

The Impact of the Multiple Intelligences on Literacy Learning: A Case Study

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Abstract

My qualitative case study looked at a particular student through the eyes of an emergent literacy learner. Through conducting this type of research, I sought to examine how student interest and motivation allow students to strive in literacy learning in reading and writing. My research participant was selected based on accessibility outside of the classroom setting. As a substitute teacher, it is rarely guaranteed that I will be in the same classroom often; therefore, my participant was selected based upon availability and familiarity. Through the various literacy learning sessions, I employed in conducting my research study with Fred (a pseudonym to protect identity), I was able to observe his literacy engagement behaviors, literacy motivation behaviors, background information, how he used background information and his funds of knowledge to aid in his understanding and making of new connections in learning.

Collaborating was just as important as interacting with the parents. Outside of working together with Fred, I was able to communicate with the student's mother and father, in regards to his emergent literacy learning abilities in reading and writing. Fred was familiar because he is my younger cousin. I was biased toward the instruction, responses, and resources I provided for him, but despite this bias, I was fully responsible for gathering, exploring and analyzing data accurately

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Chapter I: Introduction

Lead

Imagine yourself sitting in a classroom, in China, where all of the children are of a mixture of different cultures and races, but you are the only Caucasian student from America. How would you feel knowing you are singled out not only in number, but by culture too? All of a sudden, the teacher begins to talk, in Chinese. At this point, you have no idea what was said because the only two languages you can comprehend are English, and Spanish. What would be going through your head? Would you feel comfortable? Would you feel discouraged to continue learning? What do you think you would do?

As stated in the Merriam-Webster Online Dictionary (2014), literacy is “the ability to read and write and to know the knowledge that relates to a specified subject.” Literacy learning occurs within the classrooms daily, and it is extremely important for teachers to ensure the facilitation of students' literacy learning that is culturally sensitive and responsive, addresses students' literacy learning needs, provides experiences which enhance and enrich students' literacy learning and engagement, and empowers students. It also improves and increases students' chances of experiencing successful literacy learning across subject content areas. In order for students to succeed in the class, the students need to be able to understand the materials presented to them. This can be demonstrated through many different examples, but the teacher needs to make sure the students can read and understand the materials presented to them, and also clearly and effectively express their thinking through their writing or other forms of assessment. As a future teacher, my job is to provide literacy instruction that effectively addresses the literacy needs of every student in the classroom.

I believe literacy is the vehicle through which people show their understanding of a topic. All people are different, and learn differently; therefore, limiting ways in which students may demonstrate the understanding of their learning can have detrimental effects on students' literacy learning experiences and how they see themselves as literacy learners. Being an advocate for inclusive instruction enables me to understand that some students will struggle with reading, and some students will struggle with writing. In this case, it is unfair to limit our students to respond to literacy using only reading and writing. For those students who struggle with reading, using other forms of literacy experiences within the classroom such as an audio tape or an online e-book with a voice feature that allows for the story to be heard, so the student(s) can see the words and listen to the book. For those students who struggle with writing, the teacher can have them demonstrate their understanding through verbal explanations. Drawing pictures and using technology is beneficial for all students as well because using other methods of assessing understanding is the key to effective literacy development and learning.

Topic and Research Problem

Children all around the world are a part of different classrooms with different learning environments, where the use of multiple intelligences is crucial to assist in learning. Every child learns differently, and it is the job of the teacher to support the needs of each child to encourage successful learning. “The teaching process involves comprehending and improving teaching methods, which in turn assist students in controlling themselves during the learning process” (Kutlu & Korkmaz, 2013, p. 227). When students are allowed to take some control over their learning, it has been observed that the students become more engaged in the activities and improve their individual learning abilities (Kutlu & Kormaz, 2013). Even a minor change in the

teaching process, to better adjust for the students' needs and/or abilities, can be effective in increasing self-efficacy, empowering students and helping them understand that what they think actually matters and that learning can result in great satisfaction (Watson, 2001).

In summary, teachers who want their students to take ownership of their learning will aid in the process through design and implementation of literacy instruction, which takes into consideration of implementing student-to-student learning. This instruction will be authentic, differentiated, age appropriate, culturally responsive and sensitive, creative and innovative; which allows for and promotes inquiry and expedition based learning with students while being productive and balanced in finding ways to create inquiry-based ways of learning with their students (Golding, 2013).

Teachers should acknowledge, recognize and celebrate the diversity of the students in their classrooms. Literacy instruction should be designed and facilitated such that it is authentic, relevant, culturally responsive, and can address the needs of each student. This helps to increase chances of experiencing academic success, and allows students to hear and read stories of people whom they know. Failure to acknowledge diversity of students in the classroom can result in minimal interactions between peers, and can reduce the amount of learning in the classroom. "Students should be routinely surrounded with images, sounds, and symbols of their ethnic and cultural diversity," (Geneva Gay, 2002, p. 619). "By ignoring the differences between children—their experiences, their beliefs, their traditional practices —schools limit their own ability to educate these children," (Utley, C. A., Obiakor, F. E., & Jeffrey P., B., 2011, p. 16). It is important for teachers to know their students and the funds of knowledge, and diverse learning backgrounds and experiences they are bringing with them to the classroom in order to effectively facilitate their literacy learning.

Rationale

When children can retain information through learning experiences, they are more likely to participate in class. These children become empowered in their learning, develop self-efficacy, and the ability to participate and contribute within structured classroom literacy experiences, despite their varied abilities of learning and different backgrounds. With inclusive teaching, it is important to use differentiated literacy instruction, which allows all children with different abilities to learn the same material and retain the lesson. Although many different forms of lessons may need to be created in order to address the needs of every student, all of the children should be included as one class to learn and comprehend the material.

Learning about the multiple intelligences allows me, as the researcher, to find multiple ways to teach to students, and consider different ways of assessing their literacy learning and understanding. One way to create an inclusive classroom is through redesigning how students are seated to allow for cooperative learning; arrange student seating into tables of four or five. By rearranging the classroom tables, the learning environment is able to expand; children are able to converse with one another and their differences combine into one. In the design of classroom literacy instruction and learning, academically learning, weekly discussion and dialogue may be necessary as well as assigning homework (Richards, H. V., Brown, A. E., & Forde, T. B., 2007, p. 68). Through informal assessment, such as thoughtful assigning of homework, teachers will be able to monitor student understanding of the material taught in class through their understanding demonstrated in the completion of their work. Having weekly journals may also be beneficial for the children as well. Journaling will allow for the capturing of students' expressed understanding of texts, and reflections on events occurring in their lives or in the news. This allows the teacher to praise student interactions such as feelings of a topic or reading, and to query students on their

thinking with regard to how they were able to make summaries and conclusions without having direct confrontation.

Designing and facilitating literacy instruction that takes into consideration the multiple intelligences can be difficult, yet many teachers are attempting to do just that, to improve learning outcomes for all students. The complication with this form of teaching is that teachers need to be patient and accepting of those children who may be slower learners than others may. Not all students learn the same way; therefore, it is important to make every child feel welcomed, safe, and valued. It is the teacher's job to make sure that there are positive outcomes in the classroom allowing the children to academically succeed at their individual experience of learning, at all levels. "Teachers must encourage students to become active learners who regulate their own learning through reflection and evaluation," (Richards, H. V., Brown, A. E., & Forde, T. B., 2007, p. 64). If I do not conduct this research, information may continue to be limited which might aid future teachers to recognize and implement different ways to teach by including student interests and motivations. The main idea is to find ways that engage students in learning, and to spread these ideas to present and future educators, as the education system is constantly changing every day.

