Polly he’s the main attraction for the first story, but it doesn’t take him long to catch on. I give him a look and reread the line, and he begins his young acting career.

*Polly stood up and looked at the door. A strange noise was coming from the hallway.*

*“ERRRRRRRRR!”*

*Polly tiptoed away from the door. He moved toward the couch with his eyes locked on the door.*

*The lights suddenly went out. Another strange noise came from the hallway.*

*“ERRRRRRRRRR!”*

*Polly was so scared his whole body was shaking. He climbed onto the couch, curled up into a ball, and closed his eyes. He was too afraid to move.*

Polly follows my directions with a constant grin on his face. He stares wide-eyed at the door when I make my weird errrrring noise and trembles like he’s freezing when he’s told to climb onto the couch.

When the story’s finished we discuss Polly’s performance. The kids are excited to explain all the things he got right. They also report a range of their own experiences. Some report experiencing the story from Polly’s shoes, while others say they were Watching while Polly was Living. We discuss the difference in perspective before moving onto the next example.

I have Crystal step just outside our classroom door and whisper what I expect her to do before I start to read.

*It was her first day at her new school and Crystal was scared. She stood in the doorway staring at her new class. She was so nervous she almost felt sick. She stood while the teacher introduced her, biting her nails on one hand and playing with her hair in the other.*

*The kids all stared at her while the teacher talked and it made her feel even more scared.*

*“We have a new student today class,” the teacher said. “Can everyone say hello to Crystal.”*

Crystal gets a case of the giggles during her performance. Yet, she manages to get through it enough that her audience decides that she gets most of the details correct.

“She bit her nails,” Peter says when I ask them to list some of the things she was Living.

“Yeah,” MayMay adds, “and grabbed her hair too.”

“And what were you doing when she was acting those things out?” I ask.

“We was Watching,” Jasmine says.

Ronnie quickly jumps in. “Not the whole time. When we says hello we was all Living.”

“Very good,” I say with wide grin. “And isn’t that just what we talked about? We’ve been discussing how we move from one level of visualization to another depending on what’s happening in the story.”

A few of the kids nod in agreement. A few of them let out yawns.

“Let’s do one more story,” I say.

“Can I act it out?” Justin asks. His question knocks out any boredom from the room. Several kids echo his request.

“This time we’re not going to act it out,” I explain to a chorus of disappointed groans. “This time I want you to close your eyes and see if you can use your imaginations to take you into the story.”

As the kids close their eyes and place their heads on their desks, I think back to the first time I asked them to close their eyes while I read. What a difference a few months can make? The awkward act of visualization has become a commonplace part of their lives. I give myself an internal thumbs-up!

*I was raining so hard, I felt like I was walking through a shower. Water was dripping off my hair and my clothes were so soaked it felt like I was carrying heavy blankets. And it was cold! The wind was howling across the playground. My hands were so numb I couldn't feel them. I had to look at them just to make sure they were still there.*

*"Where is everybody?" I asked myself when I reached the school.*

*The playground was deserted. The kids should have been in their lines but there was no one in sight.*

*I checked my watch to see if I was late.*

*8:10 exactly. I was right on time. So why wasn't anyone else at school.*

*I walked up to one of the classroom windows and looked inside. The lights were out and the room was empty.*

*That's when I realized what was going on.*

*I shook my head and laughed. "I can't believe it," I chuckled. "I actually walked to school on Saturday."*

As I read, I noticed kids acting out small parts of the story. The signs are subtle. Jasmine wipes at her forehead. Justin gives a comical shiver. Ronnie lifts his head and stares at his watch. A class full of smiles blossom when they hear the punch line. And their teacher is so thrilled he decides to pass out stickers and fruit snacks.

They write about their experiences as they munch away on their prize (See Appendix N). Their comments are rich with detail.

“I seen the kid soaking wet,” Ronnie writes, “and him presing his head to the school window. And that he walked to school on Sat. and I was wet.”

“I felt like that was me,” Polly writes. “I felt soked because it raing cats an dogs and I felt so cold I put my arms in my jacket.”

“I felt the wind blow and raining,” String explains. “And the park was emty. He looked inside the class. It was nobody in the class and said it was Saturday. Alos he was laughing. So I was laughing.”

\*

I begin the next day with no introduction. I start reading as soon the kids are in their seats.

*String was as cool and tough as any girl in the neighborhood. She wasn't afraid of bullies or bugs or even teachers. Nothing seemed to scare her.... nothing except, of course, flying green elephants. String would stare down a hungry lion, but whenever she saw a flying green elephant, she got so afraid she could barely think.*

“Flying green elephants?” String asks me, realizing she’s about to be completely embarrassed. “Seriously, mister?”

*One day, String was sitting at her table in Read 180 when she heard a scratching noise coming from the window behind her.*

I’ve positioned the events of the story so they match where String sits. Her only choice is to play along.

*Scratch. Scratch.*

*String grimaced. She'd heard that sound before. She swallowed hard and slowly turned toward the window.*

With a sigh, String turns and stares up at the window behind her.

*Sure enough, there with its green trunk pressed up against the glass was the biggest flying green elephant String had ever seen, and it was staring right at her.*

*String closed her eyes tight and turned away. Maybe if she just ignored it, the flying green elephant would go away.*

*Scratch. Scratch.*

*String put her head on her desk and covered her ears.*

The Kids laugh as Justin reminds String she has “to hold” her ears.

*Scratch. Scratch.*

*String couldn't take it anymore. She had to get away. She had to hide. She raised her shaking hand and waited for the teacher to call on her.*

*“Yes, String?” the teacher said.*

*“I have to go to the bathroom,” String lied.*

*As soon as the teacher nodded, String stood up, pushed in her chair, and ran for the door.*

*No flying green elephant is going to pick on me all day, she thought to herself. I'm too tough!*

The kids laugh hysterically as String runs out of the room and halfway down the hallway. Some students are upset when we don't act out another story. “It's not fair,” MayMay says when I tell them we're moving onto another folk tale. “Polly and String and Crystal is the only ones who got to.”

“I'm sorry,” I tell her, “but now that we're getting good at acting the stories out, I want to see if we can Live when we read a full story. And trust

me,” I say optimistically, “I think you’ll like this one.” MayMay does not look convinced. She slouches down in her seat as I pass out the papers where we’ll record our experiences.

Today’s folk tale is one my favorites. In it, our hero Quynh confronts a trickster who has been swindling the villagers out of everything by challenging them to impossible games. In order to win back the people’s fortunes, Quynh offers himself up as for the wager, pledging that he’ll become the trickster’s slave if he can’t complete his challenge. At first, the challenge seems hopeless. Quynh is handed four chopsticks and told that he needs to turn them into a thousand.

We pause at key points as we read and record which moments we are Living. We start by sharing our experiences together, but by the end of the story the students are writing their thoughts on their own (See Appendix O).

“When Quynh was getting yelled at,” writes String, “I felt like I was getting yelled at.”

“The old woman said she lost everything,” relates Samantha. “And I felt like I was there watching her cry.”

“When the merchant told Q the rules,” Crystal writes, “I felt like I was in the crowd gasping.”

“When Quynh was scratching his chine,” Justin records, “I felt like I was scratching mine.”

I'm impressed by what I see. Somehow the Living phase of visualization comes much easier to the kids than I had expected. Their writing shows them experiencing the story from multiple perspectives and with key details highlighted. What's even more encouraging is that their writing shows signs that the Watching skill has sunk a little deeper. Many of their statements included descriptions of them watching things unfold from within the story. Those who did encounter problems, had trouble with their writing not their ideas, something that's not unexpected given the low level of most of the students and the high level of writing required to relate a Living experience.

I'm satisfied that it's time to move on. They've been able to successfully implement each of the three types of visualization. Now it's time to see if they can put them all together.

### **Putting It Into Practice**

I review the three levels of visualization by going over the reading experiences I had with the book I'm reading at home. The students seem to enjoy hearing about what and how I read, but they identify the different levels so easily that it's almost of waste of time.

I read "Quynh and the Golden Gate" out loud. The story follows the same general plot line of the other folktales we've covered, but this time I give each student a copy of the story and have them follow along. I have

them mark the margins at points where they visualize; D for Drawing, W for Watching, and L for Living. I stop periodically to explain new vocabulary and recap the story, and give them time to record their experiences.

As we move along, I notice a lull in the students' attention. Some are having trouble following along and need to be redirected several times. Many look very tired, even bored. I hope it's not a reflection of my story.

Following the reading, I ask the students to choose one place in the text where they had a strong mental image or experience. They will need to record the type of visualization they were engaged in, draw a picture to represent it, and write a description of their experience (See Appendix P).

Based on the blank faces that occurred as we read, I brace myself for a slew of groans and questions. But the students seem to know immediately which part they want to work on. The room buzzes with the scraping of colored pencils on paper.

"I Watched Quynh running from the ambassador to the gate," Peter writes. He is referring to the key moment in the story when Quynh gets the enraged Ambassador to chase him through the gate that the Ambassador vowed not to enter (Figure 24).



