

**THE EFFECTS OF LITERATURE STATIONS ON LTIERACY PROFICIENCY,
INTEREST, AND ENGAGEMENT AMONG MIDDLE SCHOOL STUDENTS
RECEIVING ACADEMIC INTERVENTION SERVICES**

by

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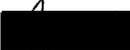
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CERTIFICATION OF THESIS/PROJECT CAPSTONE WORK

We, the undersigned, certify that this project entitled THE EFFECTS OF LITERATURE STATIONS ON LITERACY PROFICIENCY, INTEREST, AND ENGAGEMENT AMONG MIDDLE SCHOOL STUDENTS RECEIVING ACADEMIC INTERVENTION SERVICES by SIMONE M. KLUBEK, Candidate for the Degree of Master of Science in Education, Curriculum and Instruction in Inclusive Education, is acceptable in form and content and demonstrates a satisfactory knowledge of the field covered by this project.



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ABSTRACT

With the amplified rigor of the Common Core state standards, the number of students who qualify for academic intervention services (AIS) is increasing. According to the New York State Education Department in 2015, 69% of students who participated in the New York State assessments in 2015 are not proficient. In the school setting of this study, almost 40% of the 7th graders receive academic intervention services. It is imperative to find an effective strategy that will increase these students' literacy skills and transition them out of intervention programs. This study examined how instruction through literacy stations affects the proficiency, reading interest, and engagement of middle school students in a rural AIS classroom in Western New York. Six students took part in this study at one school district in Chautauqua County. The data for this study was collected through a pre and post assessment test, pre and post reading survey, engagement tracker, and 1:1 interviews with the participants. Results were varied and showed that the integration of literacy stations did increase students' proficiency scores and kept them engaged in the lessons, yet they also indicated that reading interest is difficult to teach and or change and the instructional tool did not change the students' negative feelings about reading. Implications are discussed with regards to teachers and their classroom practices in the Academic Intervention classroom.

Keywords: middle school, academic intervention, literacy stations

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Introduction

With the amplified rigor of the Common Core state standards, the number of students who qualify for academic intervention services (AIS) is increasing. According to the New York State Education Department in 2015, 69% of students who participated in the New York State assessments in 2015 are not proficient. In my classroom, almost 40% of the 7th graders receive academic intervention services. It is imperative to find an effective strategy that will increase these students' literacy skills and transition them out of intervention programs.

Teachers need a strategy that will increase the student's proficiency in literacy and keeps the students engaged in learning while increasing their interest in reading. Reviewed literature has revealed that the instructional strategy literacy stations caters to middle schools in such a way that teachers should see positive results in the areas of proficiency, engagement, and reading interest. The movement utilized by literacy stations will correlate with the physical needs of a developing adolescent and the quick transitions to the various tasks at each station will prove to be extremely beneficial to cognitive development (Edwards, 2015). Through my personal experience, students at the middle school level enjoy activities with movement and transition. Research has also proven that students who move during instruction show improvement in attention and focus (Mehta, Shortz, & Benden, 2015). They also work best when they can collaborate with peers, as long as guidelines are established (Anderson, Aviles, Davila, 2006; Edwards 2015) Literacy stations are constructed upon peer collaboration, and this will challenge the growing socio-emotional dimension of the adolescent brains.

Based on the literature reviewed, it is evident that Literacy stations combine productive uses of movement, diversity of activities, and teamwork to differentiate literacy instruction to meet the needs of students receiving AIS services.

Problem

There are many challenges to a student's academic proficiency in middle school. Academic rigor has increased since the implementation of the Common Core Standards in 2010 (New York State Education Department, 2011). In 2011, only 66% of graduating seniors met the Common Core reading benchmark (Evans & Clark 2011). Middle School students were especially affected because the instructional shift changed halfway through their primary educational career. Adapting to the Common Core curriculum was, and still is, challenging for many students. The increased emphasis on literacy proficiency is also a challenge for teachers. Social Studies, Math, and Science teachers all feel the pressure to incorporate literacy standards into their instruction. These teachers also reported they did not feel they had the time to integrate literacy skills into their curriculum (Evans & Clark 2015). To combat the falling proficiency scores of students in New York State, and eliminate stress from core teachers, New York State has mandated additional instruction for students in 7th grade who fall below a scaled score of 301 on the Grades 3-8 English language arts assessment.

An instructional strategy utilized in the AIS classroom must be able to integrate Common Core reading material because the standards of the Common Core outline the curriculum for all core subjects (New York State Education Department, 2011). The texts included in the New York State Modules for Common Core curriculum instruction are rigorous and predominantly focus on the nonfiction genre. Students need to learn how to successfully engage in lessons that incorporate reading material on this level. If the students learn how to approach the material, this skill will carry across the curriculum.

Students in middle school have reported a lack of interest in reading because of the new challenges, such as academic rigor, presented in middle school (Fulmer & Frijters 2011).

Students need to be interested in a challenging text in order to comprehend the material (Fulmer & Frijters, 2011). Students report that they enjoy reading material that was picked specifically for them (Gabriel, Allington, & Billen, 2012). Teachers should utilize a strategy that allows for differentiated texts. Another factor attached to a student's reading interest is choice. A student who will continue to read outside of the classroom knows how to find something enjoyable to read (Mackey 2014). Teachers need to increase autonomy in reading to increase reading interest among middle school students.

Students in middle school are often disengaged and can become uninterested quickly. Disengagement makes the additional instruction for struggling students challenging. Disconnected students have a higher likelihood of truancy, abusing illegal substances, and even criminal behavior (Wang & Fredericks, 2014).

Purpose

The goal of this research is to collect data regarding academic performance, classroom engagement, and reading interests of students enrolled in AIS in a school in Chautauqua County, New York. By collecting this data, it will help determine if literacy stations are a successful instructional strategy to improve engagement and interest, while also increasing proficiency in chief literacy skills in students receiving AIS by collecting data through various instruments.

The researcher is seeking to answer several questions concerning the effects of literacy circles in the Middle School academic intervention classroom. The questions are as follows:

1. Do literacy stations increase the middle school student's proficiency test scores on literacy-based standardized tests?
2. How do literacy stations affect the middle school students' perceptions of reading?

3. How do literacy stations contribute to the middle school students' reading interests and academic engagement?

In order to answer these questions, the middle school student will be defined, and the literature review will explore the various areas of development of adolescents and why literacy stations would be beneficial for their development.

Significance

How do administrators, teachers, and school support staff help kids succeed in a world where education and the standards that shape it are becoming increasingly difficult? They need to create classrooms that cater to learners' cognitive, physical, and emotional development while simultaneously integrating individualized plans that put the student on a path to success.

Literature explored by the researcher indicates that literacy stations will expectantly be an instructional strategy that can increase the proficiency, interests, and engagement of students who are receiving additional literacy instruction. Literacy stations integrate movement, peer collaboration, and differentiation. This research will explore if changing the approach to instruction in an academic intervention classroom will help students succeed. With the increasing amount of students not reaching proficiency in regards to the rigorous literacy standards in the United States, this research will help teachers understand what practices work best with students struggling to reach proficiency in literacy, and possible other core subjects as well. Research on best practices for academic intervention in the middle school classroom is minimal and this study will help provide perspective on the implications of instruction style on students. This research could potentially guide New York State policy makers in creating a curriculum to implement during AIS instruction.

Literature Review

Middle School Students

A middle school student can be defined as a student in the grade range between fifth and eighth year of their school career. The typical middle school student is in the age range of 10-15. The development of individuals at this age directly impacts their learning. Students at this age are growing at a rapid rate and incorporating this growth and development into strategies for learning literacy will affect the student's learning potential. (Mehta et al., 2015) The teenage student is growing physically, cognitively, and emotionally during this time in their life and all three areas of development should be incorporated into the classroom learning environment to ensure the best possible learning outcomes. Adolescent development should be considered when creating a strategy for learning in the English Language Arts classroom by looking closely at each area of development and analyzing the impact it has on student learning and behavior (Edwards, 2015; Davidson, 2010). Teachers can then create environments that are best for learning based on the developmental needs of their pubescent students.

Physical development and its relationship to learning strategies. Young adolescents are typically very active, and it is imperative to integrate this desire to expend energy into the educational atmosphere. If a teacher does not acknowledge teenage physical development, the teacher risks losing the attention and concentration of their young adult students (Mehta et al., 2015). Studies have shown that classrooms, where movement and exercise have been incorporated into the environment, are linked to improved student attention and focus (Mehta et al., 2015). In one study, 34 freshman students were tested with neurocognitive tests while utilizing stand-biased desks, desks that allow a student to stand up during instruction as opposed to remaining sedentary. The results of this study showed that these students improved in the

areas of executive function and working memory, two areas essential to the development of literacy skills (Mehta et al., 2015).

Despite the innate desire to be active in preteens, childhood obesity is clearly present in this age group in the United States. According to The Center for Disease Control and Prevention Website, childhood obesity affects 17% of children in the United States (U.S. Department of Health & Human Services, 2015). Childhood obesity can lead to lifelong consequences and it is imperative that physical activity is integrated into the classroom to avoid threats to a child's health, physiological, behavioral, and psychological development. Physical activity in the classroom improves both cognitive successes in the classroom and decreases potential health risks for the middle school aged student. Literacy stations allow students to move around the classroom, preventing sedentary learning which can strengthen physical development in children and decrease the likelihood of childhood obesity (Mehta et al., 2015; U.S. Department of Health & Human Services, 2105).

Cognitive development and its relationship to learning strategies. Although teachers are responsible for encouraging the development of adolescents in all capacities, students' cognitive development is a teacher's primary focus. Teenagers develop their cognitive abilities by exploring the world around them (Edwards, 2015). Middle school students should be encouraged to evaluate, analyze, and create in their learning to capitalize on this desire to explore (Edwards, 2015). Learning strategies that have students synthesizing information will help students expand their cognitive ability. Learning strategies such as concept maps, technology application, and brain teasers will best fit the middle school students' cognitive development stage (Davidson, 2010). Davidson (2010) also reported that many theorists, such as Jeanne Chall, believe that literacy skills are developed cognitively and in stages. The theory that literacy

skills are developed cognitively suggests that if literacy instruction is delivered appropriately, all students have the aptitude to learn how to read and write, despite the other components of development. The cognitive theory of teaching literacy demonstrates that the accurate chronological stage that is unique to the student can increase students' reading success, despite their discrepancies in other areas of development (Davidson, 2010). Literacy instruction, especially to students receiving academic intervention services, should be individualized and cater to the students' specific cognitive stage of development.

Social/emotional development and its relationship to learning strategies. At the ages between 12 and 14, social and emotional development is critical to human beings. During these transitional years, adolescents seek to develop self-identity and independence from their parents, during which time establishing peer relationships becomes a significant developmental task (Erikson 1968). These students long for acceptance from their peers and are primarily concentrated on building these relationships. It is important for students to build upon this desire to bond with classmates, instead of disregarding it, in order to learning successful in the classroom learning strategies that allow the students to work collaboratively build on the student's need for social interaction (Edwards, 2015). During the adolescent years, the students' psyche is extremely fragile. Young students require learning strategies that allow for social-emotional development because students who show limitations in the area of socio-emotional development also show weakness in academic success (Aviles et al., 2006). For example, a student who is unable to manage his anger effectively could show difficulty grasping new concepts. It is imperative to the students' future to include tactile strategies in the classroom to encourage them to learn through exploration to prevent them from developing negative behaviors resulting from not having developed their socio-emotional areas of the brain. Tactile experiences

will help the students to learn through making mistakes which increase the students' patience and decreases students' chances of developing anger management issues in the future. Providing adolescents with environments that promote their skills and abilities will foster success in their ability to negotiate their developmental tasks while simultaneously resulting in academic achievement (Aviles et al., 2006). Studies have shown that building strategies upon social-emotional competencies such as self-awareness, social awareness, self-management, and responsible decision-making can improve academic performance (Chung & McBride, 2015). A strategy that allows for student choice and autonomy in learning will cater best to the adolescent learners.

Middle school students are reaching a critical period in their education where rigors increase and expectations are assessed by standardized tests. The students should receive instruction that incorporates their development to provide them with instruction that will help keep them aligned with the standards set by the United States education department.

Reading Interest

Student interest in reading is imperative because reading is the foundation for the study of all educational subjects at the secondary level. Increase a students' motivation to read will in turn increase their proficiency in the four categories of literacy. Reading interest is often coupled with academic performance. Research has found that students who perform better academically, have a stronger motivation to read because they are motivated by doing well in school (Huang 2013). This is a large contributing factor in why many students receiving academic intervention could demonstrate a negative correlation with reading interest.