Purpose

The purpose of my case study was to determine what motivates and engages the emergent literacy learner in the areas of reading and writing. My research provides data to determine what interests can benefit student literacy learning in reading and writing as an emergent learner. Through conducting a study of this nature, I determined how student interests, memories, and life events relate to literacy learning and instruction, influence the literacy learning

comprehension and development of a young emergent language learner. The research performed employs story telling while using draw talk, character imagery, felt board, role-play, and chant to connect to student's individual needs and intelligences, all of which were used in a previous study conducted by Trostle, 2006. Researcher Howard Gardner's Theory of Multiple Intelligences has provided many researchers with the opportunities to create studies about the direct impacts the intelligences have in literacy learning (e.g., Armstrong, 2003). Through my research study, I indicate how students' interests convey positive literacy learning in emergent literacy. This knowledge provides readers, teachers, and educators with skills, practices, and strategies to integrate in more than one way to effectively facilitate the literacy instruction of emergent literacy learners. This data provides multiple methods, techniques, and approaches, in order to not only obtain, but also maintain engagement, motivation, and interest in literacy learning. The results of my study inform my thinking and that of teachers and educators of how including multiple intelligences may help increase the learning comprehension in emergent language and literacy learners.

My case study was conducted with the belief that socialization and the use of Howard Gardner's Theory of Multiple Intelligences play important roles in how a student can identify oneself as a learner. Similarly, my study also examined how engagement and motivation impacts a student as an emergent literacy learner. Both of these theories and beliefs have a vital role in a student's academic success in literacy learning.

Research Questions

- How can the bodily-kinesthetic intelligence help impact literacy comprehension in elementary school aged students who are males?
- How can the use of the Multiple Intelligences impact the literacy learning amongst students, teachers, and educators?
- How can I find engaging, motivating, and diverse ways to teach to my students by using students' educational interests and needs in the classroom?

Conceptual (Theoretical) Framework

The conducting of my qualitative research case study was done so under the premise that socialization and the use of Howard Gardner's Theory of Multiple Intelligences play important roles in how a student perceives him/herself as a learner. Similarly, my study also examined how engagement and motivation impacts a student as an emergent literacy learner. Both of these theories and beliefs have a vital role in a student's academic success in literacy learning.

When connecting Vygotsky's sociocultural theory to the literacy learning of Kyle, I was able to understand what influenced Kyle to be the brilliant reader and writer that he is. According to Vygotsky, the "sociocultural theory focuses not only how adults and peers influence individual learning, but also on how cultural beliefs and attitudes impact how instruction and learning take place," (Cherry, 2016). While Kyle's parents and babysitter help him to read and write at home, Kyle's interest and motivation ultimately allow Kyle to be successful in his literacy comprehension.

"According to Vygotsky, the zone of proximal development "is the distance between the actual development level as determined by independent problem solving and the level of

potential development as determined through problem solving under adult guidance or in collaboration with more capable peers,”” (Cherry, 2016). A student has his or her own interests, motivations, and engaging factors, which help to lead the student to successful learning in literacy.

Research regarding literacy learning and instruction provides information on how crucial it is for teachers to recognize that teaching is not all about taking notes, writing on the chalkboard, lectures, and listening for talk styles in the literacy environment. Literacy teaching and learning is changing every day and it is time to step into the change. Howard Gardner’s Theory of Multiple Intelligences has been used worldwide to demonstrate the positive influence of student interest in the learning classroom. It has been proven that not only do students learn differently from one another through interactions, but teachers teach differently from one another as well. This is something that needs awareness in order to create better success for our students in the literacy-learning environment (Roseboro, 2012). Throughout my literature review, I focused on the impact the multiple intelligences have on student reading and writing in emergent literacy.

Chapter II: Literature Review

Introduction

Research demonstrates that the Theory of Multiple Intelligences (MIT) has been studied numerously throughout the world, across many countries, and has shown that each student learns differently. Many studies have demonstrated how the multiple intelligences leave a positive influence on literacy learning (Temiz, & Kırız, 2007). Some students have a difficult time with long-lasting retention and in-depth knowledge during literacy instruction. It is crucial for students today, to become independent learners and knowledge workers of tomorrow. Using a pedagogical approach, like Howard Gardner's Theory of Multiple Intelligences, provides teachers and students with a framework of diverse teaching and learning. The Theory of Multiple Intelligences has proven, across many studies, that there is a positive impact on student learning and success (Brand, 2006).

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Multiple Intelligences in the Classroom

The first step for a successful literacy classroom is to develop multiple levels of critical literacies throughout the classroom. Including technology, travel, increased information and text forms, and representing multiple perspectives are just some ways in which educators can construct literacy practices into the diverse classroom. When students read, they bring their knowledge of the world to the classroom. When students are put in a group together, many meanings and ideas can be derived from the same exact text (Creighton, 1997). This is proof that multiple views are represented in one classroom. Teachers can then create an environment where students can make multiple connections to their own life. Current teachers use charts, posters, signs, messages, labels, picture books, big books, novels, dictionaries, encyclopedias, and computer texts, whereas critical literacy enables students to closely examine how student's gender and cultural experiences relate to the text itself.

Literacy is not just about books and pens; literacy is on the television, on the radio, and even online. Technology and the way students find different forms of literacy is what helps students to stay engaged during instruction. Finding a text that connects to student background knowledge, and connects to student culture is also important to help the student make his or her own connections to real life events (Creighton, 1997). In the teaching career, you get the chance to create bonds with children and it really makes an impact on both of our lives. My strategies for teaching stem from the students. When I get into a classroom, I like to know about the children of each class (what they like, what they do not like, how they learn). In this case, I can then find ways to modify assignments, or lessons, to meet the level that the students are learning.

Teaching is effectively addressing learning needs of all students within the classroom, to prepare them for success and advancement to future levels of learning. This is so that students can experience positive academic outcomes in learning. Children need to take the most

information out of the teachers in school, until there is nothing left for the teachers to give to their students. The education field is a difficult profession to be a part of, but it takes patience and ambition to make a difference in a child's life. Teaching is strictly about the students and how we teach to ensure objectives are understood at their own levels. This is a goal for not only teachers, but for students as well. It is crucial to have the knowledge that every student learns differently from one another; we need to accept this fact.

Teaching material one way may not be beneficial for some, or most students compared to others in the classroom. As teachers, it is our job to create engaging activities for our students. These activities, and lessons, will bring our students together as a whole, so each student can comprehend the material at their own level of understanding. This research gave me the confidence to expand different ways of teaching to incorporate as my future teaching techniques increase through experience.

Students benefit with Howard Gardner's Theory in activities and lesson plans

Gardner and Hatch conducted a study to find activities, which can enable students to move around during instruction. This study was conducted with students of several different age groups. The school created a design where students could use the bodily-kinesthetic intelligence, as well as enrichment activities that allow the students to be up and moving (Gardner, & Hatch, 1989). The assessment instruction is still under review and being adapted to the curriculum, but the students displayed a positive outcome to the design. The students demonstrated retention gains, staying focused, higher engagement levels, and most motivation to learn and succeed in the classroom.

Howard Gardner's Theory of Multiple Intelligences has been studied for numerous years, all around the world. Gardner's theory consists of seven independent forms of information

processing with individuals differing in specific profile of intelligences. The eight intelligences include Linguistic intelligence (word smart), Logical-mathematical intelligence (number/reasoning smart), Visual/Spatial intelligence (picture smart), Bodily-Kinesthetic intelligence (body smart), Musical intelligence (music smart), Interpersonal intelligence (people smart), Intrapersonal intelligence (self-smart), and the Naturalist intelligence (nature smart). The purpose of this study was to understand the connections between the eight multiple intelligences (MI) and the use of online education.