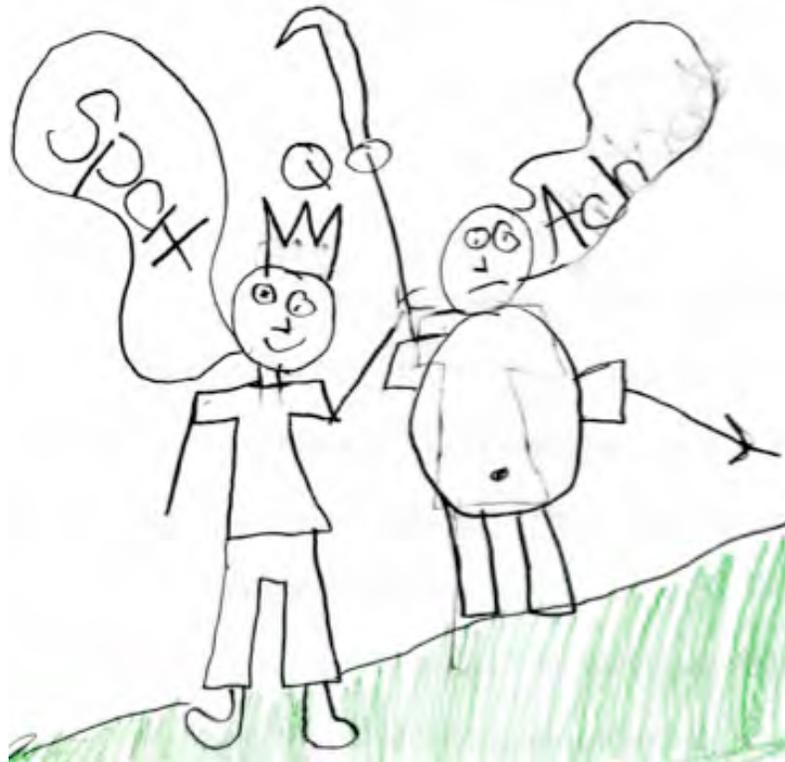
*Figure 24*

Polly describes the scene just before this crucial chase. “I Watched the king tell the guard to get Q,” Polly writes, confusing the ‘king’ for the ambassador (Figure 25).



*Figure 25*

String writes about and depicts another key moment when Quynh smacks the proud ambassador in order to enrage him (Figure 26). “I was Watching when Q slap B (ambassador) on his face and B was chasing Q with a soared.”



*Figure 26*

The only real problem that arises, other than some minor character-name confusion, is one of time. The students naturally want to spend the majority of their time drawing the pictures of their experiences, and it takes some nudging to get them to wrap up their writing before they need to leave.

As they shuffle out of the room, I pour over the collected worksheets. It's interesting that most students, almost eighty percent, chose to relate a Watching experience when this was the phase in the study that they initially seemed to have the most trouble engaging in.

I look over the marks they've recorded within the story itself and am pleased to see much more variety. D's and L's dot the pages, and I wonder if it was the fact that the most powerful part of the story lent itself to Watching over the other phases of visualization. As I compare which students experience which type of visualization when, I become excited for the next day's lesson. The students will be putting their skills into practice in a much more authentic setting. I am anxious to see what happens.

\*

I have the CD players ready to go, the books in a neat pile next to the reading couch, and the worksheets (See Appendix Q) are pre-labeled with each students' made-up names. This is the last true implementation day of the study. The rest of the study will be spent wrapping up with exit interviews and final surveys. This will be the students' last formal chance to put their skills to the test. I don't want anything to get in the way.

I put the directions on the board and review them with the whole class before I get them started. They'll be all reading the same audio book from the Read 180 library, "Jonah the Whale" by Susan Shreve, and I want to make sure they understand exactly what's expected of them so that they'll be free to concentrate and let the story sweep them away.

- 1. Listen to the story carefully.*
- 2. Press pause when you get a good picture in your mind. Put Page numbers where you stopped.*

3. *Record type of visualization.*
4. *Draw picture.*
5. *Describe what was happening in the story.*

The moaning and groaning that follows the directions makes me happy this is the last day. The students seem to be growing tired of the visualization activities and I am worried that the high engagement and motivation I've been enjoying for several weeks is at an end.

"Press pause whenever you get a really good image," I tell them as they move to the reading group, "or when you finish chapter one. Then, complete the worksheet."

The first chapter of "Jonah the Whale" introduces the protagonist Jonah Morrison. Jonah has recently moved, after his mother and her boyfriend broke up, and will be starting at a new school the next day. Jonah, who eats when he feels sad, has been dreading his next day at school.

Despite my early concerns and trepidation, motivation and engagement are extremely high. Thank you Susan Shreve! The students get very excited when they get their image, calling out things like Ronnie who proudly announces, "I got one, Mr. Toonder, I got one."

The students' pictures and descriptions are extremely encouraging. They show highly accurate details that match the text well enough that I can actually flip through the book and relocate the section of the text they are relating.

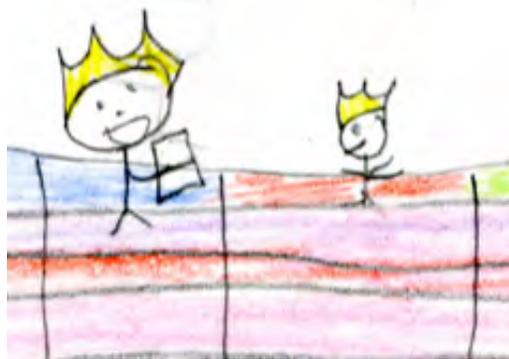
“I was living,” Peter writes beneath his picture (Figure 27). “I was watching Jonah eating a bowl of cheerios, ice cream, chocolate snack swirl, and graham crackers.”



*Figure 27*

Peter needs a lot of help spelling the food Jonah is splurging on and as I help him sound them out, I take the time to ask him why he labeled it Living and Watching. “I could smell the food,” he tells with a smile. Then, he cocks his head. “Wait, that’s living right?”

Jasmine is working more confidently than I’ve seen her in months. Usually, very quick to ask for assistance, she flat-out refuses my help as she writes, “I watch Jonah read a book to Quentin.” Her picture shows the brothers relaxing on the bed (Figure 28).



*Figure 28*

Ronnie's picture is simple, but his description shows a deep level of empathy (Figure 29). "I was Living," he writes. "I seen Jonah tossing and turned. He got to go to school. Everybody will call him a whale."



*Figure 29*

Crystal's colorful picture matches the high level of understanding her description shows (Figure 30). "I was Watching Jonah laying in his new bed try to finger out a way to get his parent to get back together."



*Figure 30*

MayMay's chooses to write and draw about the same scene (Figure 31). "I Watched Jonah on his bed tosking and turn. He was thinking about her boyfriend."



*Figure 31*

Polly laughs out loud as he pauses his CD player. “He dreamed about his Grandmother’s sweet potato Pie,” he writes under his sketch (Figure 32).

“I watched him.”



*Figure 32*

String tells me how the scene reminds her of when her mom goes to work before she completes her worksheet (Figure 33). “I was Living when his mom said hurry I gots to go to work,” she writes, “and he said ok.” She looks at me as I read her paper. “It’s just like my mom. She does that like every morning.”

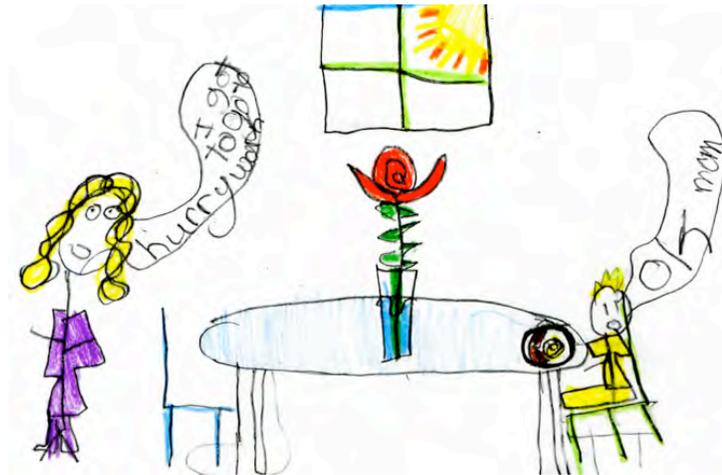


Figure 33

Justin is the only student who leaves me scratching my head. “As I listened to the story,” he writes, “I drew Jonah in the kitchen. He was calling his dad.” His description mentions Jonah calling his stepfather, something that doesn’t occur until later in the book. It takes me a few seconds to remember that Justin has read the entire book before. I realize he’s putting in details that he remembers from later on in the book. Plus, the picture doesn’t show anything of real consequence from the book, just a simple representation of the character that lacks any real detail (Figure 34).



*Figure 34*

I pull Justin aside and ask him some questions about the story to make sure he understood what he was reading. He answers every one of my questions correctly and later confesses that he was thinking about the later scene when he did his picture.

