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The Impact of Differentiated Learning Activities on Student Engagement and Motivation in the English Language Arts Classroom

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The Impact of Differentiated Learning Activities on Student Engagement and Motivation in the English

Language Arts Classroom

A Qualitative Research Methods Proposal

A Project Presented to the Graduate Faculty of Minnesota State University Moorhead

By

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Dedication:

I would like to dedicate this work to my husband

who has supported this adventure and helped guide

me in the right direction.

Abstract

This 2021 study focused on student motivation and engagement when differentiated instruction was provided. By taking into consideration how each individual student learns, there is an opportunity to create an engaged and motivated student body as they each learn and understand in their own way. The purpose of this research study was to investigate how differentiated learning activities could affect student engagement and motivation. In other words, how does providing students the opportunity to learn in their preferred learning intelligence affect how they interact with the content and complete the work assigned? This study was conducted with two student groups in the 9th English course; one group was provided with differentiated learning activities catered to their learning intelligences and the second group was not provided the differentiated learning options. Students were sorted based on the class period they were assigned at the start of the school year. Through observations, interviews, and surveys, this study was able to examine how students' engagement and motivation was affected by differentiated learning activities and used to guide future curriculum planning. Based on the data collected, there was little impact on student motivation and engagement in the 9th Grade English Language Arts classroom. Students in the differentiated group were motivated to complete their work more frequently than students in the non-differentiated. In terms of engagement, based on the student interviews, students from both groups felt they were motivated and engaged in the work assigned. These results provide us with a deeper understanding of what motivates and engages students in the classroom setting and how educators can better meet their needs.

Keywords: differentiated instruction, student engagement, student motivation, differentiation by product

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CHAPTER 1

INTRODUCTION

Introduction

      As years pass, new research and new methods of teaching are introduced into the world of education. Along with new ways of teaching, research shows there are numerous ways students can learn. As an educator, it is important to grow along with students and learn how to keep them engaged in the content being taught. One way of doing this is to learn how students prefer to learn and create lessons and activities catering to those preferences. Howard Gardner's Theory of Multiple Intelligences was a key theory considered while conducting this study. Gardner originally believed there are seven intelligences or ways for students to learn (Brualdi, 1998) and most recently it is believed there are nine different intelligences or ways students learn best (Sener & Cokcaliskan, 2018). These intelligences consist of the following: verbal-linguistic, logical/mathematical, visual/spatial, musical, bodily/kinesthetic, intrapersonal, interpersonal, naturalistic, and existential (Sener & Cokcaliskan, 2018). This indicates there are multiple ways for students to gather and interpret information.

      By creating lessons and activities based on students' intelligences, teachers can increase student engagement and motivation (Winarti et al., 2019). To increase engagement and motivation in her own classroom, the researcher chose to focus on differentiated instruction by creating differentiated learning activities, resulting in differentiated products, that were catered to students' learning intelligences. There were two groups for this study; one group of students was taught without differentiation incorporated into the learning activities meaning all students completed the same final product. The other grouping of students was provided differentiation options that accommodated their learning intelligences; for example, instead of all students creating a PowerPoint and presenting it to the class, there were differentiated product options for students to choose from. These product options were linked to the different learning intelligences and included products such as presentations, songs, or creating a piece of

art. The researcher explored if there were any difference in motivation and engagement between a classroom with differentiated learning activities and a classroom without differentiated options.

Brief Literature Review

Research has shown students learn in several ways, which also affects student engagement and motivation. Instruction should be differentiated to benefit each individual student. Adjusting teaching methods to accommodate student learning preferences helps to increase student motivation and performance (Malacapay, 2019). There are a few ways to differentiate instruction. One is by considering Howard Gardner's Multiple Intelligences Theory. Gardner's theory currently states there are nine intelligences to consider when creating curriculum (Sener & Cokcaliskan, 2018). It is important to provide students ways to learn that are geared toward their preferred method of learning. Differentiating by considering learning styles is another method to consider. There are six learning styles, and knowing these learning preferences allows for students to build on their strengths and improve their weaknesses (Sener & Cokcaliskan, 2018).