Skills including alphabet knowledge, phonemic awareness, phonics and nonsense word competence, and language usage were researched within a literature-based multiple intelligence approach (Brand, 2006). Multiple intelligences can be crucial to learning and literacy; this theory can provide a major impact on student learning. The literacy activities included strengths in children's interpersonal, intrapersonal, logical-mathematical, bodily-kinesthetic, linguistic, musical, naturalistic, and visual-spatial abilities and interests. This study was completed with thirteen inner-city students in a seven-week program. There have been recent studies that show students who demonstrate phonemic awareness and letter knowledge deficiencies, may correlate with warning signs of later reading accuracy and fluency. Another skill that contributes to later reading success or failure was development of oral language category. This study shows results from the benefits of two forty minute, direct small group instructions each day. When storybooks were read in class, teachers decided to incorporate draw talk, character imagery, felt board, group role-play, and chant. With these activities, student interests spiked! These storytelling methods enabled students to become engaged and motivated to learn in the literacy environment. The study was able to show there were significant gains in phonemic awareness, nonsense word

competence, and word usage fluency because of the integration of multiple intelligences with literacy instruction (Brand, 2006).

Students are engaged through student interest accepted in the classroom.

A study conducted by Souto-Manning identified techniques to help students interest to be included into the learning environment. Signing, painting, dressing up, reading, and interacting with others were all characteristics one teacher provided during a book workshop lesson about aspects of Matisse's paintings. After reviewing the lesson and watching the students remain engaged, teachers were able to admit that they did not know how to integrate the arts into the classroom (Souto-Manning, & James, 2008). Through the study, teachers were able to see the positive results in student learning. This was seen through combining the arts into teaching practices with large-group time, which included a read-aloud, three visuals, and discussions.

Technology and the way students find different forms of literacy is what helps students to stay engaged during instruction. Teaching students, the way we were once taught does not address how our students learn best today. This is crucial to 21st century learning because educators are challenged to be practical and realistic in their teaching. Diverse strategies need to be integrating into instruction where students can work in pairs, triads, and small groups. Students need to have the ability to incorporate multi-model technologies, graphics, art, and music into literacy instruction (Roseboro, 2012). Teachers and art teachers have much in common in regards to the way they approach teaching. Many lessons involve hands-on activities and engagements for students to stay motivated. There are many opportunities for students to learn and quite often, the students can find results in more than one outcome. Learning opportunities are engaged through ownership and originality from one's "mistake" or miscue

(Souto-Manning, & James, 2008). As a teacher, it is important to teach the child as a reader, writer, artist, mathematician, and scientist, not teaching them through the subject matter.

Conclusion

Further research provides a positive impact on student learning, as well as an educator's teaching, while continuing to include the multiple intelligences in the learning environment. Change occurs every day all day. It was said, "We learn something new every day." People can choose to either agree or disagree with that saying, but when it comes to literacy instruction, it is crucial that we recognize these changes. Teachers are there not only to help children for today, but to help children for tomorrow and the future beyond all schooling. "We must do our best to prepare them not just for college but also for success in the world in which they live today and in the years to come," (Roseboro, 2012, p. 17). It was shown that teachers agreed that using the multiple intelligences in the classroom truly embraced student interest in the literacy setting. Teachers were able to acknowledge that there was "better learning connection and retention with the use of MI," (Mokhtar, Majid, & Foo, 2008, p. 97). With newer studies, including multiple ways of teaching and learning, studies show the significant, positive gains in learning students show during literacy instruction.

"Gardner (1993) reminded us that students in school must spend a greater part of their time with activities that ask them to put their understanding to work, such as carrying out applications, creating works of art, and other pursuing activities that demonstrate understanding through multiple learning styles and forms of expression," (Souto-Manning, & James, 2008, p. 86). This quote speaks to the importance of designing and facilitating literacy instruction, which incorporate the multiple intelligences to maximize the learning potential of each student in the classroom while effectively influencing student learning outcomes and academic success. Many

studies continue to show the positive outcomes diverse learning has on students of multiple ages, and this was seen through acknowledging diverse student interest.

Chapter III: Methods and Procedures

Introduction

My research was intended to determine how the bodily-kinesthetic intelligence impacts literacy comprehension of a ten-year-old male student. In this chapter of my research I discussed research questions, participants and the data collection methods and procedures I used throughout my study. I also explained the ways in which I analyzed the results and described any limitations the study had. The results are used to aid in the understanding of the impact of how bodily-kinesthetic learning can help increase literacy comprehension.

Research Questions

I planned and organized my methods and procedures in a conscious effort to answer the following questions:

- How can the bodily-kinesthetic intelligence help impact literacy comprehension in elementary school aged students who are males?
- How can the use of the Multiple Intelligences impact the literacy learning amongst students, teachers, and educators?
- How can I find engaging, motivating, and diverse ways to teach to my students by using students' educational interests and needs in the classroom?

Participant

My participant, who for the purposes of my study shall be referred to as Fred, is a 10-year-old Caucasian male in fifth grade. He has attended this school since kindergarten. Fred has

one older brother who is 13 and is in seventh grade. His mother works as a secretary in a church, and his father works for Xerox.

In fourth grade, the teacher was able to observe and assess Fred's literacy learning, behaviors and abilities; and inform Fred's parents during conferences about his style of learning in the classroom. The teacher made note that Fred was often not interested in reading and writing in school. When she would give Fred a topic to write about, she mentioned that Fred would often sulk and goof off during the activity. When I was talking with the mother, she also mentioned that the fourth grade teacher provided her with some reading activities to do at home, to enable Fred to become more interested in his reading. Fred did not find ELA difficult, but when conversing with Fred he said, “When teachers ask me to read, I read. When teachers ask me to write my own topic, I like that even more. When I can write what I want to I can tell people more things that I actually know. When I am writing I am not bored because I like what I am writing about.”

Being part of a family, with one brother at home, allowed Fred to have conversations with his peers easily. Fred was able to share during recess, and Fred was able to try to help his peers if they needed or asked for help. Having an older brother allows Fred to get a glimpse of what the next year will be. This includes homework, or sporting events, and even making new friends!

Context

Fred attends a K-5th grade suburban public school in Western New York. There are approximately 475 students in the elementary school, with an average class size of 21 students. According to City-Data organization, in 2016 the population of students attending the

participant's school included 92% white, 3% Black of African American, 0% American Indian and Alaska Native, 2% Asian, 0% Native Hawaiian and Other Pacific Islander, and 2% Hispanic or Latino, 7% of students are eligible for free lunch, and 2% of students are eligible for reduced-price lunch.

Fred is in a classroom with 20 other students. There is one teaching assistant in the classroom that helps with guided reading groups, as well as writer's workshop during literacy interventions. Fred's ELA block consists of 60 minutes of reader's workshop, and 30 minutes of writer's workshop. When working with me, Fred and I worked at his home, outside of the school setting; therefore, I conducted this study at the child's home, outside of the school setting. The home was located in a suburban area in Webster, New York.

Positionality as the Researcher

I am a 23-year-old white female. I was raised in a middle class family in a suburban neighborhood in western New York State. In school I was encouraged to read books of interest, and I was encouraged to always write my full thoughts and ideas, not matter how long. At home, I often wrote notes to my mom. She would write notes back to me, and that increased my literacy writing throughout my younger years. Growing up as a dancer, the only way I was able to learn most of the material in class was if I included some sort of hands-on practice. I would draw my ideas, or I would need to stand up and stretch often. I found that when I was able to express my ideas through movement, I was then able to transfer my thoughts and expressions onto paper. I completed my undergraduate studies at The College at Brockport, State University of New York. I earned a Bachelor of Science degree in Interdisciplinary Arts for Children, and teacher certification in Childhood Inclusive Education grades one through six; Currently, I am pursuing

my Master of Science degree in Literacy Education at The College of Brockport, State University of New York. I have substitute taught for two years.