Other than the high accuracy of most students and Justin's strange recall from later on in the book, I notice an interesting fact as I examine the students' work at the end of the day. Not a single student has chosen to use the initial description of Jonah that occurs on the very first page of the text. The scene is simple, showing Jonah looking out his window before school, and would have been very easy to depict and write about. Yet, all of the students passed it by. Does this show that struggling readers take a certain

amount of time to begin to visualize what they are reading? Is it just a coincidence?

I jot down a note about an area of potential future research, and continuing flipping back and forth through the students work.

### **Wrap Up**

As I file the day's work and reflection into my notebook, I flip back to the first day of the study. A lot has changed. The students have gone from seeming completely unaware of visualization, to demonstrating a strong ability to apply multiple types of mental imagery. The final survey, exit interviews, and upcoming reading level assessments will show me more clearly if my impressions are correct, but as I skim through the last pages and close up my log I feel confident my students and I have accomplished something special.

### *Exit Interviews*

I call each student over individually and ask about the study and their thoughts about its impact on them (See Appendix R). "What did you think about the visualization lessons we did this year?" I ask each student in turn.

Ronnie rings his hands together and gives me a pretty generic answer. "It was neat cause you get to see videos, hear cool stories, and draw pictures."

Samantha's response is much more specific. "When it was livin, you get to feel like you were in the story, like in real life," she tells me with a wide smile. "That was my favorite part."

Jasmine is a little more practical. "It was fun cause it is easy and it helps remember the story."

Polly, MayMay, and Crystal are in agreement, even though they don't hear each other's response. All explain how much they enjoyed drawing the pictures.

Justin and String focus on the Quynh stories we've covered. "I thought it was nice to hear about Quynh," Justin says. "I liked how he cheated a lot." String echoes his thoughts, "I feel like I live in the story when you read about Q and the emperor. It was so funny!"

Peter's response to the first question is a summary that I think I might steal for my future abstract. "It was real fun," he says. "We learned to picture stuff in you head. We learn to draw, watch, and live the story."

I do my best not to lead the students as they respond. As soon as they stop talking, I move on to the next prompt. "Tell me about a visualization experience you have had while reading." I get a rich diversity of answers. Some are from stories we've read together.

“When I was living the Quynh story,” Peter tells me. “When the Ambassador was really mean and made the deal with the gate. When he said he wouldn’t go through the gate, I felt like I was Quynh.”

Jasmine tells about an experience from our very last lesson. “In the Jonah book I saw Jonah reading his book to his little brother Quentin.”

“When we were reading *The Diary of a Wimpy Kid*,” Polly says after a moment of thought, “I had a really good picture when he was wearing a Speedo.”

Samantha recalls one of the stories she read in a different class. “When we were reading about Guided Reading. I felt like I was in the Antarctic with the animals. I felt cold.”

Other students talk about reading experiences they had at home. “When I was reading at home,” MayMay says. “I felt like I was in there. I felt like I was going to die. There was a dragon chasing people. I felt like he was chasing my brother.”

“At home,” Crystal explains in one long breath, “I was reading *The Old Willis Place* and there was a ghost and these people who lived there. When her brother was riding his bike and he fell in the pond and the bike got messed up.” She takes a well-needed pause before wrapping up her response. “I felt like I was on the bike with him.”

For most students, my main problem is just writing fast enough. I want to make sure I get their details down as accurately as I can and it's hard to keep up, but all that's about to change.

As I move onto the third interview question, I encounter a lot of blank stares. It takes fair amount of coaxing to get most students to respond. "How have the visualization lessons we did in class affected your reading?"

I need to add other questions to get most of them to respond. "Does it effect how well you remember the story?" I pry. "Does effect how much you read?" Their answers are what I'd like to hear, but the fact that I've had to ask them leading questions makes them less powerful, and certainly less valid. Still, it's better than awkward silence.

"I feel like I am a better reader," Peter tells me right on cue. "Picturing it helps me remember it."

"I can answer the questions easier," Justin explains. "My grades are getting better."

Despite my fishing, I do land some surprises. Many of the students talk about improvements in fluency.

"When read with my dad, I was reading fluently and I was reading clear," Ronnie says. "I saw a picture in my head while I was reading."

"My voice sounds better," Polly answers without my needing to ask any follow up questions. "And my reading level's going up and I know more

words. It helped me because it looks like the stories and shows me the stuff that I know.”

Polly’s last sentence makes little sense, but I’m so caught up in his and Ronnie’s surprising fluency responses that I don’t follow up. I was expecting comments about improved comprehension, which I got with a little effort. I was also expecting answers about improved reading enjoyment. I hadn’t even considered a connection to fluency and as I’m about to read Polly the next question, I decide I definitely don’t understand it. Maybe it has something to do with attention or added interest?

I jot down the word “Fluency” on my double-sided journal with a large question mark next to it, and read the last prompt. “How have the visualization lessons we did in class affected the enjoyment you get from reading? Did it make it more fun? Why or why not?” This time I don’t see any blank stares. The kids are quick and excited to respond.

“Yeah, cause when I read there are funny parts I get to see,” String answers.

“It makes it feel like a dream,” Samantha says. “It makes it more fun.”

Crystal nods, but doesn’t say anything until I wave her along. “It makes it fun because when I used to read at my house, I could not concentrate

because my mom and brother were always yelling. Now, I'm able to focus on what I am reading better."

"It makes it more fun because you can live the story." Peter shrugs like it's obvious. "You can feel like you're in it."

"It made my reading more fun because now when I read to my brother it sounds good," Justin says returning to a topic that leaves me scratching my head again. "When I'm into the story, it makes me read better."

Those fluency comments stay in my head long after the kids have moved back to their regular classes. On a day when I felt like I was pulling teeth to get some of the answers I fully expected to hear, three students have brought up something that hadn't even crossed my mind. Is there really a connection between visualization and fluency? Can two things that seem so unrelated on the surface have roots that connect?

#### *Final Visualization Survey*

As the study progressed, I've often looked back at that first survey I gave my students and used it as a measuring stick for how their understanding was growing. Now, as I read over the same questions that once caused so much anxiety, I take notice once again. The questions seem to bore the kids and my insistence on making them listen to my in-depth explanation of each question brings eyes rolls from every direction.

As I record the results later that day, I don't find the results quite as positive as I was hoping (Table 6). The results do lean toward the use of the skills we covered, but many of the student's responses are very spread out. The *Hardly-Evers* are few, which is of course what I wanted to see, but they still jump out at me.

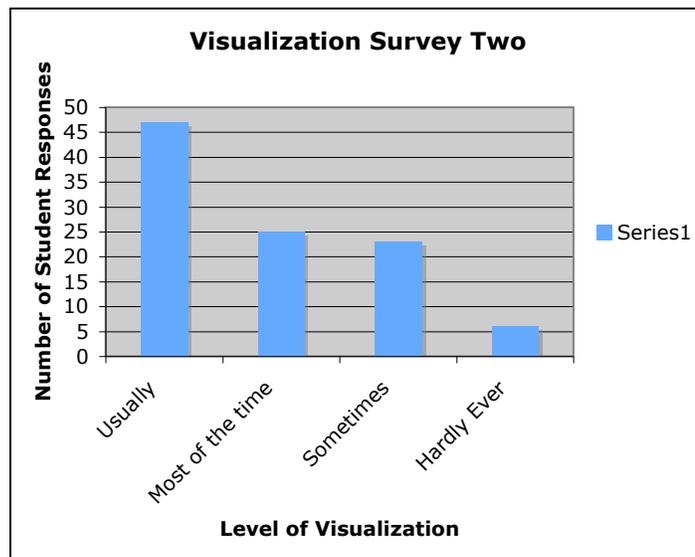
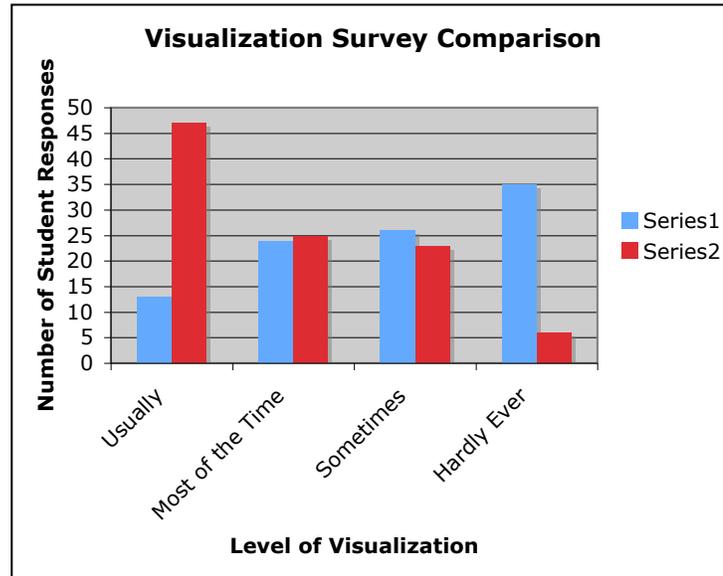


Table 6: Visualization Survey Two

Then, I compare the new survey results to the original survey (Table 7).