Aside from students and their preferred methods of learning, teachers need instruction and need to have tools available to them to implement differentiated instruction into their classroom. Many teachers intend to differentiate, but struggle with how to incorporate these ideas and learning preferences into their classrooms. Other teachers feel they do not have enough time available to them, so they use it to a low extent (Onyishi & Sefotho, 2020). By providing teachers with training and time, teachers may become more comfortable with implementing differentiated instruction and would have a positive impact on student learning (Bogen et al., 2019).

There are multiple ways for teachers to differentiate instruction. This can be done by learning preference, academic ability, content, process, or product. Learning groups, however they are determined, should be flexible, and teachers need to ensure they vary how students are grouped (Heacox, 2012). When grouping students based on their learning preferences, there are numerous surveys and tests that can be completed to determine both intelligences and learning styles. In order to create flexible learning groups based on academic ability, teachers need to test the students' level of knowledge (Richards & Omdal,

2007). A teacher can also differ the content, process, and the product. Differing the material students access in order to learn is differentiation by content (Joseph et al., 2013). Tiering the complexity level for activities is differentiating by process, and finally, the assessments students complete to demonstrate their knowledge and skills is another area a teacher can differentiate in their classroom, and that is differentiating by product (Joseph et al., 2013).

Teachers are tasked with keeping students engaged and motivated when learning. Keeping this in mind when creating curriculum is vital and there is evidence that focusing on how students prefer to learn increases their motivation and engagement regardless of the content (Winarti et al., 2019). Implementing multiple intelligence-based learning strategies can increase student achievement (Winarti et al., 2019).

Statement of the Problem

Student motivation and engagement is a difficult area for educators to work through in a classroom. The research problem was focused on measuring student motivation and engagement when differentiated learning activities were incorporated into the classroom. In her own classroom, the researcher noticed students were not always actively engaged in the content. Instead, students seemed to go through the motions of completing the work but didn't necessarily enjoy it. Because of this, the researcher wanted to find the best way to provide students with opportunities to be engaged with the content and motivated to complete work. For the researcher to consider students engaged, she looked for enthusiasm while completing the task assigned, attentiveness during lessons and work time, and took into consideration if students worked efficiently on the assigned work.

Using two class periods of 9th grade students, the researcher had one class period that was provided with opportunities to differentiate learning activities by product. This was done by surveying students to determine which of Howard Gardner's nine intelligences were present in the classroom. Then activities were created to benefit those intelligences and provide students with options that were most beneficial for their own learning. For example, if a group of students were found to have musical intelligence, there would be an activity option where students created a song to demonstrate their knowledge of the content taught. The second group of students was taught without differentiated

activities, meaning they all completed the same final product. There were no options available to the second group. Students from both groups were taught in the same mini lesson style and provided the same instructional information, but the first group of students were given the option to pick which final product they would use to demonstrate what they learned, while the second group only had one option. The researcher observed and noted student engagement and motivation using a variety of data collection tools during and after the work time provided in both sections of 9th grade students.

Purpose of the Study

Differentiated learning is a concept that has been researched and implemented in classrooms over time. This style of teaching and learning is beneficial for students because it caters to their needs and allows for them to learn in their own way. When differentiating the product students used to demonstrate their knowledge, the researcher observed the two student groups for this study and took notes regarding attentiveness and efficient use of time. These were used to determine how motivated and engaged the students were while completing the work. The researcher also provided students with a survey asking questions regarding their thoughts on the activities and their own self-assessment of their motivation and engagement. Observations and surveys from students were compared in both groups to determine if there was an effect on student motivation and engagement when differentiated learning activities were implemented. This study was conducted to help provide direction in curriculum planning in the future and keep students engaged in the content being taught in the researcher's classroom.

Research Question

What is the impact of differentiating learning activities by product on student engagement and motivation in the English Language Arts classroom?

Definition of Variables. The following are the variables of study:

Variable A: The student motivation and engagement were the dependent variable. Student motivation and engagement was measured through observations, interviews and surveys. This variable depended on the type of learning activities provided.

Variable B: The learning activities that were provided to students was the independent variable. One group of students was provided differentiated activities, while the other group of students was not. Whether or not students received options affected the outcome of how motivated and engaged students were when working with the content.