Factors contributing to lack of reading interest in the middle grades. Middle school students are reporting negative feelings about reading at an increasing rate due to the new

challenges, such as academic rigor, presented in middle school (Fulmer & Frijters, 2011). In Cavazos- Kottke's 2006 study of reading interest among male adolescents enrolled in gifted and talented programs, he indicated that research related to the types of genre middle school students are interested in is scarce. In a 2013 study of reading interest, it was found that there is a close correlation between reading scores and reading motivation. This study went on to conclude that high-achieving students showed more positive attitudes towards the subject of reading (Huang, 2013). On average, students with lower proficiency scores in the area of literacy tend to have a lack of interest in reading. Intrinsic motivation is a large contributing factor to students' interest in reading. Edmunds (2006) found that family members play a large role in the students reading motivation. During the conducted interview, the children participants reported that they found out about the text they were currently reading from various family members (Edmunds, 2006).

Increasing reading interest with instructional strategies. Instruction intended to increase student proficiency in the area of literacy should be based upon student's interests. If instruction is differentiated for the student based on their interest, the student's overall interest in reading will increase. Research has found that if a challenging text is geared toward an individual's interest, the student will be more likely to read further in the text than if the difficult text was on a topic that proved not interesting to the student (Fulmer et al., 2011). Further research indicates that many adolescents read magazines because of the thrill of "receiving something meant just for them" (Gabriel et al., 2012, p. 182). Another factor tied to a student's reading interest is choice. Several studies have proved that a student who will continue to read outside of the classroom knows how to find something enjoyable to read (Mackey, 2014; Edmunds, & Bauserman, 2006; Guthrie, 2013). Integrating autonomy into instruction has a positive impact on student's reading interest. Mackey reported that teachers can improve a

student's reading interest by increasing opportunities for choice in the classroom and sharing their methods of finding new books (2014). The conclusion of Edmunds' study suggested an instructional strategy that can incorporate "three-piece kits" These kits would include an expository book, a narrative book, and a poem all on the same subject (Edmunds, 2006). In a study of factors affecting middle school student's reading motivation in Taiwan, all of the student participants said that reading personal interest books would be much more enjoyably than reading textbooks (Huang, 2013). Research has also found that integrating involvement of others can increase motivation to read. Edmunds states,

"Based on the frequent mention of these practices (giving students books, reading to them, and sharing books with them) by students when asked to discuss what other do to motivate them to read, it is recommended that teachers spend time daily reading aloud to them, and that teachers allow many opportunities for them to share what they are reading with one another" (2006).

An instructional strategy that support peer collaboration can have a positive impact on students' motivation to read.

Literacy stations is a strategy that allows both teachers and students to explore many different types of texts because the genre can change from at each station. According to Cavazos-Kottke (2006), "a literacy curriculum sensitive to individual students' reading interests can be especially motivating". Literacy stations is an instructional strategy that is able to be built around individual student goals so this strategy can be integral in improving student's reading interest. While utilizing the strategy of literacy stations in the classroom a teacher can provide students' new texts each class period that has been picked by the teacher specifically for them, which will peak interest and keep students motivated. This strategy can also allow teachers to

select specific readings aligned to an individual student's interest which will push them to read a text that is challenging for their literacy abilities, or provides student choice in particular readings that aligned to their interest and literacy levels. Moreover, the group atmosphere of literacy station allows students to discuss what they are reading and participate of group discussion of comprehension questions.

Student Engagement

The term student engagement is defined by Axelson and Flick (2011) as "how involved or interested students appear to be in their learning and how connected they are to their classes, their institutions, and each other". School engagement is the direct path to cumulative learning, educational accomplishment, and long-term success (Wang & Fredricks, 2014)

Decrease in engagement in the middle grades. Engagement has been shown to decline as students' progress through the upper elementary grades and middle school, reaching its lowest levels in high school (Fredricks, McColskey, Meli, Mordica, Montrosse, & Mooney, 2011). In his 1996 study, Schulenberg also found that middle school is a period which adolescents are more prone to decline in academic motivation and success and an increase in substance use and criminal behavior (as cited in Wang & Fredricks, 2014). In a study performed in 2014, it was found that there is a direct correlation between a student's involvement and engagement in school related activities, substance abuse, criminal behaviors, and the increase in the likelihood of dropping out of school (Wang & Fredricks, 2014). Because of the main factors that affect engagement during adolescence, this increase in disengagement has led to many schools making engagement a goal of school improvement (Fredricks et al., 2011). The many social and emotional developmental changes effect the academic engagement of middle school students. A study performed in Los Angeles measured the association between social standing in a peer

group and academic functionality during middle school of 342 adolescents (Schwartz, Gorman, Nakamoto, & McKay, 2007). The study measured popularity and acceptance using peer rating and friendship and aggression using peer nominations. The researcher then compared these scales to the students' GPA scores and found that youth who experiences increases in popularity were also characterized by unexplained absence and declines in academic engagement (Schwartz et al., 2007).

Literacy instruction and engagement. Studies have shown that academic engagement can improve if content delivery is changed frequently, collaboration is integrated, and content is relevant to the students' lives. Marchand and Furrer (2014) suggests that “ when supports for students are modified or content delivery is changed, students respond in unique ways; in some cases, the quality of student participation may improve or students may learn the material more quickly”. Integrating literacy stations into the classroom where traditional instructional strategies were used, such as direct instruction, could help students reach proficiency in literacy.

Instructional strategies that support peer to peer instruction or collaboration will increase engagement for middle school students. One study, whose participants were sixth-grade students in an urban school identified as "low achieving," recorded results of above 75% frequency in the areas of writing, reading aloud, reading silently, and attending to task when engaged in peer to peer instruction (Veerkamp, Kamps & Cooper 2007). Peer to peer instruction is a component that can be easily, and is often, implemented in literacy stations thus supporting engagement.

Instruction and reading materials that are relevant to students' lives will help increase academic engagement. In his 2009 study, Lau found that when middle and high school student perceived that instruction was pertinent to their lives, they displayed high volumes of reading activity. An instructional strategy that combines these instructional techniques, such as literacy stations,

should increase student engagement, but there is limited research to support this. Examining this issue was the second purpose of this study.

The Common Core State Standards

The Common Core Standards are a set of high-quality academic standards in Mathematics and English Language Arts/Literacy (Common Core State Standards Initiative, 2016). These learning principles outline what a student should know and be able to do at the end of each grade in the 46 states and jurisdictions that have adopted the Common Core curriculum. The standards were created to ensure that all students graduate from high school with the skills and knowledge necessary to succeed in college, career, and life, regardless of their geographical location. Forty-two states, the District of Columbia, four territories, and the Department of Defense Education Activity have voluntarily adopted and are moving forward with the Common Core (Common Core State Standards Initiative, 2016). The standards set specific expectations for what students should be able to do by the end of a school year.

Curriculum expectations. The Common Core standards for English Language Arts in the sixth through the eighth-grade levels are divided into five categories: Language, Reading: Literature, Reading: Informational Text, Writing, and Speaking and Listening. Each category has a certain number of standards ranging between 6 and 10. The Common Core initiative outlines that it expects students to meet the standards for the grade level of the student by the end of the school year (Common Core State Standards Initiative, 2016). Each student is tested on these standards using a local assessment determined by the administration for that particular school district and a statewide Common Core test. These tests determine if the student has met the standards through multiple choice, constructed response, and extended response questions. In 2015, the majority of the students who took the New York State Common Core assessment

performed below grade level. Thirty-five percent of the students scored on a level 2, and 34 percent of the students scored at a level one (New York State Education Department, 2015).

According to the New York State regulations, these students qualify for intervention services to help the students prepare to reach level 3, grade level proficiency, the following year.

Academic intervention services. Academic intervention services (AIS) as defined by the New York State Department of Education, are services designed to assist students in achieving the Common Core Standards in English language arts and mathematics in grades K-12 and social studies and science in grades 4-12 if the student falls below proficiency level. AIS must include additional instructional time that supplements the general curriculum taught through regular classroom instruction and any services need to address individual students' barriers that hinder their academic performance (The University of the State of New York State Education Department, 2000). Students are eligible for AIS if they score below the designated performance levels on elementary, intermediate, and high school level state assessments in English language arts, mathematics, social studies, and science. Students at risk of not meeting state standards as indicated through the district-adopted or district approved procedure, including those K-3 students who lack reading readiness are also eligible for AIS services (The University of the State of New York State Education Department, 2000). AIS services should be individualized to best meet the needs of the students and support them in remediation of the skills they need to meet all standards required by the state at their particular grade level. The general education classroom at the middle school level does not allow for a significant amount of time to respond to the individualized developmental needs of the students so these needs should be addressed in the additional instruction time for students who are eligible for AIS (Lesaux, Harris, & Sloane, 2012). Students who receive additional instruction in English language arts because they qualify

for AIS services have varied needs and an instructional plan that allows the students to individually work on the standards they identified to be weak on would be the best use of additional instructional time.

Students receiving academic intervention services because they are not proficient in the Common Core English language arts standards must focus on improving their literacy skills during their additional instructional time. In many classrooms, these literacy skills are based upon the student's individual weakness and are provided by their English Language Arts classroom teacher, a reading specialist, or an academic intervention services instructor

Literacy

Literacy can be simply defined as the ability to read and write, but with the rigor of the Common Core standards, the skills attached to literacy are much more complicated than the simple definition provided by a dictionary. The National Reading Panel identified five components of literacy instruction. The categories are phonemic awareness, phonics, fluency, vocabulary, morphology and text comprehension (National Institute of Child Health and Human Development, 2014).

Teaching literacy. Teaching and reviewing the categories of literacy across the content area is critical to a student success in all spheres of instruction. One study noted that when involving reading and writing activities into their lessons students enjoyed the work and were invested in their learning (Orr & Kukner, 2015). It is critical to have strong literacy skills because they are the foundation of all Common Core learning standards. Content area teachers rely on academic intervention instructors to increase struggling students' skills in literacy. One study noted that content area teachers, such as science and math teachers, do see themselves as literacy teachers as well but expressed serious doubts about their abilities to teach literacy

(Cantrell, Chambers, Burns, & Callaway, 2009). Content area teachers need the assistance of English language arts teachers and academic support staff in instructing students about literacy, especially in the category of comprehension, to increase student success across the middle school curriculum. Literacy Stations can integrate various instructional methods (Maurer, 2010). Literacy Stations grant the teacher the autonomy to modify the strategy to fit the specific needs of the classroom (Hodges & Mctigue, 2014). For this particular study, the specific needs of the researcher's classroom will be to increase proficiency, engagement, and reading interest in middle school students enrolled in an intervention class period. This follow sections of the literature review focuses on the instructional methods of cooperative learning, question answering and generating, and paraphrasing. Theses specific methods are discussed because the researcher will integrate these instructional methods into the literacy stations during the study due to the findings the literature reviews presented.

Cooperative learning. Any activity that involves students working together to achieve one common goal can be defined as cooperative learning. Students at the middle school level are influenced heavily by their peer group. Utilizing cooperative learning in instruction can manipulate the peer stimulus to increase literacy inability, especially in the areas of vocabulary and comprehension. Reading ability and reading to learn about subject matter is much more than mastery of an isolated skill (Blanton, Wood, & Taylor 2007). Blanton et al. also reports, “Reading to learn from text is a complex task that requires social interaction among teachers and students” (2007). Ferguson and Kern (2011) recognized that peer-led discussion of literature can aid in the benefits of language development, reading comprehension, engagement, enjoyment of literature, and enhance a sense of self-efficacy when reading and understanding texts. These researchers observed a decrease in the number of students who "fake read" through noticeable

improvement in the complexity and quality of written responses as well as an increased engagement in reading and discussion (Ferguson & Kern, 2011, p. 28). Student literacy skills will increase naturally when integrating cooperative learning into the academic intervention classroom.

Sportsman, Certo, Bolt, and Miller (2011) claim that "Cooperative learning methodologies such as peer-assisted learning have been linked to gains in student achievement" (p. 16). Cooperative learning can be successful but needs to be structured to guide peer discussion to be academic. Teachers must always review procedures and clarify the importance of positive interdependence to the success of the academic task (Johnson, Johnson, & Roseth 2010). Reviewing procedures will help students stay on task and meet their educational goals. Students should understand that to complete a task, they must work together and have academic centered conversations only. To keep students linked to this guideline, each student should be individually responsible for their work on the task (Johnson et al., 2010). Although the students are working together, personal responsibility such as a grade should be tied to the collaborative learning to keep students on track for success. Berne (2006) explains that holding students accountable is one of the most important concepts, especially when using small group discussion strategies. Accountability includes bringing ideas to the table and engaging in related talk with peers about those ideas to create further meaning and comprehension of the text. The reading and discussion process motivates the student to employ comprehension strategies. Literacy stations that rely on cooperative learning but also use other comprehension strategies, such as question answering, will hold students accountable for producing work that shows they are working towards proficiency in the Common Core standards.