*Table 7: Visualization Survey Comparison*

My anxiety calms as I stare at the comparison chart. The students have reported a complete one-eighty. Where most once claimed little or no use or understanding of visualization, the vast majority of responses now suggest familiarity and even frequent use.

#### *Final Testing*

The January Scholastic Reading Inventory is probably the most important SRI assessments the students take all year. The next SRI will not be taken until the end of the year, so this round's results will be the basis that months of reading software, independent reading, and instruction will be based on. It's my measuring stick for how my instruction has impacted my

students the first half of the year, and my gage for what they might be able to accomplish the remainder of the year. I'm always excited to see the results. Yet, rarely have I been so anxious to see the scores.

As I bite my nails, I pull up the students' grades since the beginning of the year. Halfway through the study, no students were showing below benchmark, seventy-percent, achievement in any assessment category. I know from looking at various other reports that some students are struggling with certain comprehension skills, but still, for an entire group of struggling readers to maintain all passing grades is quite an accomplishment. To see such results again would be really impressive. I'm not disappointed (Table 8).

READ 180 Software Progress							Independent Reading	Teacher-Directed Instruction
Level	Comprehension Score	Vocabulary Score	Word Fluency	Final Fluency Recording (Out of 6)	Spelling Score	Context Passage	Book Club Average (No. of Books)	Whole- and Small-Group
2	74%	79%	90%	4	98%	86%	68% (6)	82%
2	84%	84%	81%	5	99%	94%	90% (5)	97%
2	79%	75%	85%	4	98%	85%	94% (5)	94%
1	79%	80%	88%	4	98%	89%	83% (4)	89%
2	83%	77%	93%	4	98%	89%	83% (8)	94%
1	80%	73%	94%	4	97%	92%	78% (5)	100%
2	94%	81%	88%	4	98%	91%	83% (4)	94%
2	92%	84%	86%	4	97%	100%	87% (6)	94%
2	76%	86%	99%	5	97%	93%	83% (8)	80%
2	74%	82%	98%	6	99%	74%	95% (4)	89%

Table 8: Read 180 Midyear Grading Report

Some of the students are barely hanging on in some assessment categories. Yet, given the makeup of the class, the students' grades through half a year's worth of work are nothing to scoff at. I know from prior years that these results are very impressive. Generally, there will be at least two or three students below benchmark in more than one of the categories at this point in the year. The fact that none are, makes me expect good things from the next round of Lexile testing.

\*

I go over my normal pre-testing pep talk. I explain how important it is that the students do their best. I explain how big an impact this Scholastic Reading Inventory assessment will have on their work for the rest of the year. Then, I break them up into their groups and pace nervously back and forth while the students take their tests.

As they work, I wonder how much of an impact my visualization lessons could have on their reading growth. As I've mentioned, the SRI is, at its core, a making inferences test. Will the visualization skills they've learned help them do this? Will picturing the short passages in their heads help them think about them?

When I look at their scores, I'm fairly sure the study has had a positive impact (Table 9).

Grade	First Test in selected time period		Last Test in selected time period		Growth in Lexile®
	Lexile®	Date	Lexile®	Date	
4	140	09/12/11	396	01/17/12	256 
4	BR (0)	09/14/11	219	01/17/12	219 
4	138	09/12/11	356	01/17/12	218 
4	250	09/12/11	412	01/17/12	162 
4	395	09/12/11	536	01/18/12	141 
4	318	09/12/11	458	01/17/12	140 
4	409	09/12/11	540	01/18/12	131 
4	407	09/12/11	502	01/17/12	95 
4	442	09/12/11	530	01/19/12	88 

*Table 9: End-Study: Scholastic Reading Inventory Growth Report*

The results of the study’s final Scholastic Reading Inventory are impressive and I’m very proud of my students for attaining them. Every one of my Read 180 students has made progress and the average growth of a hundred and sixty-one Lexile points would be something to brag about if it occurred at the very end of the year. With four months remaining till their final SRI, a classroom of economically disadvantaged students, four of who are special education students and two of which are English Language Learners, have already accomplished a solid year’s worth of growth.

Comparing their proficiency levels from the beginning of the year to these fresh results really puts it in perspective (Table 1).

Grade	Lexile®	Date	Normative Data		
			Percentile Rank	NCE	Stanine
4	395	09/12/11	16	29	3
4	407	09/12/11	16	29	3
4	409	09/12/11	17	30	3
4	442	09/12/11	20	32	3
4	BR (0)	09/14/11	1	1	1
4	138	09/12/11	1	1	1
4	140	09/12/11	1	1	1
4	250	09/12/11	5	15	2
4	318	09/12/11	10	23	2

*Table 1: Pre-Study Scholastic Reading Inventory Results*

In September, more than half the class was reading far-below grade level. Five of the students' Lexile scores indicated they were reading below a second grade level. The new results show a jump in proficiency level for nearly half the class (Table 10). String, Justin, Jasmine, and Samantha have all made that crucial jump toward reading on grade level.

Grade	Lexile®	Date	Normative Data		
			Percentile Rank	NCE	Stanine
4	356	01/17/12	12	25	3
4	396	01/17/12	16	29	3
4	412	01/17/12	17	30	3
4	458	01/17/12	21	33	3
4	502	01/17/12	25	36	4
4	530	01/19/12	28	38	4
4	540	01/18/12	29	38	4
4	536	01/18/12	29	38	4
4	219	01/17/12	3	10	1

*Table 10: End-Study Scholastic Reading Inventory Results*

I'm proud of my students. Many are approaching the six hundred Lexile score that means they are reading on grade level. By the end of the year, there is a good chance that some could make it. But I'm stuck on the dilemma that I knew I would face. How much of the shown progress can I attribute to the visualization curriculum I've instrumented? Separating the student growth the study has initiated from that of the general Read 180 classroom routine and instruction is difficult. Yet, perhaps by going over the data I can at least get a rough idea of the study's impact.

## **DATA ANALYSIS**

I engaged in eight different forms of data collection and ongoing analysis throughout and at the conclusion of my study: participant observations, reflective memos, Scholastic Reading Inventory, Read 180 Grading Reports, student surveys, student interviews, student work, and codes, bins, and themes.

### **Participant Observations**

Throughout the study, observed student statements and actions were recorded as they occurred. These statements and actions included objective descriptions of incidents, as well as my personal thoughts and feelings about the importance and relevance of those occurrences.

### **Reflective Memos**

At the conclusion of each of the study's lessons, I recorded the day's events and my reflections about those events through ongoing journal entries. Reflective memos were also written at the mid-point and conclusion of the study. With these entries, reflections about ongoing data collection and the status of the study's intervention were recorded.

### **Scholastic Reading Inventory**

Before the implementation of my study, all students were given the Scholastic Reading Inventory exam. This computerized test measures

student's reading level in terms of Lexile points. Results from these exams are used to monitor student progress, place students within the appropriate instructional software, and to establish a reading range for independent and guided reading. For my study, these results were critical in examining the effects of my visualization intervention.

### **Read 180 Grading Reports**

Midway through study, the students' grades in comprehension, fluency, and spelling were analyzed through the Read Grading Report. This report provides the teacher with overall classroom performance in the instructional software, independent reading group, and whole and small group instruction. At the conclusion of the study, the Read 180 Grading Report was again utilized to track student performance since the beginning of the intervention.

### **Student Surveys**

Prior to the implementation of my study, students completed a survey to help determine the students' use of visualization skills in various aspects of their reading. At the conclusion of the study, students completed an identical survey. The results of the two surveys were then analyzed and compared to measure any changes in students' reported use of the strategies covered.

### **Student Interviews**

At the conclusion of the study, students were asked a series of questions independently. The purpose of the questions was to inquire about the students' thoughts and feeling about how the study effected them and their reading experiences.

### **Student Work**

Throughout the study, students' work was collected and analyzed. These included examples of students' pictures and descriptions of reading experiences as well as surveys. Students used pseuonyms on all collected samples in order to ensure anonymity.

### **Codes, Bins, and Themes**

All data, observation, and reflections were collected within a field log and analyzed on an ongoing basis and at the conclusion of the study. Recurring ideas, events, and concerns were noted and recorded through the use of various codes, short words or phrases used to represent similar ideas and events. As these codes accumulated, they were grouped into related categories and then analyzed to observe themes within the research (Figure 35).