Significance of the Study

This study was important to help students understand how they learn best. By allowing students an opportunity to discover their learning intelligences they were equipped to choose options where they would be most successful. It also allowed them to challenge themselves by choosing activities that would help strengthen areas considered weak when it comes to their learning intelligence. This study allowed for students to have choice in the classroom and to stay more engaged in the content while learning.

This study was also important for the researcher because it showed how she can differ her teaching methods to improve herself as an educator and to help her students. By learning how differentiated instruction affected students, the researcher can focus on improving her teaching activities to benefit students.

Research Ethics

Permission and IRB Approval

In order to conduct this study, the researcher has sought MSUM's Institutional Review Board (IRB) approval to ensure the ethical conduct of research involving human subjects (Mills & Gay, 2019). Likewise, authorization to conduct this study was sought from the school district where the research project took place (see Appendices A and B).

Informed Consent

Protection of human subjects participating in research was assured. Participant minors were informed of the purpose of the study via the Method of Assent (see Appendix C) that the researcher read to participants before the beginning of the study. Participants were aware that this study was conducted as part of the researcher's master's degree program and that it benefited her teaching practice. Informed consent means that the parents of participants have been fully informed of the purpose and procedures of

the study for which consent was sought and that parents understood and agree, in writing, to their child's participation in the study (Mills, 2018). Confidentiality was protected through the use of pseudonyms (e.g., Student 1) without the utilization of any identifying information. The choice to participate or withdraw at any time was outlined both verbally and in writing.

Limitations

For this study, there were a few potential limitations. The first was the sample size. Due to the researcher teaching in a rural school in North Dakota, the sample size was limited to the students she had access to. Another limitation was students choosing activities based on their peers rather than the activity that would allow them to practice their learning preference. Finally, absences impacted the results for this study. If a student was absent, they were not provided the same instruction time as their peers and instead learned material on their own.

Conclusions

Teachers look for ways to increase student motivation and engagement in the classroom. Differentiated instruction provides an opportunity for teachers to consider student learning preferences when creating curriculum and potentially allow for students to be more active in their learning. There are numerous ways to differentiate instruction whether it is through the way students are grouped or through content, process, and product. This study differentiated by product, which allowed students to choose how they wanted to demonstrate their knowledge. The options provided were catered to the different learning intelligences of the students. In the following chapter, the researcher explains how different students learn, what teachers need to implement differentiated instruction, and how differentiating instruction in the classroom is beneficial for students.

CHAPTER 2

LITERATURE REVIEW

Introduction

When considering the individual student, educators know each individual learns and processes in unique ways. What works for one student may not work or be beneficial for another. Ismajli and Imami-Morina (2018) note that "all learners do not make progress at the same speed rate, or with the same learning techniques, with the same behavior, or interests" (p. 208). Taking this idea that everyone learns at different rates and in different ways into consideration, it is important to think about the multiple intelligences or learning styles when creating curriculum, teaching, and differentiating instruction. Teachers can increase student engagement and motivation by forming lessons and activities based on students' intelligences or learning styles (Winarti et al., 2019). Varying the way students learn enriches the curriculum and is beneficial for students. One form of variation could be by intelligences and another form is through the learning styles. Because of the variety of intelligences, not all students benefit from a one-size-fits all teaching or style of activity. It is important to design curriculum to benefit the strengths of each student and allow an opportunity for students to strengthen their weaker areas of intelligence (Sener & Cokcaliskan, 2018).

The purpose of this study was to determine if students are more engaged and motivated when activities are catered to their unique way of learning. To become more knowledgeable regarding differentiated instruction, the researcher found information regarding what differentiated instruction is, and the different ways teachers can differentiate instruction. Modified activities regarding learning preferences can be done through content, process, or product. Teachers can also plan for and facilitate differentiated instruction by learning preference. Another aspect researched was how teachers intend to differentiate but may struggle to implement this differentiation. The benefits for students when differentiated instruction is implemented was researched as well as how differentiated instruction affects student engagement and motivation. These topics were important to understand prior to the researcher beginning their study.