Reflecting on Howard Gardener's theory of the eight multiple intelligences, it was important to try to incorporate numerous, different ways to teach lessons. Technology is constantly changing; our world is constantly changing and so how do we adapt to all these changes? It is our task to accommodate the different learning levels of our students. As stated by Benjamin Franklin, "Tell me and I forget. Teach me and I remember. Involve me and I learn" and in order to help these children learn, in this day in life, we must include multiple ways of learning for our students. Sitting in seats, taking notes, and listening strictly to the teacher was one strategy for teaching but I believe students are capable of engaging in experiential learning.

Procedures

My study was conducted over a four-month period between September and December 2016. I created activities and lessons that connected with the literacy learning of the child, as if it were during his English Language Arts block in the school setting. During the allotted time with the participant, mini lessons, independent reading, word study practice, vocabulary practice, and writer's workshop were used to enhance the student's literacy comprehension through bodily-kinesthetic learning.

Data Collection Instruments and Analysis

Several data collection methods were used as detailed in the following sections. I collected data by using formal and informal assessments, which included student surveys, anecdotal notes, Garfield Reading Attitude Survey, and the Fountas and Pinnell benchmark

assessment system. These methods aided in providing insight into my students' motivation, and engagement in literacy learning.

Student Surveys

I handed out the Garfield Assessment to determine the student's interest and motivation in literacy reading and writing. I distributed another student survey to assess the student about how the participant feels he or she learns best. These surveys were used to decide which multiple intelligences the student uses more, how the student learns in school, and what motivates or keeps the student engaged in literacy learning.

Anecdotal Notes

I used anecdotal notes to record my observations during the literacy instruction, which contained mini lessons, writer's workshop, independent reading, vocabulary practice and word study. This was done in order for me to record the thinking, behaviors and attitudes displayed by the student, as well as evidence of learning and achievement demonstrated by the student.

Garfield Elementary Attitude Survey

I implemented the Garfield Elementary Attitude Survey because it is an uncomplicated age appropriate survey that is easy for to Fred complete. Most students do not like answering questions and this was the perfect way to get to know your students. It provides attitudes toward reading and literacy. This was a great example of an assessment because it did not focus on the comprehension of the reader; it focused on the attitude of the reader and it "produces a public-

domain instrument that would remedy shortcomings and enable teachers to estimate attitude levels efficiently and reliably” (Garfield Survey, p. 1).

Fountas and Pinnell benchmark assessment system.

I used the benchmark system created by Fountas and Pinnell, which is a leveled reading program in which students are assessed using a running record, fluency rubric and comprehension rubric. The student was assessed twice throughout the four-month period. I utilized this assessment data as one piece of evidence of the participant’s literacy success.

Criteria for Trustworthiness

As a teacher-researcher, it was crucial that I accurately conducted this study in an unbiased and ethical manner. It was important that all parts of my research be completed with accuracy, validity, and reliability. Four types of data were collected which included, observations, interviews, audio recordings, and video recordings. Prolonged engagement for the research process was met because data was collected over a six-week time frame. Throughout my case study, I looked back at my research to find what worked, and what did not work. I was honest throughout the reporting of my findings and I used the exact words of Fred at times to support my findings in demonstrating his thinking. While reading reflections about the case study, I explained and understood what I was thinking and feeling during my lessons with the student. Based on the research and reflections I provided, I found multiple ways to support Fred through differentiated instruction.

There have been regular alliance sessions between the primary researcher and the advisor in order to help develop my knowledge of the Theory of Multiple Intelligences research in

literacy learning. There have been many opportunities for my peers and other advisors to analyze and provide feedback within my case study. I analyzed and read numerous scholarly articles that explained the Theory of Multiple Intelligences. All of the sources I chose came from credible and trustworthy articles and studies. I reviewed the research articles and then proceeded to synthesize them to find how they were able to inform my research further.

Limitations

This study included some limitations. The data collection took place over a four-month period, and this short length proved to be a limitation because it did not show long-term results of literacy achievement.

The data collection methods I chose also include some limitations. The parent and student surveys included biases of the parents and the student. The participant is a family relative; therefore, these instruments may not be reliable and valid. Because this was a case study, the results obtained may not be reproducible in a general population. Furthermore, the anecdotal notes may inherently have some bias as well when taking into consideration different perspectives presented in responding to the survey instruments regarding student engagement and literacy learning comprehension.

The Fountas and Pinnell benchmark system was scored quantitatively therefore, may be less specific regarding a student's strengths and needs. However, this assessment provided an effective way for analyzing Fred's growth.

Chapter IV: Results

Results of Assessments

Benchmark Assessment System (BAS)

The purpose of BAS is to provide teachers with a series of different leveled texts that link assessment with instruction. As quoted by Irene Fountas and Gay Su Pinnell, “it reliably and systematically matches students' instructional and independent reading abilities to the F&P Text Level Gradient™” (Heinemann, 2015). A teacher gives this assessment to students individually. The teacher gives the student a prompt about the leveled text, and the teacher asks the student to read certain pages of the book aloud. While the student is reading the book aloud, the teacher is marking any miscues, while timing the student at the same time. After the student has completed reading the assigned pages, the student can continue reading the rest of the book to be assessed on the comprehension of the story.

Students are scored based upon their accuracy rate, fluency score, comprehension scores, and a written response score. The accuracy rate is the percentage of how many errors, or miscues, the student had during the reading. Fluency is based on a 1-3 scoring scale; 0 is reading word-by-word at a slow rate, 1 is reading in two-word phrases at a slow rate, 2 is reading three- or four-word phrases with minor slowdowns, and a 3 is reading larger, more meaningful phrases at a steady rate. Comprehension and the written response follow the same scoring based on a 0-3 scale; 0 is scored as having no understanding, 1 is scored as having very limited understanding, 2 is scored as having partial understanding, and 3 is scored as having excellent understanding.

Using the benchmark assessment system (BAS) aided me in understanding Fred’s reading capabilities better. I was able to notice that he is reading at a higher level than I thought he would be reading for his age and grade level. When reading, Fred uses expression and reads with great fluency. When Fred was reading I noticed that in his making miscues he often did not

correct or attempt to correct his errors. He repeated parts of sentences, but often skipped over words he did not recognize. When he reads he uses meaning and structure to make miscues, but uses visual information to make self-corrections. Fred has control of language and gains meaning from the text, while identifying some high-frequency words. The BAS also helped me to understand how Fred reads because I observed that Fred reads at very fast pace. Because Fred reads rapidly, he often makes omissions or small visual errors during his reading. Throughout his reading, he used the word *carriages* for *carriage*. I can understand Fred's thinking process because *carriages* was used more times than *carriage*. In saying this, Fred would use the word that he was more familiar repeating and visualizing. Fred would repeat one or two words to become more familiar with the language. I noticed when he would repeat words that it was because he had mispronounced them the first time and it did not make sense for him during his reading. In this case, he would retry to make meaning of the text.

This assessment allowed me to see that Fred is reading at an independent level. He had strong fluency, comprehension, and a good written response. Although his accuracy rate included 10 errors, resulting in the 95% score with five self-corrections, Fred was able to recall most of the key ideas in his comprehension. It is important for students to not just read to read the words, but to read to make meaning and recall important information. Overall, I think Fred was able to show motivation from completing the BAS and I believe this assessment is great when getting to know more about readers!