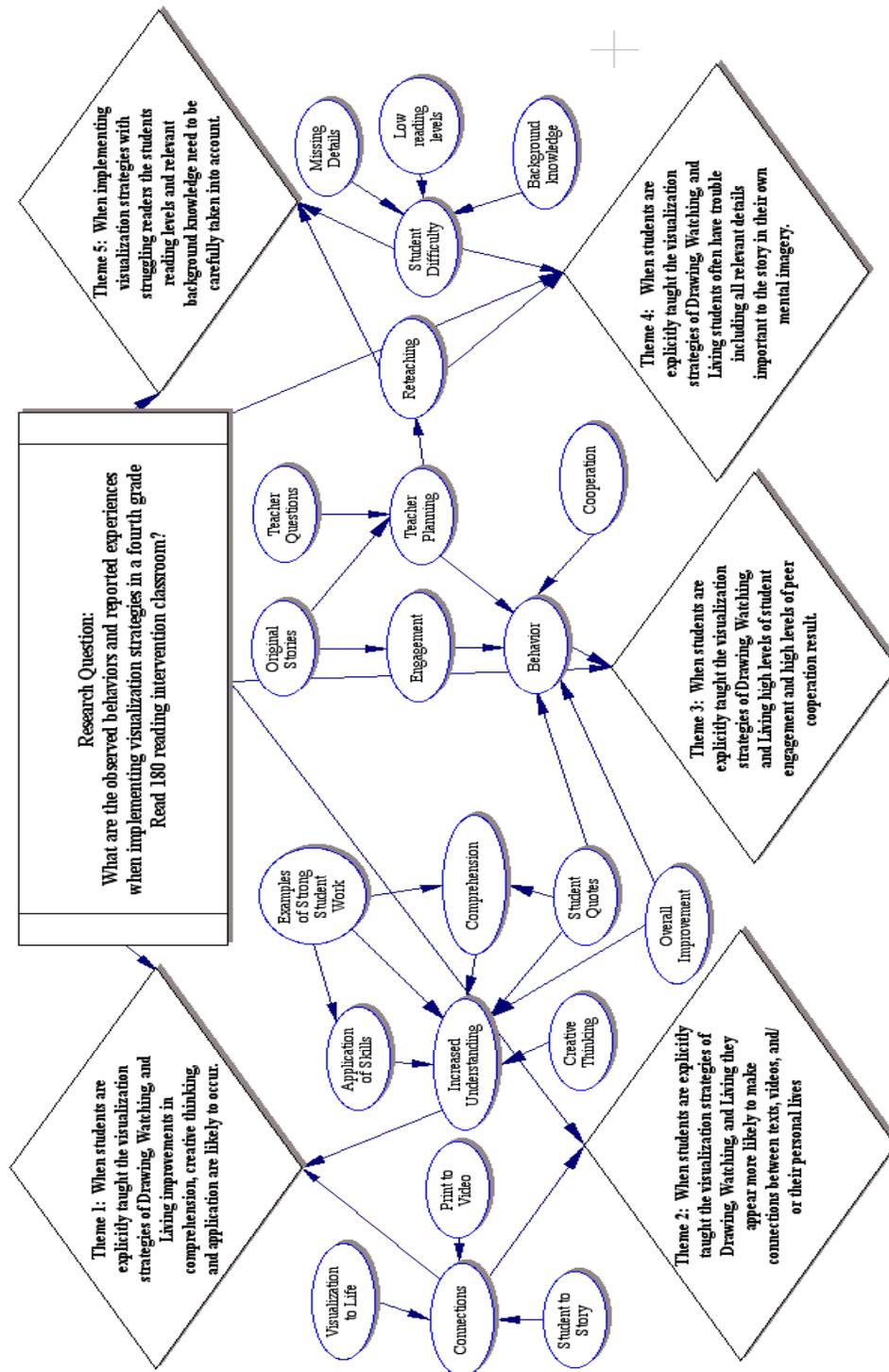


Figure 35: Codes and Bins

## RESEARCH FINDINGS

As the gathered data, observations, and reflections were reviewed, analyzed, coded, and categorized five themes emerged. The findings suggest the possible impacts visualization instruction may have on struggling readers.

*When students are explicitly taught the visualization strategies improvements in comprehension, creative thinking, and application are likely to occur.*

Improvements in students' reading comprehension was measured and analyzed primarily through the use of the Scholastic Reading Inventory. The reading level assessment monitors student growth in terms Lexiles. As previously mentioned, the study's nine participants all demonstrated positive growth, with the class averaging gains of one hundred and sixty Lexile points over a period of four months. Forty-five percent of the participants rose in proficiency level over that same period, rising from Far Below Grade Level to Basic.

Students' reading comprehension levels were also monitored through the use of the Read 180 Grading Report. This report, utilized at the mid-point and conclusion of the study, showed all students performing above the seventy-percent benchmark in all categories.

While the results of these two data sets are impressive, it is impossible to determine the degree to which the visualization intervention impacted the observed increase in comprehension beyond the normal Read 180 curriculum.

However, when applied to the observational, survey, and interview data gathered throughout the study, the connection between the intervention and student progress is strengthened. Throughout the study students reported various instants of strengthening recall and application, both in and out of our classroom. The pre and post surveys show a dramatic shift in the application of the skills, while the interviews and observational anecdotes speak of a strong link between the use of visualization skills and improvements in recall and creative thinking.

When the observational, survey, and interview data are combined with the impressive grades and improvements in Lexile level, the connection solidifies, suggesting a positive correlation between the explicit instruction of visualization skills and improvements in comprehension.

***When students are explicitly taught the visualization strategies they are more likely to make connections between texts, videos, and/or their personal lives.***

Throughout the study, students frequently reported making connections between texts and videos, other texts, and their personal lives. By analyzing their recorded comments from the field, as well as their responses to

interview questions, it can be suggested that the act of visualization can positively impact students' ability to make connections between texts and other experiences.

***When students are explicitly taught the visualization strategies high levels of student engagement and high levels of peer cooperation result.***

Students demonstrated extremely high levels of engagement throughout the study. Time on task and reported student motivation were recorded and reflected upon on a daily basis during the duration of the study and the resulting data showed consistently high levels in both categories.

Students also demonstrated a high degree of cooperative skills when asked to work in groups or pairs, showing patience, appropriate turn taking, and fulfillment of responsibilities. The use of original teacher stories, student drawings, and video clips may have helped increase this motivation and cooperation, including student motivation to read independently.

***When explicitly taught visualization strategies students often have trouble including all relevant details important to the story in their own mental imagery.***

Throughout the duration of the study, many of the participants encountered difficulties including all relevant details of given passages in their pictorial and/or written representations. This often requires re-reading and re-teaching experiences in order to rectify the issue. These challenges often

increase as the level of visualization being implemented increases, with fewer issues arising during the simpler Drawing phase, and more during the harder Watching and Living phases of mental imagery.

Weaknesses in other comprehension areas may be at play, especially reading for detail, and may account for some of these difficulties. Also, since the lessons for this study were administered heterogeneously with all students receiving the same level of passages, the reading level of the various passages might have hindered some students' ability to follow and recall some important details. Without further research, I believe it is unclear how much of these difficulties may be attributed to the reading level of the given passages.

***When implementing visualization strategies with struggling readers the students reading levels and relevant background knowledge need to be carefully taken into account.***

By reviewing, coding, and categorizing my field log, it became apparent to me that visualization skills rely heavily on background knowledge. Any gaps in a student's prior knowledge greatly hindered their ability to use mental imagery during a reading. As the study progressed, it was crucial for me to think ahead of things the students might be unfamiliar with in order to fill in those gaps in prior knowledge and give them the best chances for success.

The impact of passage reading level also became apparent as I analyzed the observations and reflections in the data. Often, it was noticed that student difficulties decoding or understanding the vocabulary in a text negatively impacted their visualization depictions and/or descriptions.

## **POSSIBLE FUTURE RESEARCH**

I believe this study and the works that it is based upon set a precedent for the value of in depth and systematic visualization instruction. Yet, there are many questions about visualization instruction that remain unanswered.

As previously mentioned, the environment this study was implemented made it extremely difficult to accurately measure the impact of systematic visualization instruction had on reading progress. Teaching the various visualization skills in an environment where they are more isolated and measurable would help explore this connection and begin to explain the true power mental imagery can have on a students' reading ability.

Also, due to regular curriculum constraints, the visualization lessons were spread out over a wide time period. Generally, the participants were only exposed to one or two lessons per week. While this allowed opportunities for frequent review and may have aided in the deeper understanding and long-term mastery of the skills, it also left wide gaps in opportunities to build upon previously learned concepts. It is unclear what positive or negative effects this may have had upon the findings. Therefore, it may prove valuable to re-teach the concepts covered in this study in a more condensed and less interrupted fashion.

It would also be interesting to see the impact that visualization skills may have upon various aspects of reading development. During this study, there was a strong case made for visualizations positive impact on general comprehension. But what are the specific impacts on specific reading skills? Does visualization improve a student's reading for detail skills? Does visualization improve a student's ability to compare and contrast characters or events in a story or set of stories? Does mental imagery, as suggested by some of my students interview responses, have a positive impact on reading fluency and expression? These intriguing questions can only be answered by specifically developing research aimed at targeting and measuring each skill as the visualization skills are developed.

Finally, as with any real-world instruction, there are aspects of the study that could be corrected and improved upon if it were ever to be re-implemented. The students' initial complete unfamiliarity with visualization took the researcher by surprise and, as a result, proper pre-teaching of key concepts was not carried out prior to administration. To what extent this impacted the study's results cannot be accurately guessed, but it would be interesting to see the results of research where this was correctly taken into account. Also, I believe the wording of the interview questions, especially the lack of adequate predetermined follow up and leading questions, may have

had an adverse effect on the study's results. Re-administration of the study with more carefully crafted questions could prove very valuable.