Body of the Review

Context

Student engagement and motivation are key factors to a student's success. To assist with motivating students, instruction needs to be differentiated to benefit each student and the way they learn. By updating teaching methods to fit learning styles, student motivation increases, and performance is improved (Malacapay, 2019). Differentiated instruction in a classroom is when varying formats are available to provide students "different avenues to acquiring content, to processing or making sense of ideas, and to developing products so that each student can learn effectively" (Tomlinson, 2001, p. 1). By differentiating instruction, all students are accommodated and there are various ways provided to allow students to learn and succeed in school. When students know and understand how they learn, their motivation to learn is improved (Allcock & Hulme, 2010).

One way to differentiate instruction is to consider multiple intelligences. Howard Gardner originally established seven intelligences students used to solve problems: logical-mathematical, linguistic, spatial, musical, bodily-kinesthetic, and the personal intelligences (Brualdi, 1998). According to recent research, there are now nine intelligences in the Theory of Multiple Intelligences: verbal-linguistic, logical/mathematical, visual/spatial, musical, bodily/kinesthetic, intrapersonal, interpersonal, naturalistic, and existential (Sener & Cokcaliskan, 2018). Teachers' curriculum needs to engage all or most intelligences when structuring their materials (Brualdi, 1998) and learning materials need to be differentiated. This will "[enrich] learning experience" and "increase learners' personal motivation" (Weller, 1996 as cited in Yavich & Rotnitksy, 2020, p. 107). It is important to provide students with opportunities to learn through their own intelligence or learning preference.

Another way to differentiate instruction is to consider learning styles. Sener and Cokcaliskan (2018) cited six main learning styles: visual, auditory, kinesthetic, tactile, individual, and group. When students know their learning style, they can learn from their strengths and build on their weaknesses (Sener & Cokcaliskan, 2018). The strategies used to help students learn can be restricted depending on the

teaching style; these instructional strategies are what guides students to "pursue the act of learning" (Smith & Renzulli, 1984, p. 45) and learning styles need to be considered.

What Teachers Need to Differentiate Instruction

Teachers are responsible for implementing differentiated instruction in their own classrooms. While many teachers intend to differentiate their classrooms, there are many who struggle with how to implement the strategies. Some teachers feel there is not ample time to use differentiated instructional strategies, so they use it to a low extent (Onyishi & Sefotho, 2020). According to a study completed in Maryland, there is a significant difference between the desire to implement differentiated instruction and actual classroom practices (Hersi & Bal, 2021). This study then looked at previous studies and discovered these results are similar and not just limited to one "county, school district, or town" (Hersi & Bal, 2021, p. 67). This gap provides evidence that professional development in differentiated instruction is beneficial for teachers. If teachers were comfortable with differentiation, it would have a positive impact on teachers meaning they would implement different forms of differentiation (Bogen et al., 2019) This would help close the gap between the desire to implement in the classroom, and classrooms that actually implemented differentiated instruction.

Along with teachers' desire to use differentiated instruction strategies, students were found to prefer learning in a format that meets their needs. Parents were also found to support the idea of learning being done in ways that accommodated their child's strengths (Ismajli & Imami-Morina, 2018). Based on this information, teachers have the support necessary to implement differentiated instruction, but in order to feel more comfortable using the strategies, they need more professional development.

Differentiating and Grouping Students.

Because students learn in a variety of ways, matching how a student learns with teaching strategies has shown to have "a positive impact on student achievement, interest, and/or motivation" (Smith & Renzulli, 1984, p. 49). There are multiple ways to group students in flexible learning groups. In order to differentiate and group students by learning preference, teachers help students identify their learning strengths and weaknesses. There are numerous ways to discover learning preferences available

for teachers to use (Smith & Renzulli, 1984) such as the multiple intelligences test, a modality assessment, and basic questionnaires can be used to determine how a student learns best. When teachers differentiate based on interests, students are motivated to learn and connect with what is being taught. They are also provided with opportunities that allow for them to learn in a manner that is natural and efficient (Joseph et al., 2013).

Another way of grouping students according to Diane Heacox (2012) is by performance or ability. This means students took a pretest and based on the scores, they would then be grouped by their grades (Heacox, 2012). Based on the study conducted by Allcock and Hulme (2010), "Students differentiated by ability experienced more variety as they were grouped according to aptitude for specific skills, which differed by task" (p. 76). It is important to limit the number of differentiated levels and ensure all learners have "respectful work" (Richards & Omdal, 2007, p. 426). Leveling students by high performing, baseline, and low-performing students requires a teacher to test the level of knowledge "before, during, and after the instructional period" (Richards & Omdal, 2007, p. 428) to ensure students are placed in the proper flexible learning groups. This also helps the teacher to target skills necessary to ensure success for all students.