Question answering and generating. Reading difficult texts to answer questions, or create questions, is a typical learning situation and should be practiced continuously throughout an individual's educational career. When students focus on questioning, they are more focused on what they are reading. Reading to answer questions challenges a student to discriminate between relevant and irrelevant information (Cerdán, Vidal-Abarca, Martínez, Gilabert, & Gil, 2009). Question answering helps the student focus on the most crucial parts of the text resulting in an accurate understanding of the message the author intends for the reader to receive (Lawrence, 2015). When the student acquires the skill of being able to answer questions about a particular text, they can apply this skill to any genre of writing to increase comprehension in all their areas of study.

In 1986, Davey and McBride performed a study that assessed the effects of post-passage question generation on comprehension questioning performance. The research focused on 50 sixth grade students. One group was instructed only to read and re-read four expository passages. The other group of students had to generate two questions for each passage read. After they completed the task given, each group of students took a comprehension assessment. The results determined that the question generating group exceeded the other group on higher order inferential comprehension test questions.

Incorporating question answering and generating into station design for literacy stations would increase students' literacy proficiency and provide them with skills that would translate to various core classes. To improve proficiency, struggling students need to practice other approaches to comprehension as well. Literacy stations allow teachers to incorporate the practice of multiple strategies to cultivate student's comprehension skills.

Paraphrasing. The strategy of paraphrasing encompasses reading a text and putting it into one's words (Kletzein, 2009). This approach encourages the student to demonstrate their understanding of the text because they need to identify the main idea and analyze it by supporting their thoughts with details from the reading material. One study focusing on sixth-grade students using the "Read, Ask and Put (RAP)" strategy found that paraphrasing increased student comprehension and literacy success in a number of ways. The "RAP" paraphrasing strategy is designed to help the student understand the specific events and main ideas of what they read. The steps include reading a text, generating questions about main ideas, and then putting the main ideas and details in their words. This study found that paraphrasing significantly increases students' correct responses to short-answer questions, increases students' confidence with self-regulation, and helps the students' practice speaking and listening skills (Hagaman, 2008).

An empirical study focusing on qualitative research based on observations of students in a natural instructional strategy found that paraphrasing helps students monitoring their understanding and encourage them to access prior knowledge (Kletzein, 2009). A strategy, such as Literacy stations, allows for the integration of paraphrasing into instruction would be beneficial to struggling students. This is noteworthy because paraphrasing, paired with cooperative learning, would help struggling readers reach their goals and achieve proficiency because they would have a strong understanding of how to find the main idea of a text and Literacy stations allows for the coupling of these two instructional methods.

Cooperative learning, question answering, question generating, and paraphrasing have been proven to be successful in teaching or reviewing comprehension (Ferguson & Kern, 2011; Lawrence, 2015; Hagaman, 2008). For highest rates of success in AIS instruction, a teacher

should create a classroom environment that integrates all three of these strategies to assist students in reaching proficiency and achieving the grade level expectations of the Common Core literacy standards. The instructional theory Literacy station can integrate several literacy teaching theories into one instructional period, which the researcher will do in the preceding study.

Literacy stations

Literacy stations can be defined as short, independent activities conducted in small groups for a set amount of time that focus on a specific Literary standard (Hodges & Mctigue, 2014). Literacy stations allow classroom teachers to apply the instructional methods identified to improve literacy such as cooperative learning, question answering, question generation, and paraphrasing activities simultaneously. This ensures that students will be able to utilize a strategy that meets their identified learning style. Traditionally, a middle school classroom relies on whole group instruction and independent work. The developmental needs of middle school students suggest that students in this age group require the time to move around, engage in conversation, and work with a variety of different resources and materials. If developmental needs of students are met in a classroom there is a higher chance of the student excelling academically (Mehta et al., 2015). Literacy stations allow for student autonomy, peer dialogue, and collaboration (Maurer 2010). Literacy stations integrate critical thinking and collaboration skills and provide students in AIS with a vehicle to reach their individual goals. One benefit of literacy stations is that they allow for differentiation and individualized attention, a specific requirement of academic intervention services in New York State (Hodges & Mctigue, 2014). One study found that small group instruction improved with the use of Diller's Literacy Work Station model. Diller defines a literacy workstation as "an area within the classroom where students work alone or interact with one another, using instructional materials to explore and

expand their literacy." (as cited in Kracl, 2012). Kracl (2012) goes on to explain that in this model, the teacher is stationed in the reading area of the classroom ready to present differentiated reading coaching to the groups. The teachers taking part in this study experienced fewer distractions and interruptions. They also found that amount of students on-task during instruction increased (Kracl, 2012). The literacy stations can be adapted so that the students are working on the same skill but at varied levels. For example, the literacy station could be focused on question answering to achieve successful comprehension of a fiction text. The students would all practice the same skill of answering questions, but the question complexity would be different based on student ability, or the Lexile level of the text could be diverse based on students' reading levels. This offers them peer support while still providing individualized instruction. Student enjoyment improves academic achievement and one study found that students reported increased enjoyment during literacy activities (Lesaux et al., 2012).

There is an overwhelming need for a strategy that increases proficiency levels for English language arts middle school students in New York State. The concept of literacy stations is a comprehensive classroom strategy that incorporates the developmental needs of a typical middle school student while also allowing teachers a platform to employ the various strategies for increasing literacy skills.

According to reviewed literature, properly designed and implemented Literacy stations can activate the physical, emotional, and cognitive development of typical middle schools students. For example, the stations are placed in various sections of a classroom, requiring the student to be in motion throughout a class period, a natural desire of the growing adolescent body. Furthermore, all stations would be based on the strategy of cooperative learning because the students are rotating in small groups. This would prompt the students to talk to one another to

gain comprehension. Adolescents desire peer interaction, so this strategy would increase growth and learning instead of hindering it. Students would engage in the lesson because the learning style is adapting to their development. Adolescents develop cognitively by exploring the world around them. Literacy stations are composed of a many of short activities performed in a set amount of time. Students would interact with various types of tools to complete tasks during the additional intervention instructional time. For example, one station might incorporate the use of technology while another station might require the student to complete concept maps or Venn diagrams. The varied use of different tools within the stations would help increase students cognitive abilities and thus potentially increasing proficiency in literacy.

Literacy stations take into consideration the individual learning styles and goals of each particular student. Students would increase comprehension, the core skill of the Common Core Standards, by completing question answering, question generating, and paraphrasing tasks. Literacy Stations can bring success to middle school students receiving academic intervention by incorporating instructional tools that target skill building, engagement, and interest.

Methodology

The following mixed-methods case study examined the effects of literature stations on the academic achievement, engagement, and reading interest of students that are enrolled in a 20 minute Academic Intervention Class (AIS) in the 7th grade. The goal of the study was to determine if, and how, the strategy of literacy stations increased academic performance, engagement, and reading interest of students that have been recognized by New York State, or the school administration, as non-proficient in literacy. The study took place over the course of six weeks at a public school in Western New York. Students participated in four weeks of literacy instruction built using the framework of the strategy of literacy stations. As a current teacher in this district, I chose to investigate this school due to my awareness of the students and because I am currently the AIS instructor for these students. Data collection was accomplished through the use of a pretest, posttest, engagement tracker, and reading interest survey, and an interview with the participants. Implications of these findings are included at the conclusion of this study.

Research Design

The research study followed a mixed method design. Mixed-methods research includes both quantitative and qualitative approaches. The advantage of a mixed-method study is that the researcher can gather different kinds of data (Fraenkel, Wallen, & Hyun, 2015). The section of this study that examined students reading interest levels through interviews was qualitative in its approach while the STAR reading pretest and posttest; in addition to the engagement tracker, was quantitative in design. There was also a quantitative survey given to the students that included questions about student's interest in reading. Specifically, the research performed in

this study was correlational. Correlational research determines a relationship between two or more variables to explore the implications (Fraenkel et al., 2015). I studied the relationship between the instructional strategy of literary stations and the student's academic, interest, and engagement levels. The study followed a triangulation design. This study considered three different aspects of student learning to come to a conclusion about the effects of literacy stations on middle school AIS students. The results of both quantitative survey from the students, the quantitative results of the STAR reading test, and engagement tracker was given equal priority and was combined, interpreted, and presented as findings at the conclusion of the study.

Setting

Community. The school district that served as the setting of the study is situated in a rural village in Western New York. The school district serves several small towns in Chautauqua County. The village where the school is located has a total population of 791. 93% of the population is Caucasian, 2% identify as Native, 2% as multiracial, and 4% Hispanic. The formal boundaries for the village are .98 square miles of land. The median family income is \$49, 191 and 22.7 % of the population falls below the poverty line, which is 15.6% higher than the percentage of New Yorkers who fall below the poverty line. 92% of the population graduated from High School, but only about 16.3% of the population hold a Bachelor's degree or higher in the village proper (U.S. Census Bureau, 2014). The village and surrounding towns are predominantly supported by the grape farming industry.

School. This case study was conducted in a small rural public school. The school district has approximately 500 students (Garrett, 2015). This particular school district covers several towns and over 112 square miles; therefore its demographics are marginally different than the demographics of the village. The racial makeup of the school is 9 Black or African American,

26 Hispanic or Latino, 446 Caucasian, and 20 multiracial students (New York State Education Department, 2015). The study took place in a combined Middle High School that serves 240 students and employs 23 full time teachers. 76 of the 240 students received a free lunch and 34 are eligible for reduced price lunches. There are no teachers employed to teach Academic intervention, the class is taught by both English Language arts 7-12 teachers and History 7-12 teachers.

Students. The seventh grade, of which the six participants of the study were selected from, is comprised of 35 students split into two sections of students. The middle school Math, English, Social Studies, and Science loop with the students. This case study was conducted in one seventh grade AIS class where I acted as the instructor and also the data collector.

Participants

Participants for this study are six seventh grade students who are identified as non-proficient and enrolled in Academic Intervention Services (AIS) in English Language Arts for the 2016-2017 school year at the school previously described. These six students are part of the 12 total students that make up 34% of their graduating class enrolled in AIS. The six participants receive AIS instruction for twenty minutes a day every day, for a total of 100 minutes of additional literacy instruction per week. The other six students only receive AIS instruction every other day, so they were omitted from the results of the study. The class of participants examined consists of five boys and one girl. The participants range in ages between 12 and 13 years old. The native language of all the students that participated in the study is English. Three of the students in this study identify as Caucasian, two students are Multiracial, and one student is African American. Based on the 2016 New York State Common Core English Language Arts

examination, five of the students scored a level two out of four, and one student scored a level one out of four. Two of the students have individual education plans (IEPs) for learning disability, and one of these two students has dyslexia. The modifications of these students were considered and integrated into the literacy stations.

Data Collection

As formerly stated, this research followed a triangulation mixed-methods approach. Instruments used to conduct this study included a pre/posttest, engagement tracker, reading interest survey, and interviews with the participants.

Achievement Test. Achievement tests measure an individual's knowledge or skill in a given area or subject (Fraenkel et al., 2015). This instrument is most commonly used to measure learning or the effectiveness of instruction (Fraenkel et al., 2015). I utilized the Standardized Test for the Assessment of Reading (STAR) as a data instrument to gather data on all of the student's' reading level before and after instruction using literacy stations to collect data in regards to the academic effectiveness of literacy stations.

The STAR reading is a 25 question computer-adaptive assessment designed to give an educator data to develop instruction and intervention (Renaissance Learning, 2010). The STAR reading was taken on individual desktop computers in the school's computer lab. The program starts the test taker on a reading ability level based on the previous results or a set grade level. The students in this study have taken the STAR test in the last 180 days. Therefore, the assessment began at a difficulty level based on their participant's previous test scores. Once the test begins, the software delivers test items based on the student's expected ability level. If the student answers correctly, the software bumps up the complexity. By recurrently adjusting the

difficulty of an item, the program zeroes in on an accurate assessment of the student's academic ability. With each question, students are given between 45-60 seconds to answer, depending on the type of question asked (Renaissance Learning, 2010). The option of extended time is available with the software and has been previously accounted for with students who participated in the study that has an accommodation on their IEP for extended time. For the general education student, the test takes about 15 minutes. Each test question is marked with a difficulty level created through the process of calibrating nationally representative samples of students. To generate a score the program uses the Response Theory. This particular theory of analysis relates the possibility of a student correctly answering an item to the student's ability and the difficulty of the question. The test produces a variety of scores, but for the purpose of this research, I analyzed the student's Instructional Reading Level (IRL) for improvement. This score represents the highest grade level at which the student can understand 80 percent of the text (Renaissance Learning, 2010). Before I began the 4-week literacy station based instruction, I administered the STAR test and document the students' IRL. Then at the conclusion of the four-week study, I re-administered the STAR test and documented the students' IRL. According to the National Center on Response to Intervention (NCRTI), a reliability level of .60 is good on the tests-retest reliability. The reliability of the STAR reading exceeds .90. The STAR reading assessment also exceeded the guidelines provides by NCRTI in regards to validity.