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## APPENDIX A: PRINCIPAL CONSENT FORM

Dear principal,

During the autumn of semester 2011, I will be completing my final research project at Moravian College as I work toward my Master's Degree in Education. The course, Teacher as Researcher, seeks to assist me in providing meaningful learning experiences to my students through action research.

During the Months of September, October, and November, I will be conducting a systematic study of my own teaching practices, specifically as they relate to explicit instruction of visualization strategies in reading. By doing this study, I hope to increase student comprehension by increasing visualization skills as well as increasing student motivation. My goal is to increase all of my students' academic success.

I will be gathering information to support my study through an observational log, student surveys, interviews, and samples of student work. All of the methods I employ in this study will be based on researched best practices. The data I gather will help me better meet the needs of my struggling readers. All student, parent, and teacher names will be kept confidential as will the name of the school. The only names that will appear in this study will be my name, the name of my sponsoring professor, and Moravian College. No names will appear on work samples or in any reports of the research study and all data gathered will be destroyed at the conclusion of the study.

All students will receive the same instruction as part of their reading intervention. Participation in this study is entirely voluntary and based on parent consent. Participation or non-participation in the study will not affect student grades or the instruction they receive. Any student may withdraw from the study at any time by contacting me in person, in writing, or through email. If a student is withdrawn or fails to receive consent for the study, none of the information pertaining to the study will be used and the student will not be penalized in any way.

I can be contacted by phone at 610-393-8875 or by email at [scotttoonder@yahoo.com](mailto:scotttoonder@yahoo.com).

My sponsoring professor is Professor Shosh and can be contacted by phone at 610-861-1482 or by email at [jshosh@moravian.edu](mailto:jshosh@moravian.edu).

If you have any questions or concerns about the study, please feel free to contact me at any time. If you have no questions, please sign and return the bottom of this letter. Thank you very much for your help and time.

Sincerely,  
Scott Toonder

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I attest that I am the principal of the teacher conducting this research study, that I have read and understood this consent form, and that I have received a copy. Scott Toonder has my permission to conduct this study.

Principal's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## APPENDIX B: PARENT CONSENT FORM

Dear Parent(s) and/or Guardian(s),

I am taking classes at Moravian College working toward my Master's Degree in Education. These classes help me to learn new and better ways of teaching.

This Fall I am working on my final research study. For this class I am required to study the ways I teach and try to improve an area of my teaching. I will be studying how to better teach my students to picture what they are reading in their heads. I hope that by teaching them this they will be able to remember more of what they read and get more enjoyment out of it.

This study will take place during September, October and November of 2011. I will be looking at student work, student questionnaires, and keeping an observational log in order to learn if my teaching in this area is working. All student names will be kept confidential, as will the names of other teachers, parents, and the school. The only names that will appear in the study will be my name, the name of my professor, and the name of Moravian College. No names will appear on any work samples or in any reports in the study and student work may be slightly altered in order to ensure student confidentiality and all data will be destroyed at the end of the study.

All of the students in my class will receive the same instruction as part of their reading class in my room and their participation in the study will not affect their grades in any way. Participation in the study is entirely voluntary and is based on your consent. Any student may be withdrawn from the study at any time by contacting me in person, by phone, or by email. If a student is withdrawn or you choose not to have them participate, I will not use any of their information in the study. No student will be penalized in any way if they are withdrawn or if you choose to not have them participate.

If you have questions or concerns about this study please feel free to contact me by phone at school or by email at [stoonder@beth.k12.pa.us](mailto:stoonder@beth.k12.pa.us).

My sponsoring professor is Professor Shosh and can be contacted by phone at 610-861-1482 or by email at [jshosh@moravian.edu](mailto:jshosh@moravian.edu).

If you have no questions, please indicate whether or not you want your child to participate in my study below and return the bottom portion of this letter. Thank you very much for your time and help.

Sincerely,

Scott Toonder

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\* I have read and understood the above information and I give my permission for my child, \_\_\_\_\_, to take part in Scott Toonder's research study.

Parent/ Guardian Name: \_\_\_\_\_ Date: \_\_\_\_\_

\* I would **not** like my child to participate:

Parent/ Guardian Name: \_\_\_\_\_ Date: \_\_\_\_\_

## APPENDIX C: VISUALIZATION SURVEY

### Visualization Survey

1. When you are reading a story by yourself, how often do you picture what you read in your head?  
A. Usually   B. Most of the Time   C. Sometimes   D. Hardly Ever
2. When you are listening to a story, how often do you picture what you read in your head?  
A. Usually   B. Most of the Time   C. Sometimes   D. Hardly Ever
3. When you are reading in other classes, like science, math, or social studies, how often do you picture what you read in your head?  
A. Usually   B. Most of the Time   C. Sometimes   D. Hardly Ever
4. Does being interested in what you are reading make you more likely to picture it in your head?  
A. Usually   B. Most of the Time   C. Sometimes   D. Hardly Ever
5. Does picturing what you are reading or hearing about help you remember it?  
A. Usually   B. Most of the Time   C. Sometimes   D. Hardly Ever

6. Does picturing what you are reading or hearing make it more enjoyable?

A. Usually   B. Most of the Time   C. Sometimes   D. Hardly Ever

7. Does picturing what you are reading or hearing help you think about the story?

A. Usually   B. Most of the Time   C. Sometimes   D. Hardly Ever

## APPENDIX D: I SPY WORKSHEET

*As you read each description, try to draw the object in your mind. Then, write the name of the object you are picturing.*

1. I have as many legs as a dog, but I can't move. My top is flat and tan. People slide chairs under me. I am the \_\_\_\_\_.
2. The \_\_\_\_\_ is blue and fuzzy. It is flat. Sometimes pencil shavings get all over it and kids walk on it all the time.
3. The \_\_\_\_\_ is small and has a red tip. It stays on its side unless someone is using it and sleeps on a metal bed of gray.
4. It is soft and gray. It is round, but its shape changes when pushed. It has a brother that looks just like it. It is a \_\_\_\_\_.
5. We are rectangles. We are part of the wall. You can see through us. We are \_\_\_\_\_.
6. It stretches across the wall. It is white and flat. It is more than eight feet wide and has a gray shelf beneath it. What am I?  
\_\_\_\_\_.
7. The \_\_\_\_\_'s red and white stripes flow across it. It has many white stars. If it was outside, it might flap in the wind. It hangs above the T.V.

8. The \_\_\_\_\_ sits in the corner of the room. Its black surface is cracked and peeling in parts. It looks a little old and worn, but is comfortable to sit in.
  
9. The \_\_\_\_\_ is light brown and lays flat against the floor. It is splattered with tiny dark spots and is worn from people sitting, reading, and walking on it.
  
10. I have three small windows and two gray handles. I swing and I lock. And sometimes I creak. I am a \_\_\_\_\_.

*Now make up your own clues.*

1. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

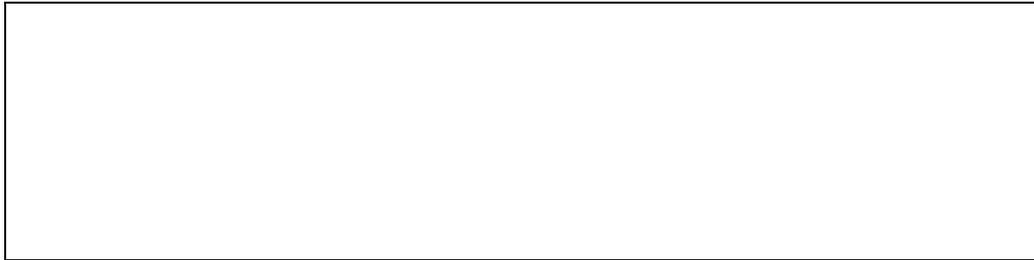
2. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## APPENDIX E: DRAWING WORKSHEET 1

*Make a picture that shows what's described in each passage.*

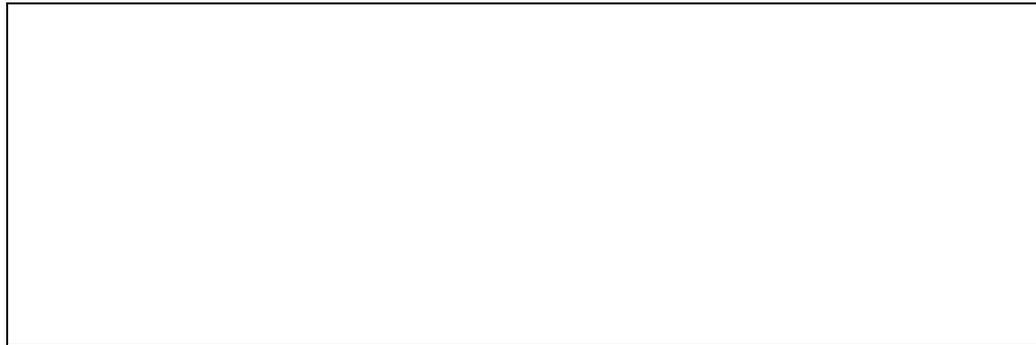
1. The house looked funny. It had a big round door in the middle of it and it had three square-windows running across the top. Even the front lawn looked weird. It was shaped like a big star.