The act of reading includes text, prior knowledge, other learners and constraints, and the act of assessment includes who the student is (Valencia, & Pearson, 1987). What varies across readers is how students are able to obtain available resources. The reading process is different for all learners; the reading process includes decoding, vocabulary meaning, fluency, and

comprehension (Afflerbach). Using process-oriented reading provides teachers and readers with skills and strategies a student can use to problem solve. This outcome enables the teacher to identify skills that may or may not work for the student during reading (Afflerbach). Using product-oriented reading provides teachers with achievement abilities. This outcome enables the teacher to determine achievement in reading benchmarks, standards, and goals (Afflerbach).

Using this dynamic assessment enabled me to find Fred’s ZPD while providing reading instruction (Valencia, & Pearson, 1987). The results of the assessments, as shown in Figure 4, gave me a general idea as to which books and assignments might aid me in addressing Fred’s learning needs (Robb, 2013). Assessment needs to become more frequent to allow progress monitoring to take place throughout learning: Conducting informal reading conferences allowed Fred and I opportunities to discuss strengths and weaknesses throughout his reading process (Vlach, & Burcie, 2010).

Figure 4: Fred’s Zone of Proximal Development

Zone of Actual Development	Zone of Proximal Development
Breaks apart contractions	Rereads words that do not sound right in a sentence
Reads punctuation correctly	Retells parts of story he has read
Knows concepts about print	Picks texts that are appropriate for his age level and interest
Is aware of his speed during reading	Can read on his own
Pauses when he approaches an unknown word	Can distinguish the difference between a comma and a period

Attitude in Reading and Writing

Sometimes it is not all about their comprehension; it is about the student's attitude toward reading (Armstrong, 2003). It is important to recognize the fact that some students may enjoy reading outside of class, but when they are in class, they demonstrate a strong dislike for reading. I noticed that Fred thoroughly enjoys reading any kinds of books, and even enjoys receiving books as gifts! Whenever Fred takes any sort of test or quiz, or needs to respond to questions about his reading, he has little to no interest in participating. I think this phenomenon may be observed in many students. Students may enjoy reading, but the level of enjoyments may decrease due to the strong emphasis sometimes placed on assessment of literacy comprehension.

Garfield Reading Survey

This assessment may be given to the entire class at the same time, or it may be given to individual students, or groups. The teacher explains that it is an assessment based on each students' feelings that correspond to Garfield's mood. Each student will circle which mood best describes their feeling about reading a book. They students have four choices; happy Garfield, slightly smiling Garfield, mildly upset Garfield, and very upset Garfield. The teacher can choose to have the students put their name at the top, or leave it confidential. Each happy Garfield is worth four points, each slightly smiling Garfield is worth three points, each mildly upset Garfield is worth two points, and each very upset Garfield is worth one point. The teacher puts the points in the survey and then adds up the points all together. There are three different scores that the student can obtain. One score is for attitude in recreational reading, the second score is for attitude in academic reading, and the third score is for attitude in overall (recreational and academic) reading.

While conducting the Garfield Reading Survey with Fred, I found some interesting information regarding his reading interests. Fred looked at the assessment and smiled because he enjoyed the Garfield faces, but then as he was answering the questions he said, “These are all about reading”. The tone in his voice clearly represented his scores. He scored in the 29th percentile for recreational reading, and he scored in the 40th percentile for academic reading. Overall, he scored in the 32nd percentile for both scores combined.

In regards to writing, Fred likes writing about topics that are of interest to him. He finds no interest in writing about topics that teachers assign to him because he finds them “boring and useless.” In an interview, I asked, *“In school what do you do well? Why do you think this is?”* Fred’s response was, *“When teachers ask me to read, I read. When teachers ask me to write my own topic, I like that even more. When I can write what I want to I can tell people more things that I actually know. When I am writing I am not bored because I like what I am writing about.”* Fred does do some writing at home, in the form of sending letters and cards to people. These varied writing experiences at home enable Fred to continue his learning in literacy outside of the classroom.

Finding general topics and allowing our students to self-direct their own writing is one key to successful literacy learning (Armstrong, 2003). Inclusive teaching in an education classroom is becoming the “new norm” in which many people are advocating for the benefits of all children (Watson, 2001). Not every student has the same idea, and not every student has the same interest, so when choosing writing prompts; this is important to keep in mind so students can remain engaged and motivated through individual learning.

6 + 1 Traits of Writing

The 6 + 1 Traits assessment, illustrated in Figure 4.1, is a series of rubrics, as seen below, that can be utilized to determine the quality of student writing, as well as to tailor instruction to students' needs.

Example of Andrew's writing below:

"Laws were important to follow in Colonial times. They were very different from present day laws. There were many laws with severe punishments. Instead of just going to jail or getting a ticket you had to go on a dunking stool or in the Boston stocks. When you break laws the punishments were not fines. They were physical punishments. If you were in the stocks you might have gotten rotten apples or mud thrown at you. An example of a law was that men had to shoot 3 crows or 12 blackbirds because the birds would eat the crops. Men voted for laws, but women could not vote. A man had to own a piece of land and be a member of the church to vote. There were many Sunday laws the most important Sunday law was that everyone had to go to the meeting house on Lord's Day. There were many laws in Colonial times that affected the people and the laws we have in present day."

Figure 4.1: 6 + 1 Writing Traits Rubric

6 + 1 Writing Traits Rubric Findings (based on unassisted writing sample):

Ideas- the main message	4-Fred is able to produce writing with some written details and/or reasons to support the main idea.
Organization- the structure	2-Fred is able to organize his information which allows the reader to follow along with his writing.
Voice- the personal tone	3-Fred expressed that the overall effect of his writing is individualistic, expressive, and engaging.
Word Choice- vocabulary the writer uses	3-Fred conveys words are reasonably accurate and convey the intended message in a general manner. Some verbs provide energy; some simply link one point to another.
Sentence Fluency- rhythm and flow	3-Fred has good sentence structure. Each sentence contains punctuation at the end, which allows the audience to read the writing with rhythm and flow.
Conventions- mechanical correctness	3-Fred uses all punctuation in the proper parts of his sentences.

Engagement in Comprehension

As I talked to Fred throughout several interviews, I observed that he liked to read different genres and types of books. In trying to include the multiple intelligences, I knew I needed to find a way to enhance his reading by including different topics. I chose to have Fred read several diverse short books, passages, or articles, instead of a chapter book to demonstrate his comprehension while incorporating the intelligences. Fred was able to retell the information he read within the text. Fred was also able to make connections, which increased his background knowledge and allowed him to stay engaged throughout his readings. By retelling the major events, Fred demonstrated that his comprehension represents satisfactory understanding of the text, as seen in his writing sample above.

When working with Fred, I would often ask him if he had any homework. In doing this, I was able to see the work that he is supposed to be completing for school and trying to connect that with the extra time I worked with Fred in literacy. One thing that caught my eye was the fact that Fred loves to draw during math. Illustrated below, in Figures 4.2 and 4.3, are two of Fred's work samples which clearly demonstrate how Fred uses his visual/spacial intelligence when learning. Fred was asked to solve a word problem, and he chose to demonstrate his strategies through pictures. He also used a choice of highlighting, again for a visual purpose, to read the most important parts of the sentence.