Engagement Tracker. The teacher, acting as an observer, tracked student engagement using the Behavioral Observation of Students in School (BOSS) software. Each of the six participants was observed four times in the four-week study. This software enables a teacher, or observer, to study students in a school environment and record students' behaviors in real time. It uses interactive, customizable buttons categorized by specific behaviors for the observer to press

while observing a student, or students, during a set duration. The duration menu ranges from two minutes to 60 minutes (Pearson, 2013). The duration menu for this research was set to 30 minutes, as the software user guide indicates setting the duration for ten minutes longer than that actual observation. The software keeps track of the intervals within which a behavior button is selected during an observation. The interval menu ranges from two seconds to 60 seconds. The statistics from that observational period are then calculated and revealed at the end of the observation. During this research, the interval menu was set to 60 seconds. The software allows you to define the task and setting being observed (Pearson, 2013). The task will be configured to Reading and the setting will be set to “SmGp: Tpnst”. Pearson defines this code as “The target student is part of a small group with which the teacher is working. A small group is defined as a group involving less than half the class” (2013). In this research, the students were part of a small group of which the teacher was present and circulating around the room, but this is not an option of the software. This absence of this option will not affect the validity of the results, as it is just a working title for the data collected. The data collected was renamed “Engagement of Students in Literacy Station Groups”. The researcher collected data on the default behaviors provided by the software. The BOSS template separates academic engagement into two categories: Active Engaged Time (AET) or Passive Engaged Time (PET). In either instance, the learner is considered to be on-task for that 60 second interval (Pearson, 2013). At the beginning of the cued 60-second interval, the observer analyzed the targeted student and decided if the pupil was on task and if the behavior constituted as an active or passive form of engagement as defined in Table 1. When a student is disengaged in the academic behavior, three possible categories are coded. These codes are Off-Task Motor (OFT-M), Off-Task Verbal (OFT-V), and Off-Task Passive (OFT-P) (Pearson, 2013). If any of the behaviors defined in Table 1 occurred

at any point during the 60 second interval, the observer tapped the correct subcategory button on the observation screen. The observer only noted the behavior one time per interval, because this is all the software allows. Table 1 defines the behaviors included under each engagement and disengagement category.

Table 1

Categories Of Behavior For The BOSS Software

Category	Types of Behavior Displayed
Actively Engaged Time (AET)	<ul style="list-style-type: none"> ● Reading Aloud. ● Talking to peer about the assigned material ● Research pertaining to assigned material (ex: looking a word up on iPad or in a dictionary) ● Writing
Passively Engaged Time (PET)	<ul style="list-style-type: none"> ● Looking at an academic worksheet. ● Reading assigned materials silently. ● Listening to a classmate respond to a question.
Off-Task Motor (OFT-M)	<ul style="list-style-type: none"> ● Engaging in any out-of-seat behavior outside of changing stations during instruction. ● Aimlessly flipping the pages of a book ● Handling objects not related to the academic task (e.g., playing with a paper clip, throwing paper, twirling a pencil, & folding paper). ● Physically touching another student when not related to an academic task. ● Turning around in one's seat, oriented away from the classroom instruction Fidgeting in one's seat (i.e., engaging in repetitive motor movements for at least 3 consecutive seconds)

Table 1 Continued

Categories of Behavior For The BOSS Software

Category	Types of Behaviors Displayed
Off- Task Verbal (OFT-V)	<ul style="list-style-type: none"> ● Talking to another student about issues unrelated to an assigned academic task ● Talking to another student about an assigned academic work when such speech is prohibited by the teacher ● Making any audible sound, such as whistling, humming, forced burping
Off- Task Passive (OFT-P)	<ul style="list-style-type: none"> ● Sitting quietly but not engaging in the activity. ● Looking around the room. ● Staring out the window. <p style="text-align: right;">(Pearson 2013)</p>

Reading Interest Survey. A survey is a tool used to "obtain data from members of a population to determine a current status of that population with respect to one of more variables" (Fraenkel et al., 2015). At the start of the study, the researcher provided the six participants with a reading inventory titled "My Feelings about Reading" created by Arleen P. Mariotti in 2011. (Appendix C). The Reading inventory has ten questions, and the students can check yes, sometimes, or no. The survey questions are primarily focused on students' feelings regarding reading in general. The questions asked the students where they like to read, what they like to read, and how they like to read. The researcher will be looking to see if there are any changes to

their answers from beginning to end of the study. For example, question eight states “reading is boring”. If a student answered yes before literacy station instruction and no after the instruction, the researcher can theorize that there is a positive correlation between literacy stations and raising reading interest in students. Question number one states “I like to read”. A change in a student’s answer from no, or sometimes, to yes would also indicated that the instructional methods of literacy stations help increase students’ interest in reading. The reverse change in answer might indicated that literacy stations do not have an effect on a student’s interest level. The students will complete the reading survey again at the end of the study, and the researcher will note any changes to the students' perception of reading, according to their answers.

Interview. An interview is a form of a descriptive survey where the answers are solicited in person (Fraenkel et al., 2015). A descriptive survey is defined as a survey that “asks the same set of questions of a large number of individuals either by mail, telephone, or in person” (Fraenkel et al., 2015). The benefits of an interview are that open-ended questions can be asked, particular questions of particular interest or importance can be pursued in depth, and items that are unclear to the participants can be explained by the researcher (Fraenkel et al., 2015). This interview allowed the researcher to ask the participants questions regarding how they felt the literacy stations affected their reading interest and engagement (Appendix D). This particular interview had five questions. The questions were developed based on a review of literature about engagement levels in middle school students, reading interest in middle school students, adolescent development, and literacy stations. These questions were semi-structured and open-ended. In structuring the questions this way, participants had the ability to explain their individual learning experience during the study. Additionally, this format permitted the researcher to adjust questions or ask more questions based on the direction of the participant

interviewed. The students were interviewed in the researcher's classroom and sat at a round table with the researcher. All six participants participated in the interview and were interviewed individually. The interview length ranged from ten minutes to twenty five minutes, depending on the participants. The first two questions in the interview are intended to gain an understanding of the participant's perception of their engagement during the study. The last three questions were posed to the participant to gain a deeper insight to the student's opinion of their interest in reading following the Literacy station instruction. The interviews were recorded on the researcher's laptop and then transcribed to assure validity.

Procedure

This study involves research with 12-13-year-old students within a Western New York State school district. The research has both qualitative and quantitative tendencies. Quantitative aspects can be found in the both the pre/posttest, the engagement tracker, and the survey. The interview portion of the study allows for a more qualitative method to research.

Obtaining Consent. Before research can be conducted, the researcher asked for permission from the building principal. The researcher received verbal and written consent from the building principal to conduct the study during the middle school Academic Intervention Services class. The researcher assistant visited February 27th, 2017 and spoke to the students about the study and provide consent forms to the students. The researcher will remain anonymous so the students do not feel coerced to participate in the study. Parental consent forms will be sent home in the mail. Research will begin when consent forms from the willing participants are returned.

Administration of STAR reading test. Students were administered the STAR reading test during their AIS instruction by me, acting as both teacher and anonymous researcher. The STAR reading pretest was administered in the computer lab at the school discussed in the setting on the first day of the start of the research, before any instruction using literacy station. Five participants took between ten and twenty minutes to complete the STAR and one student, who has testing accommodations, took thirty minutes to complete the test. The posttest was given on the Monday following the last week of the literacy station unit in the same computer lab. The students sat in the same seats they sat in when taking the pretest. All six participants finished the posttest in twenty minutes.

Administration of Reading Interest Survey. Students were administered the reading interest survey at the beginning of the four weeks of instruction. It took all six participants under 10 minutes to complete. They were administered the same survey at the end of the instructional period. The students took between eight and ten minutes to complete the post survey. This survey was kept secure and confidential.

Observation of Engagement. The researcher, acting as the observer, tracked the student engagement using the Behavioral Observation of Students in School (BOSS) software. The researcher observed each student once a week for 20 minutes for a total of 80 minutes of observation during the course of the study. Each student was observed four times in the study using the BOSS software. The BOSS software allows an observer to observe more than one student at a time, but the researcher was acting as an observer only observed the maximum of two students at a time, and that was only one day of the week. The observer observed the student in one-minute intervals for 20 minutes and indicated if the student was actively engaged, passively engaged, off- task motor, off-task verbal, or off-task passive. The researcher compiled

the results in order to understand the percentage of time the student spend engaged or off-task during the 80 minutes they were observed.

Interview. All six students consented and participated in the interview. Student interviews were conducted individually after school. The researcher made appointments with the participants to sit and discuss their experience with literacy stations. The interviews took place in the researcher's classroom. This is the same classroom that the participants engaged in literacy station instruction. The researcher sat at a round table with the participant and recorded the interviews with a laptop. The interviews were informal and open-ended to help stimulate honest answers. All six participants were interviewed on March 20th. Each interview took between ten and twenty five minutes. The same questions were asked to each interviewer and the audio was recorded on the researcher's laptop. The researcher then transcribed the interview directly following the conversation.

Data Analysis

The STAR test data was analyzed at the end of the 4-week study to understand if the student's IRL has increased since the start of the instruction. An increase in a student's IRL will help the researcher prove that literacy stations improve student proficiency.

The BOSS data was analyzed to visualize levels of academic engagement and non-engagement for the students in the particular setting. At the end of the four weeks, the researcher compared the collective percentages for trends. The comparison provided the researcher with information about the extent in which the students are effectively engaged in the learning process and provided insight into the effectiveness of learning stations. The researcher also analyze each student's individual data throughout the study to decipher if there was a decrease in off-task

behaviors and, or, an increase in on-task behaviors as their experience with literacy stations increases.

The reading interest surveys were analyzed by comparing the post survey to the pre-survey to decipher if there were any changes to the participants' answers after the four weeks of instruction using literacy stations. The researcher also compared the students post surveys to the post surveys of other participants to compile how many participants answered yes, no, or sometimes to each question.

The interviews were analyzed through the use of coding. Codes give meaning to data (Fraenkel et al., 2015). During the transcription process of the individual interviews, the researcher determined overall themes, or codes, found in the interview. All aspects of the interview fell under a specific theme. These themes give meaning to participant responses and their views of literacy stations and how it possibly affected their interest in reading and engagement during class.

Validity Consideration

My priority as a researcher is to protect my participants, while remaining professional and collecting the necessary data. Although I researched in the same school that I teach in, I can assure that there was no bias involved. An assistant explained the study and handed out the consent forms so that the students would not feel coerced into participating because I was their teacher. When observing students, I did not tell the students I was observing and remained as quiet and professional as I could, so that students would behave normally. The BOSS software and survey instruments were created by other researchers and have been peer reviewed. I have

had other colleagues read over and comment on my interview questions to ensure that my questions were valid.

Results

The intended purpose of this study was to identify if literacy stations help increase proficiency scores of students enrolled in Academic Intervention Services. An additional purpose of this study was to analyze how literacy stations affect student's perceptions of reading. Further, this research was conducted to determine how literacy stations affected the engagement of students during class instruction. The overarching goal was to help determine if literacy stations are an appropriate tool for the academic intervention classroom. The initial part of this research was pre- assessment test where participants took the STAR reading test to determine their initial instructional reading level. Directly following this, the participants answered ten questions on a pre-reading interest survey. The secondary part of this research was classroom observations of the students participating in learning using literacy stations. A succeeding part of this research involved a post- assessment STAR test which involved the students taking the same assessment again to determine their post instructional reading level. The participants also took a post-reading interest survey. A final component of the research involved a post-literacy instruction interview with the participants who took part in the instruction. There were many common themes discovered from the data regarding the different instruments used. The researcher analyzed the data based on the following themes: literacy stations effect on proficiency, literacy stations effect on student's feelings towards reading, and literacy stations effect on student engagement.