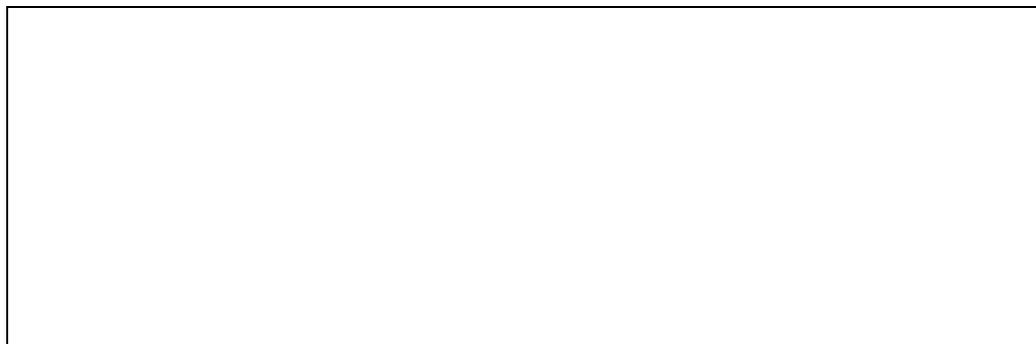
2. There were three mountains. Two were bright blue and looked peaceful. But the one in the center looked evil. It was much bigger. It was red and a cloud of black rose up from its peak.



3. When Mark walked outside his house and found that his brand new bike was gone. In the grass where it had been sitting there was only a strange pink note shaped like a heart. "Come find me!" was all it said.



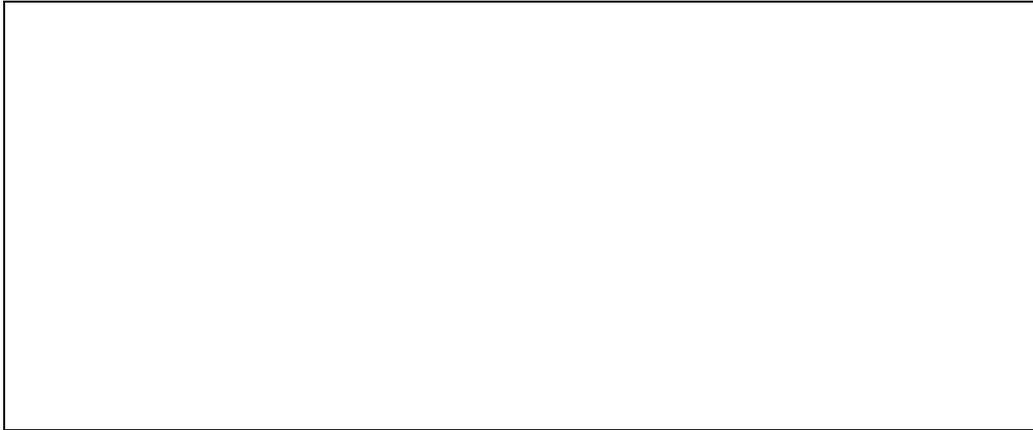
4. It was hard taking my dog Bill for a walk. He was twice as tall as me and three times as wide. The top of my head barely reached up to his belly. I needed to use a huge black chain for his leash just to keep him from running away.



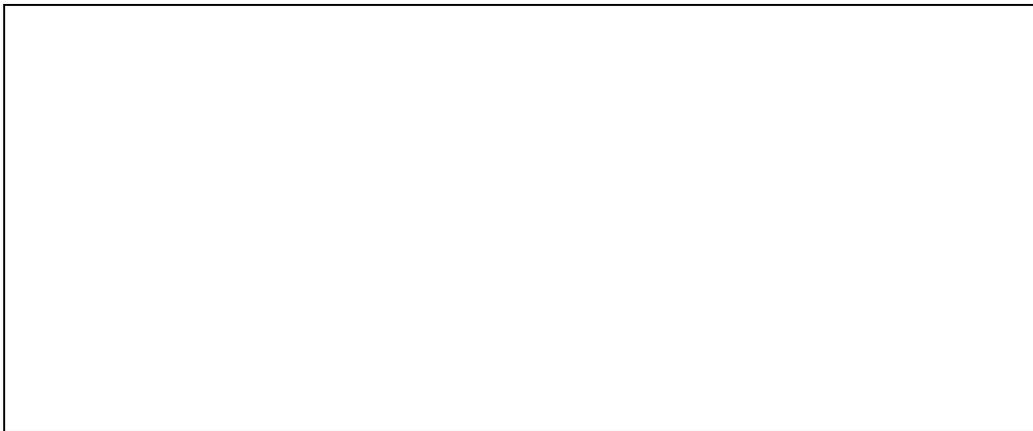
## APPENDIX F: DRAWING WORKSHEET 2

*Make a picture that shows what's described in each passage.*

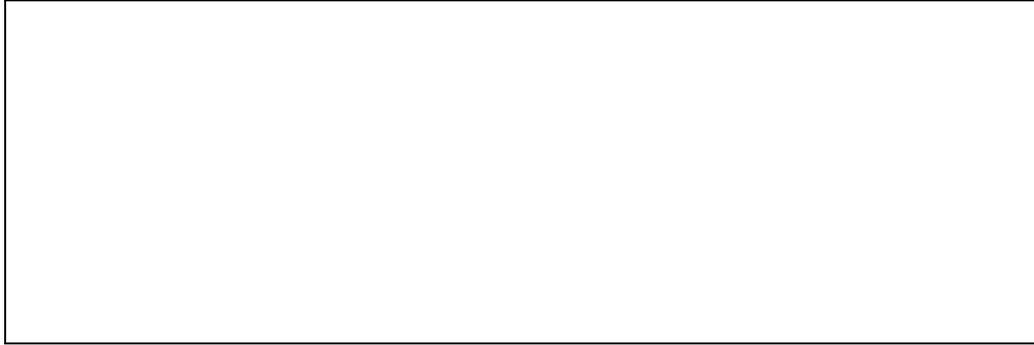
1. Tim had curly yellow hair. Tim had bright blue eyes. He was never mean and he always smiled.



2. The red car was underneath the tree. It had black wheels and a big orange spot painted on the side.



3. Tiff sat with her back against the trunk of the tree. She had a yellow dress on and a yellow bow in her long brown hair.



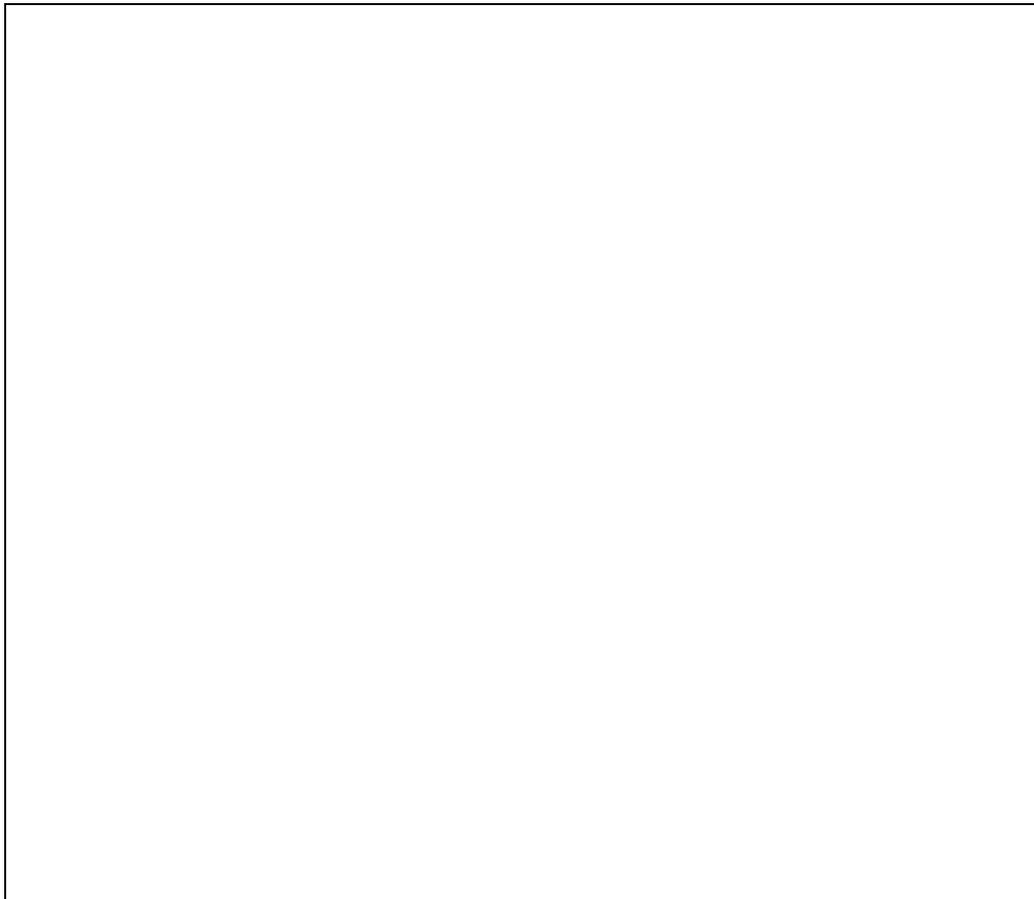
4. The pink boat was in the middle of the lake. The water around it was green and had lots of red and orange leaves floating on top of it.