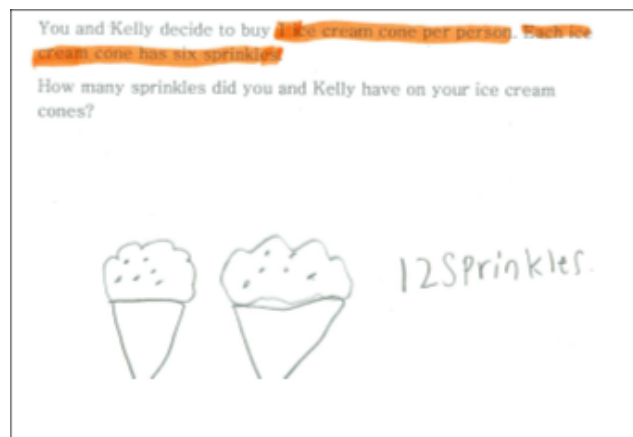


Figure 4.2: Math Equation One

“You and Kelly decide to buy 1 ice cream cone per person. Each ice cream cone has six sprinkles. How many sprinkles did you and Kelly have on your ice cream cones?”

This picture above shows how Fred highlighted the important information from the question, and chose to draw picture to represent his work. Instead of choosing to do standard math, Fred found it easier to visually see two ice cream cones with six sprinkles on each ice cream.

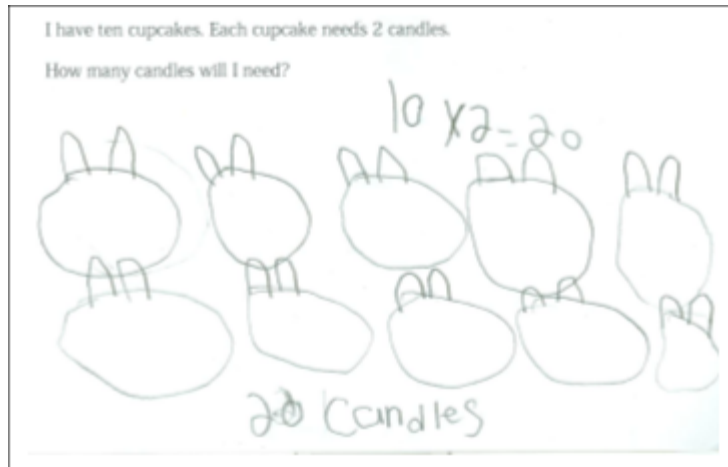


Figure 4.3: Math Equation Two

“I have ten cupcakes. Each cupcake needs 2 candles. How many candles will I need?” This picture demonstrates how Fred showed a math equation, but also used pictures to back up his work. Fred was able to represent ten cupcakes, with two candles in each cupcake.

One story that many students love to read is the book, “There Was an Old Lady Who Swallowed a Fly!” by Lucille Colandro. I have read this book numerous times with several different grades and classes, and I offered Fred the option if he would like to read this book as well. When I showed him the book, he was excited and responded “Yes! I love this book!” Even though Fred has already read this book, I wanted to test his comprehension through more than just writing and remembering. Fred read the entire book to me, and I made sure he used proper

expression for his punctuations. After we read the book, I told Fred I would like him to tell me what he read. Immediately, Fred began to start recalling information until I made him pause in his thoughts. I told Fred, “I would like you to show me what happened in the story, not just tell me.” I then proceeded to pull out my old lady felt, and the animal felts to go along with the story. I told Fred that he needed to use the props to recall the important information from the story.

Below in Figure 4.4 is an illustration of what the old lady looked like. The old lady is made out of felt, as well as all of the animals she ate. Inside her white apron is a hole in which the animals are held. Fred took out all of the animals from her stomach and was able to recall the information from the story. He used all of the animals and retold the story using the manipulatives at hand. After allowing Fred to get used to the material, I asked Fred, “What do you think the old lady’s face looks like this?” Fred responded, “Because if she eats so many animals she’s going to get sick and not look the greatest in her face.”



Figure 4.4: Old Lady Felt Figure

This photo is a picture of the old lady who swallowed a fly. She is made out of soft felt, which can become a sensory object for students. Inside her apron, there is a hole where all of the animals from the story are held. There is a spider, bird, cat, dog, goat, cow, and horse inside of her apron. Each animal is made of felt as well.

Throughout the activity, Fred was fully engaged! He liked to look at each animal and felt the soft material, as this activity was new for him. He was able to recall each animal in order, and had fun creating the story again. He named the animals in order as spider, bird, cat, dog, goat, cow, and horse, and acted out the story as if he had written the book himself. What Fred did not know was that in creating the story all over again, he was retelling the story to me in a way that I could monitor his comprehension progress. Fred mentioned that his teachers “normally make us take a quiz or just say what happened with what we read. I’ve never been able to make the story with this cool stuff. It’s fun to play with and see the animals!” Fred’s enthusiasm and engagement in the activity demonstrated his willingness to complete the activity and fully participate throughout the entire lesson.

When Fred concluded the activity with the horse, which was the last animal she was able to swallow until she died, he said, “Her stomach gets really big when all of the animals are inside. It’s kind of like mine when I eat a lot for dinner, except mine doesn’t get this big.” You can see, from the photo, the bulge in the old lady’s stomach as it gets bigger with the more she is able to eat. By Fred making these connections to the text, he is demonstrating understanding from the book as well including his own background knowledge. It is important for students to connect background knowledge, as well as to retell a story, because it shows comprehension about a text. Fred was able to demonstrate that he was not just reading the words of the story; he

was reading the information of events throughout the story, which allowed Fred to remain engaged while reading and retelling the story!



Figure 4.5: Old Lady Eating a Horse

Fred was to take all of the animals out of the apron, and retell the story as he remembered. The animals stick to the outside of the apron, as indicated in Figure 4.5, so Fred was able to explain the story by using the felt animals, as seen in the photo above.

Another book Fred read was Scooby-Doo! and YOU: The Case of the Glowing Alien by James Gelsey, displayed in Figure 4.6. This story was about Scooby-Doo and his gang, which include Shaggy, Fred, Daphne, and Velma, trying to solve a mystery about a glowing alien. Scooby-Doo and his gang meet at the pizza parlor at the beginning of the story to discuss what happened at High Point Park. When the gang arrived at High Point Park, they came face-to-face with a green, glowing alien during the grand opening celebration. Throughout the story, mystery

clues allowed Fred to decide if the alien was an invader from outer space, or if it was a person trying to scare away neighbors from the park opening.

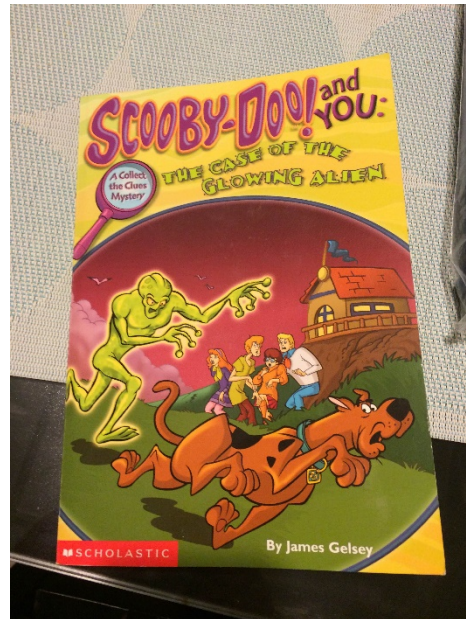


Figure 4.6: Scooby-Doo! and YOU: The Case of the Glowing Alien

Throughout the book, Fred was able to read fluently and made minor miscues demonstrating his interest and engagement. Fred was engaged with the reading because Fred found the story interesting and he wanted to know more about the clues. If I asked Fred to pick a place to pause to think about the reading, he would often say, “No! I don’t want to stop yet!” I would have to reassure Fred that we would continue reading; I just wanted to make sure he was paying attention to what he was reading throughout the book. When we finished reading the book, I told Fred that I wanted him to retell the story he just completed reading. As I did before, I told him that I was not going to be giving him a quiz or a paper to write about the story.