Literacy Stations Effect on Middle School Student's Proficiency Scores

The first research question that the researcher focused their research and analysis on is "Do literacy stations increase the middle school student's proficiency test scores on literacy-based standardized tests?" The purpose of the pre and post- proficiency assessment was to assess if there were any changes in students' instructional reading level after implementing literacy

stations in the AIS classroom. The researcher first compared the class post-STAR assessment average to the pre-STAR assessment average to see if the class' overall instructional reading level (IRL) increased. Before the study, the class' average IRL was 6.4. A 6.4 IRL is defined as: on average the students in this AIS class should be instructed using material meant for students in the 4th month of the 6th grade. At the conclusion of the study, the participants' mean IRL was 7.9. From this data, the researcher can conclude that the students should be instructed as a whole class on reading material designed for students in 7th grade in the 9th month of school. Considering that this study concluded in the first week of April, the students were at grade level at the conclusion of the study. At the core of academic intervention, the theory is the belief that material and instruction should be differentiated. The theory of differentiation led the researcher to analyze the data on an individual level as well. Student's IRL are indicated in Figure 1.

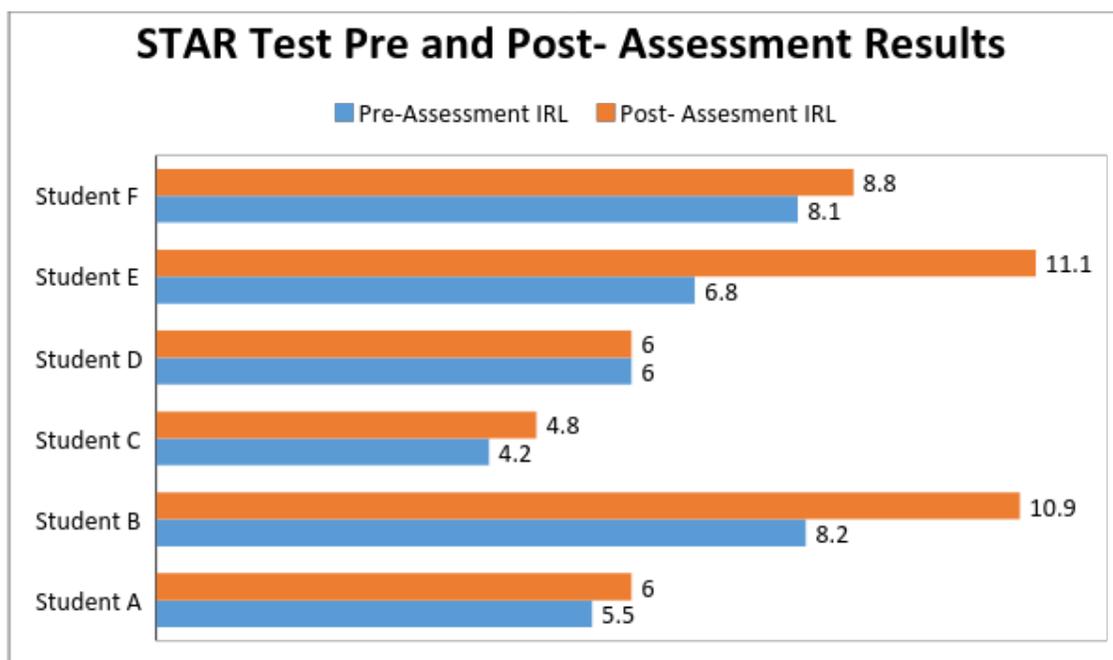


Figure 1. STAR assessment results

Figure 1 depicts the data from the pre and post STAR assessment that verifies all students' showed growth in proficiency, except for one participant, whose IRL stayed the same. Student D

was absent often during the instructional period of the study. This could account for the student's lack of growth. Student B and E showed significant growth in proficiency. Student B's test scores showed two years and seven months' worth of growth in reading level. Student E's post assessment indicated that the student made four years and three months' worth of growth in four weeks.

Literacy Stations Effect on Students Feelings Toward Reading.

The second question the researcher investigated is "How do literacy stations affect the middle school students' perceptions of reading?" The researcher wanted to note if literacy stations had a positive effect on the participant's relationship with reading. To explore a change in the participants' perception of reading, the researcher needed to collect baseline data and then collect data after the instruction to see if any of the students changed their feelings toward reading.

Students have mixed feelings toward reading. The same survey was given twice. Once before the literacy station were implemented and then again after the participants completed the four weeks of AIS instruction utilizing literacy stations. Questions one, three, five, eight, and nine on this survey were directly related to the participant's feelings and interest concerning reading. Below is the first question on the survey and the results of both the pre and post survey.

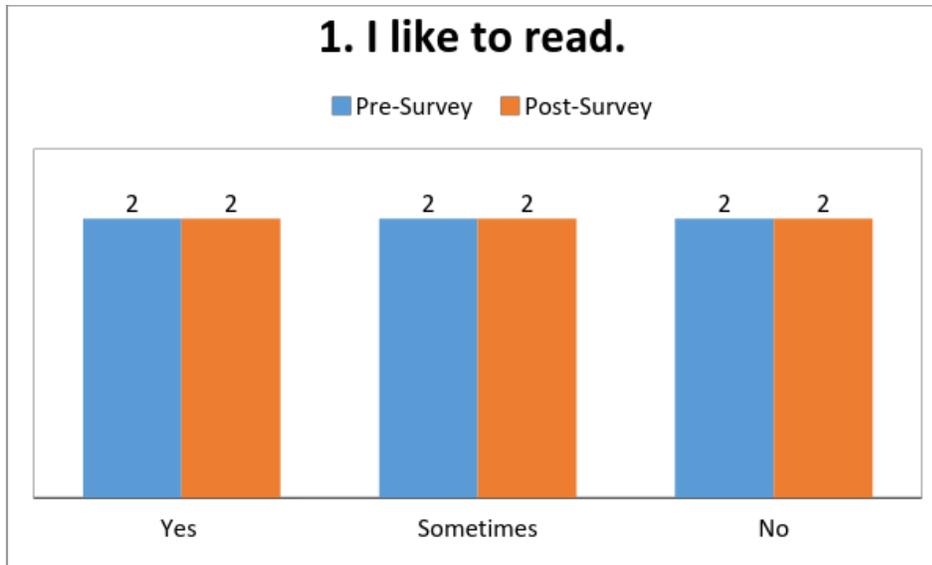


Figure 2. Respondent pre-survey and post-survey question number one results.

The results in Figure 1 represent student’s feelings toward the activity of reading before experiencing literacy stations. The results show that two of the students like to read, two of the students sometimes like to read, and two of the students do like to read. The results of the post survey indicated that still two of the students like to read and two of the students in the class do not.

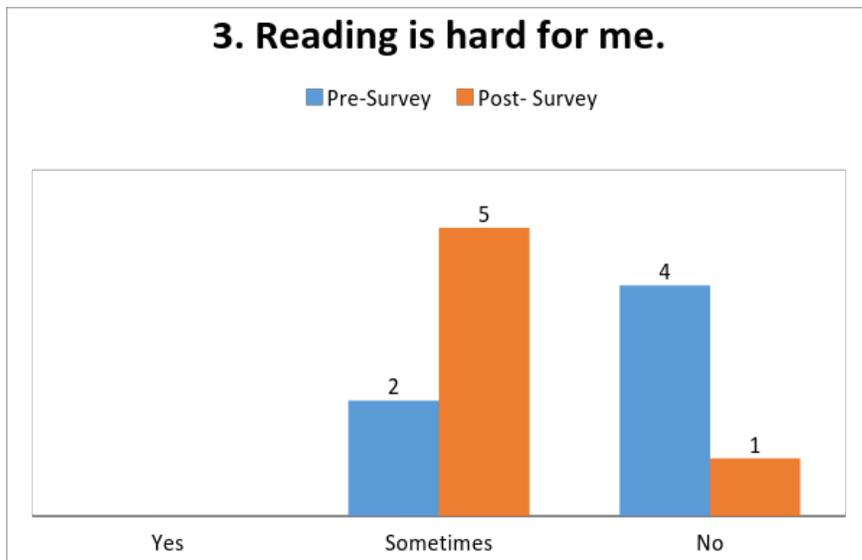


Figure 3. Respondent survey question number three results.

Results of this survey indicated that before experiencing instruction through literacy stations, four of the students did not think that reading was hard for them. And two of the participants thought reading was sometimes hard. After the instruction, only one of the students thought that reading wasn't hard and five of the students stated that reading was sometimes hard.

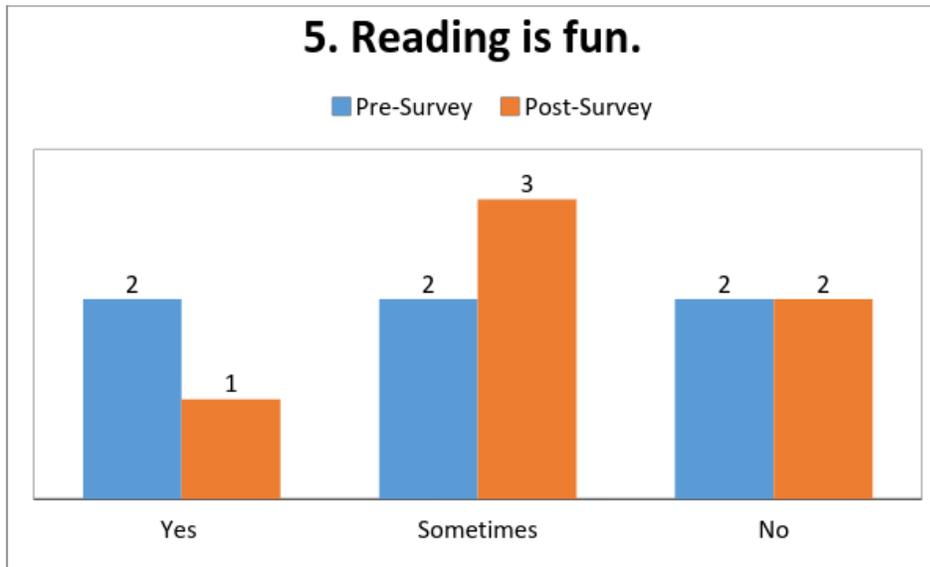


Figure 4. Respondent survey question number five results.

The results that are shown in Figure 3 represent the percentage of student who felt reading was fun before literacy stations and after. Before the instruction, two of the students believed reading was fun, two of the students felt that reading was sometimes fun, and two of the students indicated that reading was not fun. Following the literacy instruction, only one student still indicated that reading was fun for them. This indicates that literacy station instruction may have had a negative effect on students' feelings toward reading.

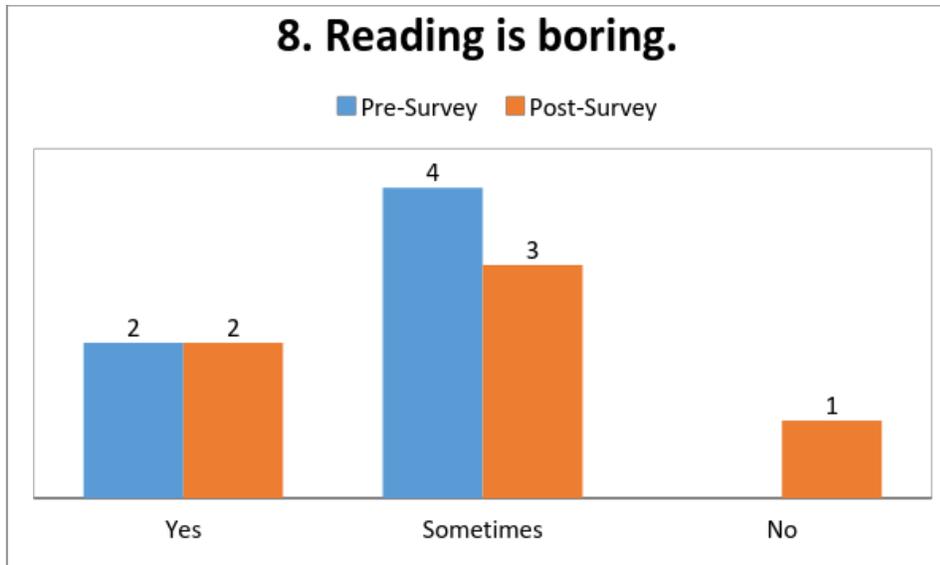


Figure 5. Respondent survey question number eight results.

Figure 5 depicts the students’ answers to questions eight on the pre and post reading interest survey. Before the study, four students indicated that they thought reading was sometimes boring, and two students indicated that it was always boring. None of the students felt that reading wasn’t boring. Following the study, one student responded that reading was not boring.