**APPENDIX G: DRAWING QUIZ, PRINT TO PICTURE**

*Read the passage, trying to picture what you read in your mind. When you are finished, draw the image described in the passage as accurately as you can.*

Three sisters were standing beside their red car. One of the sisters had yellow hair. One of the sisters had black hair. The third sister had bright red hair. They were all holding hands.



**APPENDIX H: LABELING CHART**

Drawing – Watching – Living	Drawing – Watching - Living	Drawing – Watching - Living
Notes:		
Drawing – Watching - Living	Drawing – Watching - Living	Drawing – Watching - Living
Notes:	Notes:	Notes:

## **APPENDIX I: Watching Lesson 1 Video Stories**

### **Belmont Park; Belmont Stakes (start at 14 seconds)**

<http://player.discoveryeducation.com/index.cfm?guidAssetId=2D28B12E-37AF-41C5-8CFA-FEA2FD823903&blnFromSearch=1&productcode=US>

The bell rang, the gates sprang open, and the horses bounded out onto the racetrack. They ran in tight pack, each horse's legs swinging wildly as they tried to get ahead.

A few of the horses began to pull away.

The crowd cheered as they rounded the first turn and two horses took a commanding lead. They raced past the guardrail neck and neck, matching each other stride for stride.

### **Crash Course (start at 0)**

<http://player.discoveryeducation.com/index.cfm?guidAssetId=553B7915-0527-4D4F-B0C1-418732F86A13&blnFromSearch=1&productcode=US>

The yellow racecar's engine screamed as it rolled. Its first spin through the air brought it crashing, upside down onto the racetrack. But its violent trip wasn't over yet.

As its spin wheels hit, they smashed into the ground, they sent the car spinning again. It tumbled off the track, spraying dirt and car parts through the air as it rolled across the grass.

It came to a final rest several hundred feet from where the crash began, its tires bent, its driver still seated upside down in the exposed cockpit. It was impossible to tell if he was still alive.

### **Hunting with Cheetahs and Lions (start at 30 sec)**

<http://player.discoveryeducation.com/index.cfm?guidAssetId=DEE960C9-8E4E-4D68-B828-31ACE00D6A36&blnFromSearch=1&productcode=US>

The cheetah mother led her hungry cubs across the grassland. They were surrounded by hundreds of large grazing buffalo, but it wasn't them she was hunting. She was after the newborn calves.

She waited patiently as they walked by, choosing her target carefully. And then, she sprung. She raced across the dry grass. Her claws kicked up tiny clouds of dust as she charged.

The buffalo began to panic. They started to run.

The cheetah paid no attention to the adults. She had her target in her sights.

She reached the tiny baby buffalo and calf and dug its claws into the baby's back legs. The calf rolled as it fell. And the cheetah pounced on top of it.

The cheetah and her cubs would live to eat another the day. The poor calf would not be so lucky.

**APPENDIX J: WATCHING LESSON 1 WORKSHEET**

**Belmont Park, Belmont Stakes**

**As I listened to the story, I...**

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**Crash Course**

**As I listened to the story, I...**

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**Hunting with Cheetahs**

**As I listened to the story, I...**

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## **APPENDIX K: WATCHING LESSON 2 VIDEO STORIES**

### **Space Shuttle (Start at 0)**

<http://player.discoveryeducation.com/index.cfm?guidAssetId=E401C5C-2AEB-4819-B3B3-3BC2D61E366B&blnFromSearch=1&productcode=US>

The engines ignited and a burst of flame shot from beneath the space shuttle's rockets. White smoke churned out across the ground and drifted through the air. The rocket shook as the force of the rockets tried to lift it into air, but at first the steel tower beside it held it in place.

Then, when there was enough force behind it, the clamps on the tower released and the rocket began to climb into the sky.

It shot through the blue sky like an arrow, spinning slowly as it soared.

Upward it climbed until it left the blue sky of the earth behind and inched toward the blackness of space.

Then, another explosion burst out around it. A cloud of smoke and steam shot from all sides of the rocket. The large red rocket separated from the shuttle and fell back toward the Earth.

### **Snowstorms, Avalanches, and Other Weather Disasters (Start at 10 Sec)**

<http://player.discoveryeducation.com/index.cfm?guidAssetId=71F95B70-2283-4F0E-9F1F-BE2E164741F0&blnFromSearch=1&productcode=US>

A cloud of snow rolled down mountainside at hundred of miles per hour, growing bigger as it fell and blanketing everything in its path. It flowed like water from a broken dam, pushing aside trees and rocks as it raced toward the valley below.

Anything in its way disappeared in a storm of white.

**Skating on the Edge: Changing Community Laws in California (Start at 2:08 Sec)**

<http://player.discoveryeducation.com/index.cfm?guidAssetId=B68AD934-86D7-45CB-B34C-1D67320B0BE6&blnFromSearch=1&productcode=US>

The skateboarder rolled across the tan concrete. He rode the small thin board like a surfer on a wave.

Then, as he neared the metal railing, he kicked the board. The kick sent the board into the air.

He spun as he landed his board on the top of the railing. The board let out a soft screech as it slid down the rail.

A few seconds later, the boarder spun his board back around, landing at the bottom of the ramp with a soft thud as his wheels touched back down on the concrete.

**APPENDIX L: WATCHING LESSON 2 WORKSHEET**

**Space Shuttle**

**As I listened to the story, I...**

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**Avalanche**

**As I listened to the story, I...**

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**Skating on the Edge**

**As I listened to the story, I...**

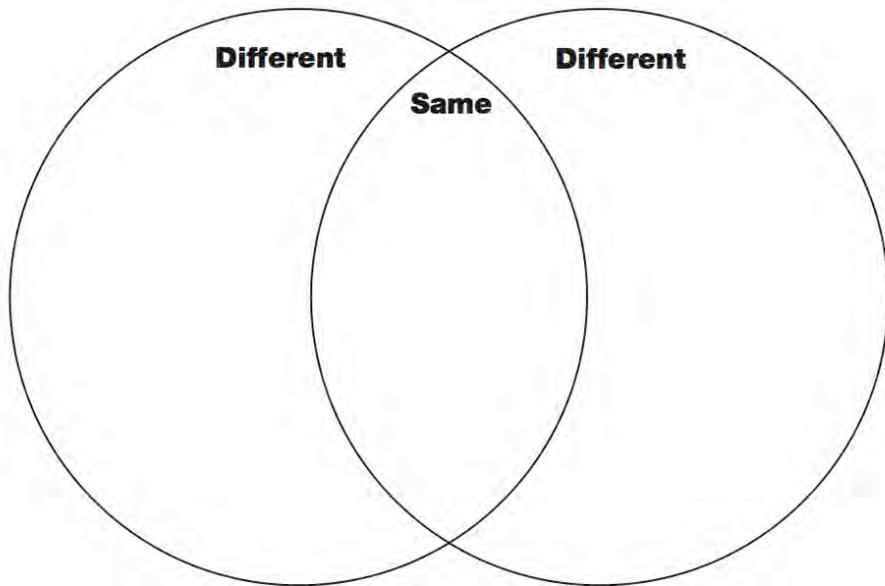
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## APPENDIX M: WATCHING LESSON 3 WORKSHEET

As I listened to the story, I was Watching...
_____
_____



**APPENDIX N: LIVING LESSON 1 WORKSHEET**

**As I listened to the story, I...**

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**APPENDIX O: LIVING LESSON 2 WORKSHEET**

**As I listened to the story, I was Living when...**

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**As I listened to the story, I was Living when...**

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**APPENDIX P: CONCLUDING LESSON 1 WORKSHEET**

**Quynh and the Golden Gate**

<b>Drawing</b>	<b>Watching</b>	<b>Living</b>

**As I listened to the story, I...**

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**APPENDIX Q: CONCLUDING LESSON 2 WORKSHEET**

**Jonah the Whale**

<b>Drawing</b>	<b>Watching</b>	<b>Living</b>

**As I listened to the story, I...**

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## APPENDIX R: STUDENT INTERVIEW QUESTIONS

Student: \_\_\_\_\_

1. What did you think about the visualization lessons we did this year?

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2. Tell me about a visualization experience you have had while reading.

- 

3. How have the visualization lessons we did in class affected your reading?

- 

4. How has the visualization lessons we did in class affected the enjoyment you get from reading? Did it make it more fun? Why or why not?

-