Instead of reenacting the story with felt, I wanted Fred to recreate the story with arts and crafts. I made the objective for Fred to create two characters from the story. I provided Fred with two paper towel roles, glue and colored construction paper. I stated to Fred, “I would like you to pick two characters from the story and create them as you think they look from the story. I really want you to focus on the facial features of the characters, including eyes, ears, nose, and mouth. Once you are done creating your characters, I want you to tell me who they are and what they did throughout the story you just read.” I gave Fred plenty of time to create his two characters with our time together. During the time that Fred was creating his two characters, he was describing what the characters looked like and was giving examples from the story.



Figure 4.7: Recreation of Fred and Daphne

Fred chose to create Fred and Daphne demonstrated in Figure 4.7. He said, “Fred and Daphne are kind of together; they’re almost dating I think. They do a lot of searching and mystery hunting as a pair. Daphne has the longer hair and always wears a headband and Fred

doesn't really have much hair because it is short. They both have similar eyes, which I think are blue. Their noses, and mouths are basically the same too because they are human.” After Fred was done creating his characters, he was able to retell the parts where Fred and Daphne were important in the book. He also included information about the other members of the gang, Scooby-Doo, Shaggy, and Velma, and was able to explain their major roles as well.

Outside of the Classroom Experience

Despite the literacy learning that Fred and I were able to complete together, I was able to spend some time outside with him to enjoy the fall season. Fred loves to be outside because he enjoys playing basketball, baseball, and sometimes lacrosse. Fred and I took a walk along the Erie Canal one day to take a break and get some fresh air. During our walk, Fred began to notice that there were several different colors amongst the leaves as we walked by. He started to explain the process of photosynthesis and described how the leaves change colors. I then allowed Fred to take a picture of the leaves that he saw to support his knowledge of learning, as shown in Figure 4.8. Fred was able to tell me the different colors leaves can change into, and he was able to tell me why the leaves make a “crunch” sound as the colors evolve into brown.



Figure 4.8: Nature Walk Picture

Throughout this walk, Fred was able to include background knowledge about nature during the fall season. A simple walk outside helped Fred to tune into his own connections and enabled him to present valid information about the leaves and the process of photosynthesis. Instead of Fred writing notes or answering questions about science, Fred was able to explain his thoughts and understanding by being outside and being with one in nature. Students, just like Fred, can often benefit from a change of scenery to focus on relevant information of multiple topics and information from different subjects in school!

Chapter V: Conclusions and Implications

Summary

Technology and the way students find different forms of literacy is what helps students to stay engaged during instruction. Teaching students, the way we were once taught, does not effectively nor adequately address how our students learn best today. This is crucial to 21st century learning because educators are challenged to be practical and realistic in their teaching. Diverse strategies need to be integrated into instruction where students can work in pairs, triads, and small groups. Students need to have the ability to incorporate multi-model technologies, graphics, art, and music into literacy instruction (Roseboro, 2012). Teachers and art teachers have much in common in regards to the way they approach teaching. Many lessons involve hands-on activities and engagements for students to stay motivated. There are many opportunities for students to learn and quite often, the students can find results in more than one outcome. Learning opportunities are engaged through ownership and originality from one's "mistake" or miscue (Souto-Manning, & James, 2008). As a teacher, it is important to teach the child as a reader, writer, artist, mathematician, and scientist, not teaching them through the subject matter.

My case study with Fred also provides information on how crucial it is for teachers to recognize that teaching is not all about taking notes, writing on the chalkboard, lectures, and listening for talk styles in the literacy environment. Literacy teaching and learning is changing every day and it is time to step into the change. Howard Gardner's Theory of Multiple Intelligences has been used worldwide to demonstrate the positive influence of student interest in the learning classroom. It has been proven that not only do students learn differently from one another through interactions, but teachers teach differently from one another as well. This is

something that needs awareness in order to create better success for our students in the literacy-learning environment (Roseboro, 2012).

Conclusions

The multiple intelligences can interconnect with one another, enabling a student to result in more than one strength for intelligences (Gardner, & Hatch, 1989). This makes instruction difficult for teachers because educators need to be diverse to allow student success. Overall, the multiple intelligences are included in daily life, and daily activities in learning. Teachers and students need to work together to make the classroom environment fun, welcoming, and adventurous for learning and teaching. In order for the students to be successful, teachers need to do their best to meet the needs of each learner in the classroom. When the teacher can provide sufficient opportunities for teaching and learning, the students and teachers can succeed through not only literacy practice, but also all other practices within the school setting and the home.

Every student learns in different ways and McLaughlin gives some great input for readers. “Our primary responsibility to our struggling students is to teach them to become active, engaged readers,” said by McLaughlin and this phrase really captured the essence of literature (McLaughlin, & Rasinski, 2015, p. 25). We not only want to teach struggling readers, but proficient readers to be engaged with reading and writing and to want to become active independently. It is important to meet the needs of students and to try to understand their thought processes by using the theory of multiple intelligences to expand differentiated learning.

Implications

Implications for Teachers

Ten years from now, in 2026, teaching and learning is going to be different, yet the same. Through my school here at SUNY Brockport, I have learned and expected that all students learn completely differently from one another. As a future educator, it is crucial to take this into consideration when teaching to future generations. Teachers need to break out of their ‘shells’ with the ways they were taught to learn, and need to learn the new ways to teach to students now. “We came to see the central metaphor of our study as the teachers’ struggle to take charge of their practice and to break out of the constraints of the “One Best System,” and we conceptualized our research as a study of teachers in new roles.” (Grant, & Murray, pg. 215).

After teachers can break out of the “One Best System” method, I believe technology is going to take over. Teachers I have worked with have been explaining to me how standardized testing is going to be completed online before we can blink. Teachers are always going to be needed, but technology is going to be a major part of life where students are going to be able to gain some of their information and knowledge. Teachers need to use videos, and online resources to engage the students of today. It is difficult to imagine what teaching is going to be like in 2026, because within the past two years so many changes have been made in teaching already. Some people may have predictions about what teaching may be like in the future however, I do not. I feel that if I can keep up with the changes, and I can implement new ways to teach to students, then I can help future generations learn the basic fundamentals and skills in life efficiently and successfully.

Teachers are always going to be faced with changes, teachers are always going to have to teach to a certain standard, and teachers are always going to be evaluated on their performance. I

believe all students would not know how to succeed or get anywhere in life if it were not for teachers being present in life. Yes, technology may be increasing throughout the years, but students do need that face-to-face interaction, especially at the younger ages of development. Teaching is always going to be a passion of mine, and no matter how many changes I need to make throughout my process, or no matter how many improvements I am going to need to make, I am willing to fulfill my duty, as a teacher, to meet my students' needs to more than the best of my ability.

Limitations

My study included some limitations. The data collection took place over a four-month period, and this short length proved to be a limitation because it did not show long-term results of literacy achievement. The data collection methods I chose also include some limitations. The parent and student surveys included biases of the parents and the student. Fred is a family relative; therefore, these instruments may not be reliable and valid. Because my study was a case study, the results obtained may not be reproducible in a general population. Furthermore, the anecdotal notes may inherently have some bias as well when taking into consideration different perspectives presented in responding to the survey instruments regarding student engagement and literacy learning comprehension.