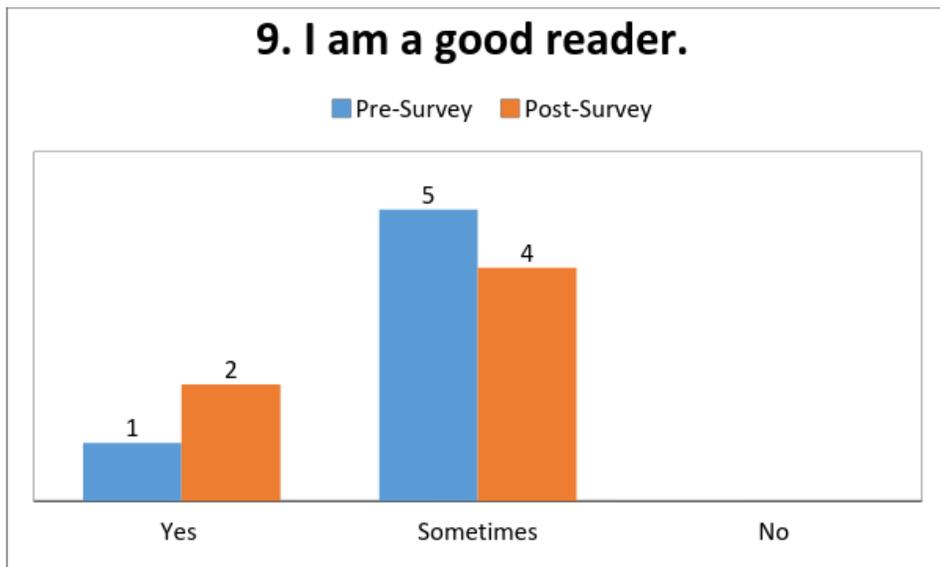


Figure 6. Respondent survey question number nine results.

Figure 6 demonstrates the students' attitudes toward their reading abilities. Prior to the instruction, five of the students indicated that they thought they were sometimes a good reader and only two of the participants indicated that they believed they were a good reader. The post survey results show that the number of students who believe they are a good reader increased by one.

Overall, the results of the survey showed mixed results. Although some questions showed that students' relationship with reading became more positive, other questions indicate that literacy stations did not have a positive effect on students' feelings and attitudes towards reading. For example, the amount of students who felt that reading was hard for them decreased and the number of students who felt they were good readers increased questions specifically geared toward the students feeling about the action of reading showed negative results. Moreover, the number of students who liked to read stayed the same following the study. On the contrary, prior to the instruction none of the students in the AIS class felt that reading was boring but following the instruction one student indicated that they felt reading was boring on their post survey. Moreover, prior to the study two students felt reading was fun, but in the post survey only one student indicated that they believed reading was fun.

Students express subtle changes in their reading interest. All six participants participated in a 1:1 interview with the researcher following the instructional portion of the study. Questions number four and five on this interview pertained to the student's interest in reading. Question number four asked the students if they felt changes in their survey answers were related to the literacy instruction. Two of the students said that the instruction was the reason their answers changed on the survey. Student B, who changed his answer to question one on the survey, said that it did. The student said that he felt uncomfortable reading with peers

and that's why he changed his answer to "sometimes" instead of "yes" on the "My Feelings about Reading" survey. Similarly, Student F also said that the literacy stations changed his answer to question number one on the interest survey. On the contrast, following the instruction, this student said he "sometimes" like to read rather than answering no, like he did before the instructional phase of the study. Student F said, "I liked having leadership in the groups and reading to my friends." (Interview, March 20, 2017)

Question number five asked the students if they read any additional texts outside of class during the study. One out of the six participants said that they read a book outside of school in the past five weeks, but all of the other students reported that they did not.

Literacy Stations Effect on Student Engagement

The third, and final, question the researcher investigated is "How do literacy stations contribute to the middle school students' reading interests and academic engagement?" The researcher set out to observe if students were most interested in reading material when assigned in literacy stations and more engaged in the instruction when taught through literacy stations. Through the use of observation and a 1:1 interview, the researcher answered this question using qualitative research and compiled the results under the theme "Literacy stations effect on Student Engagement."

Observed engagement and connection with proficiency. there were distinct intentions and purposes for observing the classroom. The researcher wanted to see not only if the movement, cooperative learning, and variation of activities built into literacy stations kept the student engaged, but also to what degree. The researcher's purpose was to act as the instruction facilitator and the observer. The researcher set up the literacy stations and gave the participants instruction, but once the instruction began the researcher focused on observation only. The

researcher observed each student once a week for 20 minutes. Each student was observed four times in the study using the BOSS software. The BOSS software allows an observer to observe more than one student at a time, but the researcher was acting as an observer only observed the maximum of two students at a time, and that was only one day of the week. The observer observed the student in one-minute intervals for 20 minutes and indicated if the student was actively engaged, passively engaged, off- task motor, off-task verbal, or off-task passive. When the researcher analyzed the data, it was combined to determine how many minutes the student spent in each of the later categories over the course of the total 80 minutes he or she was observed. Below are the combined results of each student's observations.

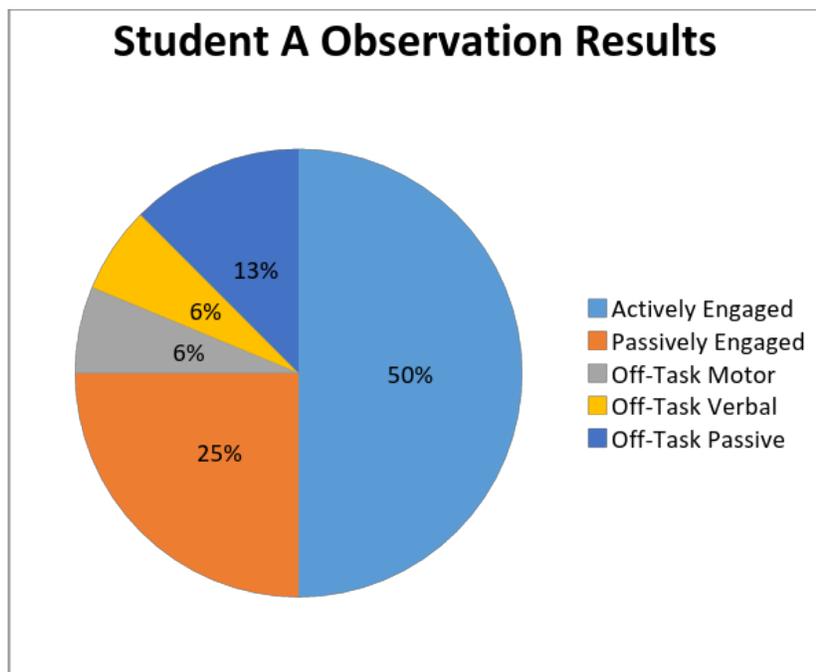


Figure 7. Student A results for 80 minutes of observation.

Student A's observation results indicated that the student spent 50% of his time actively engaged in the lesson. Figure 7 demonstrates that the student spent the majority of the rest of his

time observed passively engaged in the lesson exhibiting behaviors such as listening to other students read or speak.

Figure 8 shows that Student B spent much of his time both actively and passively engaged in the literacy stations. The student exhibited behaviors such as reading aloud, writing, listening to a classmate respond, and looking at the work in front of him. This student did spend some time passively off task. The observer noted that the student would look around the room during the stations.

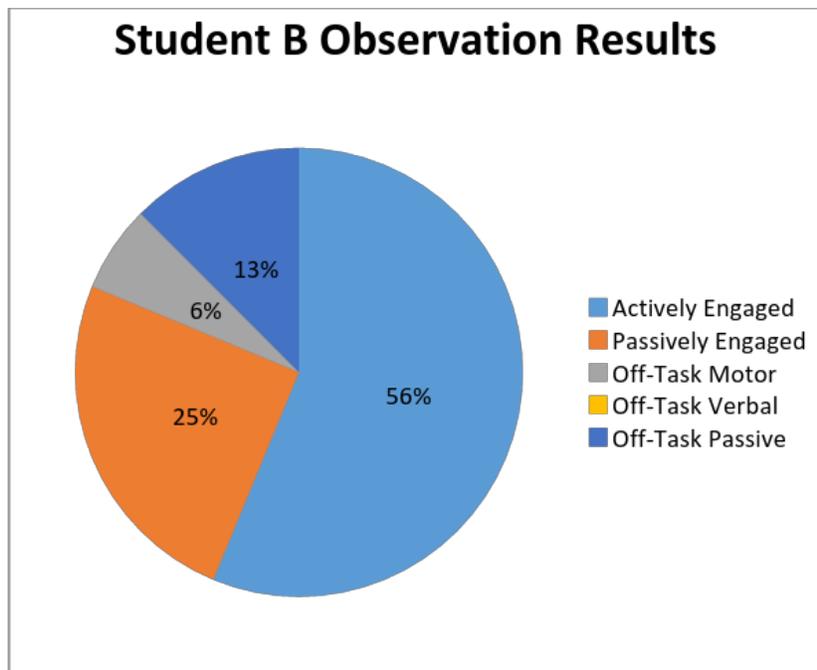


Figure 8. Student B results for 80 minutes of observation.

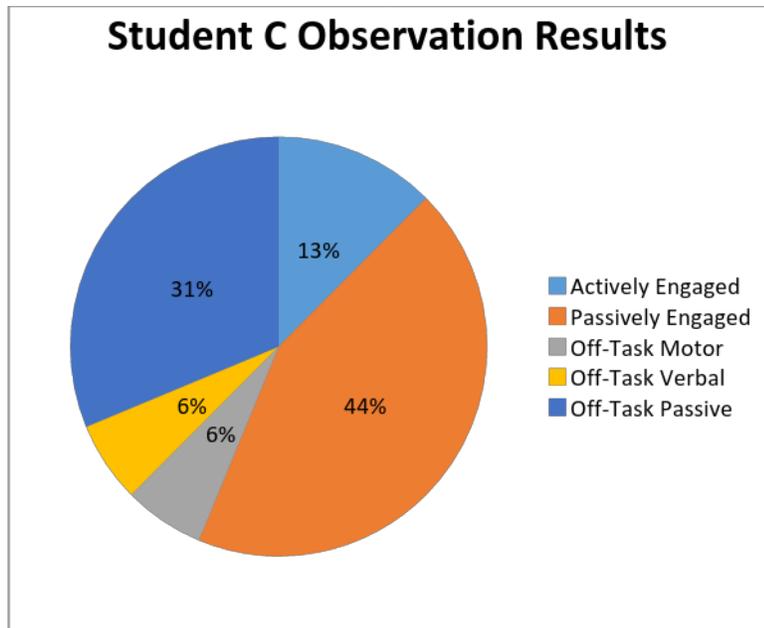


Figure 9. Student C results for 80 minutes of observation.

Figure 9 depicts the observation results for Student C. This student spent the majority of her time that was observed passively engaged or passively off task. The student was often sitting quietly, but not engaging in group activities. Referring to the post-assessment results, this student shows the smallest amount of growth, only displaying four months of growth in her post-test.

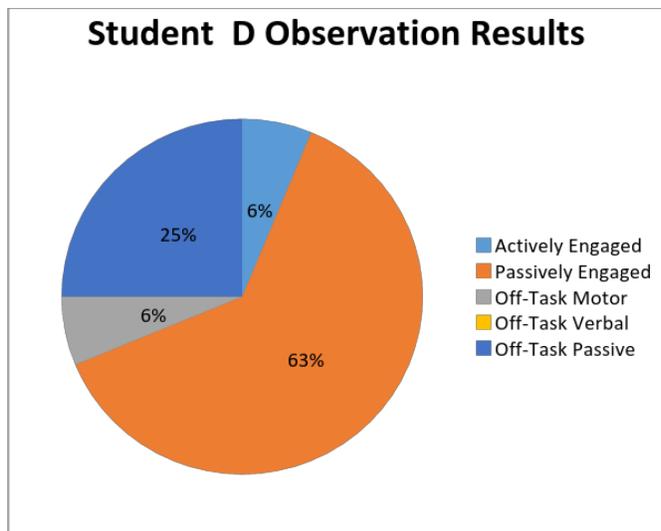


Figure 10. Student D Results for 80 minutes of observation.

The results that are shown in Figure 10 represent Student D's 80 minutes of observation. This student is very quiet and spent most of his time passively engaged. Similarly, he spent 20 of the 80 minutes that he was observed passively off-task. He did not spend much time actively engaged in the lesson, which could be connected with his lack of growth on the proficiency test.

Figure 11 illustrates the results of the 80 minutes Student E was observed. This student was completely engaged throughout the instruction all four times he was observed. The student was often reading aloud to his peers, listening to classmates respond, or reading the assignment materials silently to himself. In connection with proficiency, this student showed the most amount of growth on the post- assessment.