Suggestions for Future Research

Consideration should be given to future research on how to effectively incorporate the multiple intelligences into the literacy instruction of elementary school aged students who are males to improve engagement and motivation in literacy learning. Further research will provide a positive impact on student learning and teachers' and educators' designing and facilitation of the

multiple intelligences in the literacy learning environment. Change occurs every day, all day. It is said, “We learn something new every day.” People can choose to either agree or disagree with this saying, but when it comes to literacy instruction, it is crucial that we recognize these changes. Teachers are there not only to help children for today, but to help children for tomorrow and the future beyond schooling. “We must do our best to prepare them not just for college but also for success in the world in which they live today and in the years to come,” (Roseboro, 2012, p. 17). It was shown that teachers agreed that using the multiple intelligences in the classroom truly embraced student interest in the literacy setting. Teachers were able to acknowledge that there is “better learning connection and retention with the use of MI,” (Mokhtar, Majid, & Foo, 2008, p. 97). With newer studies, including multiple ways of teaching and learning, studies show the significant, positive gains in learning during literacy instruction.

Overall Significance of the Study

The information presented in my six-week case study provides valid information and detailed understandings of the impact the multiple intelligences have on elementary school aged students who are males. My findings and conclusions from my case study are as listed: (1) the bodily-kinesthetic intelligence helped increase literacy comprehension in Fred’s reading and writing; (2) the use of the Multiple Intelligences demonstrated positive learning outcomes through Fred’s increased motivation and engagement; (3) implementing ways of teaching that are engaging, motivating, and diverse increased and brought awareness to Fred’s educational interests and needs throughout his literacy reading and writing. Throughout my lessons and activities with Fred, he was constantly wanting to learn more. His motivation and engagement increased each time we met together to learn. Through my study with Fred, I realized that each student is significantly different than the other. My way of teaching allowed Fred’s engagement

and motivation to increase through each lesson, but this could be different for other students. As a teacher, it is important to understand how each student learns because being able to comprehend in reading and writing is important for literacy learning. Being open to differentiated instruction and allowing for student growth is one key to a successful literacy learning environment.

I have grown more confident in my ability to implement several learning strategies into different literacy learning environments, as well as provide information to fellow colleagues about the importance of Howard Gardner's Theory of Multiple Intelligences. My research and findings provide stakeholders in the world of education with further evidence supporting the implementation of the impact the Multiple Intelligences have on student literacy learning.

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Appendix A

Name:

Please circle the responses that best fits you.

1. I like working by myself rather than working with other peers.

Strongly Agree

Agree

Disagree

Strongly Disagree

1. Music was important to me.

Strongly Agree

Agree

Disagree

Strongly Disagree

2. I like to move around a lot.

Strongly Agree

Agree

Disagree

Strongly Disagree

3. I like to be outside and explore nature.

Strongly Agree

Agree

Disagree

Strongly Disagree

4. I like to talk a lot and tell stories.

Strongly Agree

Agree

Disagree

Strongly Disagree

5. I like to do puzzles.

Strongly Agree

Agree

Disagree

Strongly Disagree

6. I have good balance and eye-hand coordination and enjoy sports that use a ball.

Strongly Agree

Agree

Disagree

Strongly Disagree

Appendix B

Garfield Assessment Survey



Elementary Reading Attitude Survey (ERAS) Directions for Use

The Elementary Reading Attitude Survey provides a quick indication of student attitudes toward reading. It consists of 20 items and can be administered to an entire classroom in about 10 minutes. Each item presents a brief, simply worded statement about reading, followed by four pictures of Garfield. Each pose is designed to depict a different emotional state, ranging from very positive to very negative.

Administration

Begin by telling students that you wish to find out how they feel about reading. Emphasize that this is *not* a test and that there are no “right” answers. Encourage sincerity.

Distribute the survey forms and ensure that students write their names in the space at the top. Hold up a copy of the survey so that the students can see the first page. Point to the picture of Garfield at the far left of the first item. Ask the students to look at this same picture on their own survey form. Discuss with them the mood Garfield seems to be in (*very happy*). Then move to the next picture and again discuss Garfield’s mood (this time, *a little happy*). In the same way, move to the third and fourth pictures and talk about Garfield’s moods—*a little upset* and *very upset*. It is helpful to point out the position of Garfield’s *mouth*, especially in the middle two figures.

Explain that, together, you will read some statements about reading and that the students should think about how they feel about each statement. They should then circle the picture of Garfield that is closest to their own feelings. (Emphasize that the students should respond according to their own feelings, not as Garfield might respond)! Read each item aloud slowly and distinctly, then read it a second time while students are thinking. Be sure to read the item *number* and to remind students of page numbers when new pages are reached.

Scoring

To score the survey, count four points for each leftmost (happiest) Garfield circled, three for each slightly smiling Garfield, two for each mildly upset Garfield and one point for each very upset (rightmost) Garfield. Three scores for each student can be obtained: the total for the first 10 items, the total for the second 10 and a composite total. The first half of the survey relates to attitude toward recreational reading; the second half relates to attitude toward academic aspects of reading.

Interpretation

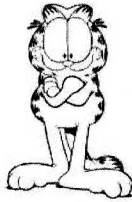
You can interpret scores in two ways. One is to note informally where the score falls in regard to the four nodes of the scale. A total score of 50, for example, would fall about midway on the scale, between the slightly happy and the slightly upset figures, therefore indicating a relatively indifferent overall attitude toward reading. The other approach is more formal. It involves converting the raw scores into percentile ranks by means of a table of national percentile ranks.

Elementary Reading Attitude Survey

School _____ Grade _____ Name _____

Please circle the picture that describes how you feel when you read a book.

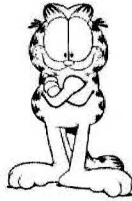
1. How do you feel when you read a book on a rainy Saturday?



2. How do you feel when you read a book in school during free time?



3. How do you feel about reading for fun at home?



4. How do you feel about getting a book for a present?



Please circle the picture that describes how you feel when you read a book.

5.

How do you feel about spending free time reading a book?



6.

How do you feel about starting a new book?



7.

How do you feel about reading during summer vacation?



8.

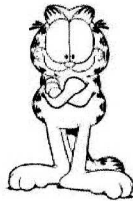
How do you feel about reading instead of playing?



Please circle the picture that describes how you feel when you read a book.

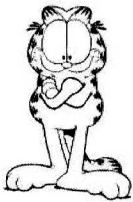
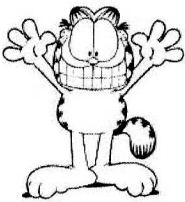
9.

How do you feel about going to a bookstore?



10.

How do you feel about reading different kinds of books?



11.

How do you feel when a teacher asks you questions about what you read?



12.

How do you feel about reading workbook pages and worksheets?



Please circle the picture that describes how you feel when you read a book.

13.

How do you feel about reading in school?



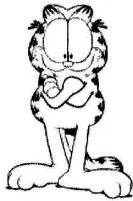
14.

How do you feel about reading your school books?



15.

How do you feel about learning from a book?



16.

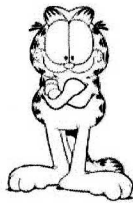
How do you feel when it's time for reading in class?



Please circle the picture that describes how you feel when you read a book.

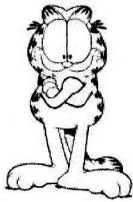
17.

How do you feel about stories you read in reading class?



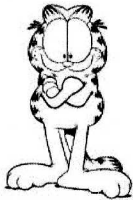
18.

How do you feel when you read out loud in class?



19.

How do you feel about using a dictionary?



20.

How do you feel about taking a reading test?