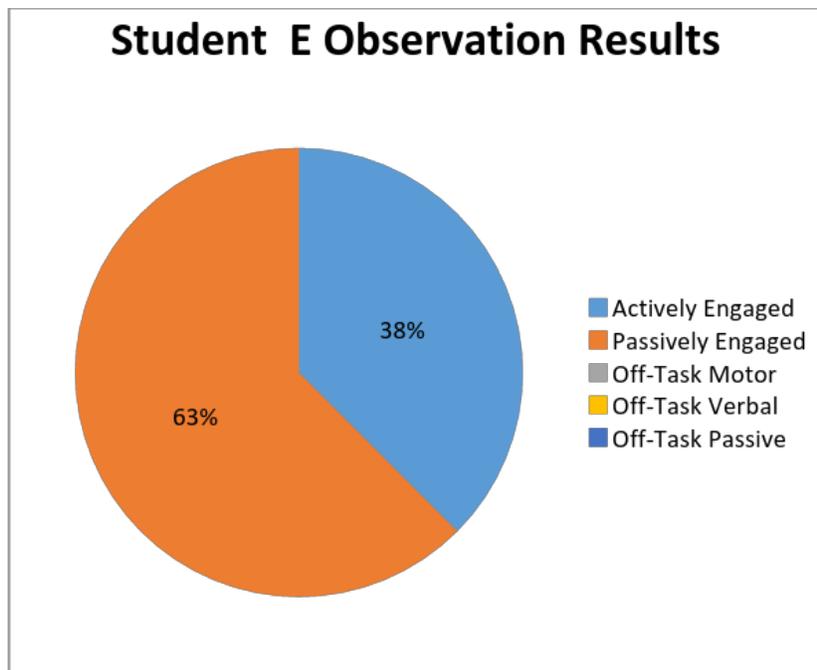


Figure 11. Student E results for 80 minutes of observation.

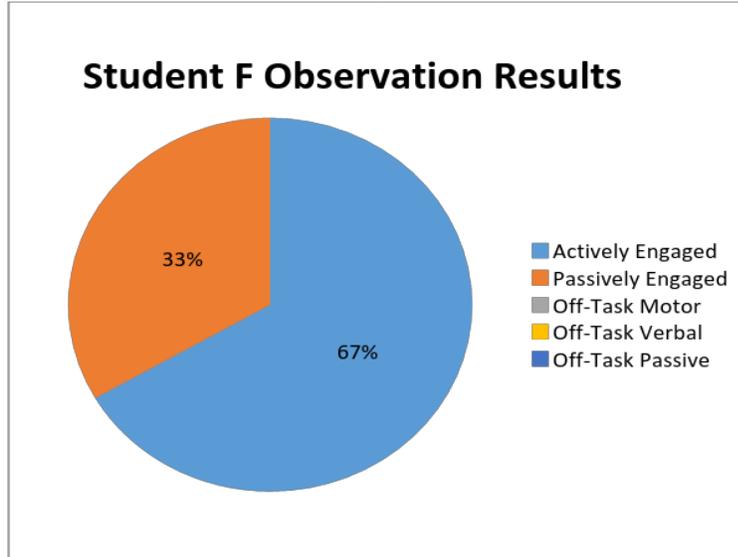


Figure 12. Student F results for 80 minutes of observation.

The data that is illustrated in Figure 12 represent Student F's observation data. This student was not off task in any intervals during his four observations. The student demonstrated 60 minutes of active engagement and 30 one minute intervals of passive engagement.

Overall, the observation results signified that when utilizing literacy stations to instruct students that require the support of AIS the students spend more time engaged in the activities. The use of literacy stations allows for students to move, vocalize, and explore different activities which leave less motivation for the students to exhibit off task behaviors such as engaging in out of seat behavior, physically touching another student, talking to another student, or staring out the window. Similarly, a correlation between engagement and proficiency can be made through this data. The students who were observed spending the majority of their time actively engaged in the literacy station showed exceedingly more growth than the students who were not engaged or even passively engaged.

Student testimonies illustrate increased engagement. All six participants participated in a 1:1 interview with the researcher. The interview was composed of five open-ended questions. Questions 1, 2, and 3 revolved around the theme of student engagement.

Question one asked the student if they felt that learning through literacy stations helped them stay on task. All of the students agreed that the literacy stations helped them stay on task. One student noted that “having a set amount of time really made me focus on what I had to do” (interview, March 20, 2017). Similarly, Student B said “I made sure to tell my group how much time we had left at the station, so we didn’t run out of time “Student B answer to this question correlated with 56% of the time he was actively engaged during his observation.

Next, the participants were asked if they thought they talked to their friends about social activities more or less when learning through literacy stations. Four of the six students indicated that they felt they talked less to their friends about things outside of the lesson. Two students indicated that they talked more to their friends about social activities. The following statements given by Students F and D indicate this discrepancy. Student F said, “We really only talked about the questions we had to answer because we wanted to finish the worksheet before we had to move to the next station” (interview, March 20, 2017). The other student stated, “I was paired with my best friend, and sometimes we would get off topic and talk about baseball practice” (interview, March 20, 2017).

The students were also asked if they preferred reading silently during the stations or aloud with their peers. All of the students indicated that they preferred reading aloud with their peers. Student A said, “I usually don’t like to read aloud but knowing that everyone had to do it and it was only a couple of us, it made it easier to read aloud”(interview, March 20, 2017).

Another student said, "I liked listening to my friends read, it was better than the teacher because my friend made the passage funny."

Discussion

This research study produced several results. These results will be evaluated as they compare to the original questions of the study. The purpose of this study was based on three research questions:

1. Do literacy stations increase the middle school student's proficiency test scores on literacy-based standardized tests?
2. How do literacy stations affect the middle school students' perceptions of reading?
3. How do literacy stations contribute to the middle school students' reading interests and academic engagement?

Question One: Proficiency

The design of the study was to answer each question through different methods. The STAR assessment was used to answer the first question about proficiency. The STAR assessment has been found as a valid measure of student proficiency in literacy and serves as an effective tool for this research study.

Based on the majority results of this study, literacy stations increased student's proficiency test scores on literacy-based standardized tests. According to Davidson (2010), Learning strategies such as concept maps, technology application, and brain teasers will best fit the middle school students' cognitive development stage. Integrating literacy stations into the classroom allowed the researcher to implement all of the tools previously stated and the proficiency results indicate that literacy stations are an appropriate tool to assist in increase proficiency rates. The instructional reading level of the class increased one year and five months over the six weeks the

study took place. Some students individually showed increases as large as four years. One student did not show any growth within the study, but the students IRL did not change either. I believe this student's lack of growth could be the result of the student's three absence during the time of the study. Furthermore, this student has a learning disability that could have affected her ability to show IRL growth.

Moreover, the results of the observation using BOSS software indicated that the students who demonstrated more engagement in the lesson performed better on the post assessment. An instructional strategy that increases engagement will increase proficiency.

Question Two: Student Interest

The researcher set out to examine how student interest in literacy was affected by the use of literacy stations in the classroom. The results of this research were mixed. The results of the reading interest survey reported that some students had changes in their answered, but they were not always positive changes. These results concur with much of the previous research on reading interest. Huang found in his 2013 study that there is a close negative correlation between reading scores and reading interest. On average, students with lower proficiency scores in the area of literacy tend to have a lack of interest in reading. (Huang, 2013) These students all have fallen below proficiency consistently for much of their educational career, so their negative relationship with reading has been built up throughout many years. This study concluded that reading interest is a difficult skill to teach students, especially if they began with a negative connotation towards reading. For example, before the study two of the students marked that they thought reading was fun on the survey, but after the instruction, one student changed their answer and reported that reading was only "sometimes" fun for them.

Similarly, the interview presented contrasting opinions of the literacy stations. Only one student reported reading a book outside of school during this study and one of the students reported that they felt the literacy stations “came with a lot of reading” and that’s why he changed his answer to reading is only sometimes fun (interview, March 20, 2017). There are also many outside factors that contribute to reading interest. Research has found that family members play a large role in the students reading motivation (Edmunds, 2006). This could be a contributing factor in the students’ unswerving negative feelings toward reading.

There were also positive changes noted by the researcher when analyzing the participants’ post-surveys. Many of the students who expressed an extreme dislike for reading through their answer showed slight changes that indicated these feelings could change. For example, Student E chose the answer “yes” for question 8: “Reading is boring.” Following the instruction, he changed his answer from “yes” to “sometimes.” This concurs with the research that proves a literacy curriculum sensitive to individual students' reading interests can be very motivating (Cavasos- Kottke 2006). The student’s answer leads the researcher to believe the student may continue to change his opinion on reading if he continued to receive instruction from literacy stations.

A person’s interest in reading is innate and difficult to change. Research indicates that middle school students have reported negative feelings about reading at an increasing rate due to the new challenges, such as academic rigor, presented in middle school (Fulmer & Frijters, 2011). These results concur with previous research and show that Middle Schoolers have negative feelings about reading that are difficult to adapt. Given the results of this study, the research concluded that literacy stations do not have a lasting effect on a student’s interest in reading, but did help the student increase their interest in becoming stronger readers.

Question Three: Student Engagement

Research shows that classrooms, where movement has been incorporated into the environment show, improved student attention and focus (Mehta et al., 2015) Results of the observation and interview support this.

An overwhelming theme of the interviews was the increase in engagement and connection to learning participants developed as a result of their time in this study. The students expressed to the researcher that they felt on task during the lessons while still in control of their learning. This is supported by the literature that states if middle school students perceive that instruction was pertinent to their live, they display increased engagement (Lau, 2009). The sense of independence each student gained with the instruction increased their need, and want, to stay connected to the lesson.

The results of the observation yielded similar results to those of the interview. The observation results indicated that the students were engaged during the instruction. The teacher observed the students reading, writing, and talking constructively with peers. Out of the 480 minutes the researcher spent observing, 395 of those minutes were spent by the students either actively or passively engaged. This data is supported by Marchand and Furrer's study that showed when delivery of instruction is changed, students often respond by improve the quality of participation and learning material more quickly (2014). Moreover, the results of the observation correlate with the results of the proficiency assessment. Those students who showed more engagement during their observation performed better on the STAR assessment.

Engagement was observed by the researcher and also reported by the participants. Utilizing literacy stations with middle school students struggling to reach proficiency in literacy increases engagement and interaction within the instruction.

Implications

This research was intended to investigate the utilization of literacy station in an academic intervention program at a rural school in Western New York and to document its effects on the students enrolled in the class. This study accomplished what it set out to do. Results show that literacy station instruction is a tool that can be utilized to increase proficiency scores in the AIS classroom. Educators and literacy coaches should utilize this tool to promote academic growth in struggling students. Literacy stations are a key tool in keeping students engaged and connected with the content of a lesson. Teachers should integrate literacy stations; or an instructional tool that allows peer collaboration, movement, and autonomy, to ensure academic engagement. Moreover, while literacy stations don't produce a drastic increase in a student's interest in reading they can create bridges that the student can build with more interaction with the instructional strategy of literacy stations. Teachers should incorporate literacy stations earlier in a student's educational career to try and foster a better relationship with reading. This research can inform educators on the best practices for AIS instruction. The researcher's results indicate that literacy stations can help increase proficiency in students struggling with literacy. It also indicated that the stations increases student engagement in a lesson.

Administrators need to be aware of the growing number of students who lack proficiency in literacy and help educate their teachers on how to help these students. First, administrators need to make professional development available for all educators frequently throughout the year on successful interventions for students who lack profanely in literacy. Second, administrators

need to create and implement a new curriculum for students in AIS that include that foundations of literacy stations. Lastly, Administrators need to make sure each teacher is trained on the curriculum and how to integrate the tool in their classroom.

Limitations

This research study contained several limitations. The largest deficiency was the small pool of eligible participants the researcher was able to include in the study. The school where the research takes place has a small population of students. There are only twelve 7th grade students enrolled in AIS. Moreover, only six of these students receive AIS on a daily basis. Data that yields the results of only six participants does not necessarily give a valid depiction of the engagement, proficiency, and interest increases of all students taught using literacy stations in an AIS classroom.

Another limitation of this study is that it only took place in one classroom at one school in Chautauqua County. To make this study stronger, it would be beneficial to have every school in the New York State introduce the instructional strategy of literacy stations into the AIS program and gather data on proficiency, interest, and engagement of students from every AIS program in New York State.

One last limitation to the study focused around the instrument used to measure student engagement. The BOSS software measures engagement in 60-second intervals and only allows the observer to choose one category of behavior for that interval. Therefore, even if the student was both actively engaged and passively engaged within that minute, the observer is only allowed to choose one category. Similarly, if the student was actively engaged but suddenly became off- task verbally, the observer was not able to indicate that within the limits of the

program. The inability to choose two categories of behavior within an interval limited the depth of analysis concerning the researcher's question on the topic of student engagement.

Recommendations for Future Research

The results of this research only reflected a small population of students. Future research should examine the effects of literacy stations across the state in suburban, urban, and more rural school districts in classrooms with a ranging number of students. Moreover, this data only reflected 6 participants. Future research should examine the effects of literacy stations in larger academic intervention classes. Another recommendation would be that future research includes the perspectives of the teachers who are using the strategy of literacy station in the classroom. One last recommendation would be that future researchers examine the effect of literacy stations on students who show proficiency in literacy compared to their peers who do not.

Conclusion

Due to the limited number of results, it is difficult to conclude this research study. However, it is imperative to look at how the results have answered the research questions and add to the already existing literature on the subject at hand. The first question of this study was: Do literacy stations increase the middle school student's proficiency test scores on literacy-based standardized tests? This question is answered through the assessment and instructional portion of this study. Although the results of the post-assessment varied slightly, the average proficiency of this class increased. On the post-assessment, none of the students demonstrated a decrease in proficiency, although one student did not show any growth. Overall, the proficiency of the students increased proving that literacy station does increase the middle school student's proficiency test scores.

The second research question asked was: "How do literacy stations affect the middle school students' perceptions of reading?" This question was answered through the results of the post reading interest survey and the interview. The survey results indicated that the instructional time did not noticeably change their perception of reading. Many of the students still had the same attitudes towards reading. Moreover, some of the students' perceptions toward reading changed in a negative way. One of the students blamed the increase in reading and direction for reading to classmates changed his perception of reading in a negative way. The interview supported that student's perception of reading was changed very little, if at all, through literacy station instruction.

The third, and final, research question explored by this study was: "How do literacy stations contribute to the middle school students' reading interests and academic engagement?"

Based on the results of the observation and interview portion of this study, literacy stations positively contribute to middle school student's reading interest and academic engagement. Moreover, the researcher found that academic engagement has a positive correlation with proficiency exams. The students who exhibited more engagement in the lesson showed the most growth on the STAR assessment. The students demonstrated a strong sense of independence during the instruction and reported that the literacy stations kept them on track and helped them to pay attention.

The conclusion of this study supports the research that overall, students benefit from instructional that allows them to move, explore different topics, and academically conversation with peers. Literacy stations are a positive tool to integrate into the Academic Intervention classroom.

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*Appendix A***Consent Form for Student Participants**

Dear Student,

A researcher is asking you to participate in a multi-part research study because they are trying to determine if literacy stations are a successful instructional strategy to improve engagement and interest, while also increasing proficiency in chief literacy skills in students receiving AIS by collecting data through various instruments. This research will last a total duration of 6 weeks. If you agree to participate you will take a test to measure your achievement prior to, and following, Literacy Station instruction that is going to take place during your academic intervention instructional period. You will complete a reading interest survey in the same fashion. You will be observed during the instruction by your teacher. Finally, at the conclusion of the study your teacher will be interviewing you with a set of 5 questions.

The Standardized Test for the Assessment of Reading (STAR) will take you approximately 20-30 minutes to complete and will be taken during your regular academic intervention class. This achievement test will be used to gather data concerning the effects of Literacy stations on academic achievement.

Immediately following the assessment you will complete a 10 question reading interest survey. This survey includes questions that evaluate your reading interest level to determine if, and how, Literacy stations change your interest in reading.

Following your participation in the STAR pre-test and reading interest survey you will partake in 4 weeks of Literacy instruction using a method called “Literacy Stations”. Literacy stations can be defined as short, independent activities conducted in small groups for a set amount of time that focuses on a specific literary standard. During the instruction, you will be observed for engagement using software called Behavioral Observation of Students in School (BOSS). When observing you, I will be looking for signs of engagement and non-engagement in the lesson. You must participate in the literacy stations, as they are a part of the Academic Intervention curriculum, but if you choose not to participate in the study, your teacher will not observe you during the lessons.

Following the instruction you will complete the STAR reading test again and the reading interest survey so that the researcher can compare your data.

To conclude your participation in this study, your teacher will schedule a short individual interview with you. During this interview, you and your fellow classmates will be asked 5 open-ended questions about your experience with the Literacy stations method of instruction. This interview will be audio-recorded.

If you choose to participate in the study, you must agree to all three parts of the study. Your participation in this research will not only directly benefit you, but the results will be helpful to other teachers who are trying to find ways to improve student's academic performance, engagement, and reading interest. Participation in this survey is not mandatory and you will not be penalized if you choose not to participate.

Furthermore, there are no risks involved in this study. You are not required to be in this study and may stop your involvement at any time during the process. Please feel free to ask questions at any point in the study. The study is entirely confidential and your data will not be shared with anyone in the school.

If you choose to participate in the STAR reading test, observation, reading interest survey, and interview please follow these steps:

1. Sign your name and write the date on the lines below.
2. Leave the consent form on the corner of your desk.

If you do not choose to participate in this study please follow these steps:

1. Do not sign your name at the bottom of this page.
2. Place the paper on the corner of your desk.

Thank you very much for your time. You have been very helpful.

I, _____, agree to participate in a study about literacy stations. I understand that all my information will be secure and remain confidential. Participation in this study is completely voluntary and I know that I may stop my participation at any time without explanation or penalty.

If you have any questions or concerns, please feel free to contact your teacher.

Thank you,

Researcher from SUNY Fredonia

Appendix B

Parental Permission for a Minor to Participate in Research of the Effects of Literacy Stations

Hello parent/guardian:

Your student has been chosen to voluntarily participate in a research study to determine if Literacy stations are a successful instructional strategy to improve engagement and interest, while also increasing proficiency in important literacy skills for students receiving AIS by collecting data through various instruments. Your child was invited to take part in the research because he or she is a student currently enrolled in Academic Intervention Services. Some parts of this research are required as part of the Academic Intervention Curriculum, but if you choose to not have your student take part in the study, data will not be collected on the student during the study.

If you agree to let your child participate in this research study, the student will take part in the following:

- Pre/post Standardized Test for the Assessment of Reading (STAR)
- Pre/post 10 question reading interest survey
- Observation of engagement during Literacy station instruction
- 5 question interview with me at the conclusion of the study

All portions of the research will take place in the school during normal school hours. Each STAR assessment will take your child about 20-30 minutes to complete. The reading interest survey should take the participants about 5-10 minutes to complete. The five question interview should take no longer than 20 minutes. These parts of the survey are voluntary, and you may choose for your student not to participate if you wish. If you choose to not let you student participate in the study they will still take part in the testing and instruction, because it is part of the academic intervention curriculum, but they will not take part in any of the activities mentioned above.

This study will not only directly benefit your child, but the results will be helpful to other teachers who are trying to find ways to improve student's academic performance, engagement, and reading interest. There are no risks in this study. Your child may answer only those questions he or she wants to, and he or she may stop the entire process at any time.

Confidentiality will be protected throughout this research study. All surveys, test results, engagement data, and transcriptions of the interviews will be shredded after the study is complete. Recordings of the student interviews will be erased.

You have been given a copy of this consent form to keep. Please sign and return one form if you wish to have your child partake. Participation in this research study is voluntary. You may decline to have your child participate in this research study. You also may withdraw your child's participation at any point during the study. Please contact me with any questions you may have.

Child's Name _____

Signature _____ Date _____

If you have any questions or concerns, please feel free to contact me.

Thank you,

Simone M. Klubek

sklubek@forestville.com

Appendix C

Reading Interest Survey

My Feelings About Reading

Name _____ Date _____



YES



SOMETIMES



NO

- | | | | |
|--|-------|-------|-------|
| 1. I like to read | _____ | _____ | _____ |
| 2. I read at home. | _____ | _____ | _____ |
| 3. Reading is hard for me. | _____ | _____ | _____ |
| 4. I like picture books. | _____ | _____ | _____ |
| 5. Reading is fun. | _____ | _____ | _____ |
| 6. I like to read long stories. | _____ | _____ | _____ |
| 7. I like someone to read to me. | _____ | _____ | _____ |
| 8. Reading is boring. | _____ | _____ | _____ |
| 9. I am a good reader. | _____ | _____ | _____ |
| 10. I like the stories we read in
school. | _____ | _____ | _____ |

*Appendix D***Engagement and Interest Interview Questions****Questions regarding student' perception of their engagement during the instruction:**

1. Do you feel that learning through literacy stations helped you stay on task?
2. Do you think that you talked with your friends about social activities more or less when learning through literacy stations?
3. Did you prefer reading silently during the stations or aloud with your peers?
4. Your answers to the "My Feelings about Reading" changed (or did not change). Do you think this was because of the literacy stations instruction?
5. Did you read any additional texts outside of class during this study?

Appendix E

CITI Certificate

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

COMPLETION REPORT - PART 1 OF 2
COURSEWORK REQUIREMENTS*

* NOTE: Scores on this Requirement Report reflect that completions at the time all requirements for the course were met. See it below for details. See separate Transcript Report for more detailed quiz scores, including those on optional & supplemental course elements.

- Name: Shmoe Klibek (ID: 5405263)
- Email: sklibek@medois.edu
- Institution Affiliation: SUNY - College at Fredonia (ID: 273)
- Institution Unit: Curriculum and Instruction
- Phone: 716-400-6439

- Curriculum Group: Human Research
- Course Learner Group: Group 1
- Stage: Stage 1 - Basic Course

- Report ID: 18750304
- Completion Date: 21-Feb-2016
- Expiration Date: 20-Feb-2018
- Minimum Passing: 80
- Reported Score*: 90

REQUIRED AND ELECTIVE MODULES ONLY	DATE COMPLETED	SCORE
Be Informed Report and CITI Course Introduction (ID: 1127)	17-Feb-2016	3.0 (100%)
History and Ethical Principles - SBE (ID: 490)	17-Feb-2016	5.6 (100%)
Dealing Research with Human Subjects - SBE (ID: 491)	17-Feb-2016	4.6 (80%)
The Federal Regulations - SBE (ID: 502)	17-Feb-2016	5.6 (100%)
Assessing Risk - SBE (ID: 503)	17-Feb-2016	4.6 (80%)
Informed Consent - SBE (ID: 504)	17-Feb-2016	5.6 (100%)
Privacy and Confidentiality - SBE (ID: 505)	17-Feb-2016	5.6 (100%)
Research with Prisoners - SBE (ID: 506)	17-Feb-2016	4.6 (80%)
Research with Children - SBE (ID: 507)	21-Feb-2016	5.6 (100%)
Research in Public Elementary and Secondary Schools - SBE (ID: 508)	17-Feb-2016	4.6 (80%)
International Research - SBE (ID: 509)	21-Feb-2016	4.6 (80%)
Internet-Based Research - SBE (ID: 510)	21-Feb-2016	4.6 (80%)
Avoiding Group Harms - U.S. Research Perspectives (ID: 14080)	21-Feb-2016	3.0 (100%)
Vulnerable Subjects - Research Involving Workers/Employees (ID: 483)	21-Feb-2016	4.4 (100%)
Conflicts of Interest in Research Involving Human Subjects (ID: 488)	21-Feb-2016	4.6 (80%)
SUNY Fredonia State College (ID: 587)	21-Feb-2016	No Quiz

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: <https://www.citiprogram.org/verify/25b4838e1-1ce4-4d4d-94c8-c7e3d6974921>

CITI Program
 Email: stppoint@citiprogram.org
 Phone: 888-629-6929
 Web: <https://www.citiprogram.org>

*Appendix F***HSR Approval**

17 February 2017

Simone Klubek
c/o Sovicheth Boum, Ph.D.,
Language Learning and Leadership
College of Education
The State University of New York at Fredonia

Re: Simone Klubek— The Effects of Literature Stations on Literacy Proficiency,
Interest, and Engagement Among Middle School Students Receiving Academic
Intervention Services

Your research project using human subjects has been determined Category 1,
Exempt, under the United States Department of Health and Human Services Code of
Federal Regulations Title 45 Public Welfare, Part 46 Protection of Human Subjects,
46.101, Subpart A (b) (1) and/or (2). This document is your approval and your
study titled "The Effects of Literature Stations on Literacy Proficiency, Interest, and
Engagement Among Middle School Students Receiving Academic Intervention
Services" may proceed as described. Your approval is valid from February 27,
2017 through April 7, 2017.

Thank you for keeping the high standards relating to research and the protection of
human subjects under the auspices of the State University of New York at Fredonia.

Sincerely,

A handwritten signature in blue ink that reads "Judith M. Horowitz".

Judith M. Horowitz, Ph.D.
Associate Provost, Graduate Studies, Sponsored Programs
and Faculty Development
Human Subjects Administrator