Aside from the grouping of students, differentiation takes placed by differentiating the content, the process, and the product. When a teacher modifies how students access the material or learn, that is differentiation by content (Joseph et al., 2013). Differentiating by content means one student who struggles may focus on one resource while a gifted learner would be provided with opportunities for deeper analysis (Tapper & Horsley, 2017). When differentiating by process, teachers tier by level of complexity; they also provide various ways for students to work and create depending on their preferred way of learning (Joseph et al., 2013). These are activities that allow students to understand the topic, and they are varied in how students explore the content. Lastly, product differentiation is focused on assessments students complete to demonstrate their knowledge and skills after instruction (Joseph et al., 2013).

Student Engagement and Motivation.

Student engagement can be defined as how interested students are in their classes and their learning. Successful instruction is indicated by how connected students appear to be in what they are learning (Groccia, 2018). Students who are engaged and motivated in their learning tend to appear as though they are concentrating, are more involved in their learning, and appear to demonstrate positive emotions and effort (Groccia, 2018). Student motivation focuses on how students work to complete the task at hand and check their own progress; students self-assess to know when they are learning and how much effort they need to use to complete the task assigned (McMillan & Hearn, 2008).

In terms of student motivation and engagement, educators are tasked with satisfying the needs of all learners (Cimermanová, 2018). With a decrease in student attention and engagement, it is necessary to implement interventions and various teaching practices to improve student engagement and provide consistent motivation to students (Halif et al., 2020). Varying levels of student achievement creates the issue in which gifted students are not considered as the focus is on low-ability students. Because of this, "gifted learners are not being involved in meaningful school experiences that would stimulate achievement" (Rayneri et al., 2003, p. 197). Many gifted students are motivated but considered underachieving because of the instructional approaches used in the classroom (Rayneri et al., 2003). There is evidence that applying the Multiple Intelligence Theory learning strategies in school have improved learning outcomes. Implementing these strategies has also improved student "interest, motivation, and emotional intelligence" (Winarti et al., 2019, p. 124). Results from a study completed in a science classroom showed that implementing multiple intelligence-based learning strategies improved student achievement (Winarti et al., 2019).

Theoretical Framework

One educational theory that supports differentiated instruction is the constructivist learning theory. Constructivism is an "approach to education…in which learners actively create, interpret, and reorganize knowledge in individual ways" (Shah, 2019, p. 5). Knowledge is explored and created by the learner through exploration and discussion. A teacher's role under the constructivist theory is one of a

facilitator; they are to "spur students' enthusiasm, motivation, and independence so that they are actively involved in the learning process" (Ndia et al., 2020, p. 287). Teachers help students "construct knowledge rather than reproduce a series of facts" (Shah, 2019, p. 5). The student is in the center of education and learning. Because of this, multiple intelligence theory is another theory that supports differentiated instruction (Karaduman & Cihan, 2018). Using different instructional methods provides for each student and allows students to construct knowledge on their own with a teacher as a guide.

While Gardner's theory is widely accepted by educators, the scientific community is more skeptical. Essentially, the abilities or intelligences may not be separate and instead my just be considered talents instead (Woolfolk, 2019). Gardner's response is that "intelligences are not the same as learning styles" (Woolfolk, 2019, p. 126). Overall, there are multiple perspectives to Gardner's multiple intelligences theory, but the theory does allow as an option for differentiation based on how students prefer to learn.

Research Question

What is the impact of differentiating learning activities by product on student engagement and motivation in the English Language Arts classroom?

Conclusions

This chapter reviewed the literature and studies that support differentiated instruction in the classroom. There are many ways to differentiate instruction through content, process, and product as well as numerous ways to group students by ability or learning preference. These factors are supported by the constructivist theory because students are placed at the center of learning. Differentiated instruction is a way to increase student engagement and motivation in the classroom as they learn. Knowing this information, this study aimed to determine if students were more engaged when lessons and instruction provided were suited to their specific style of learning. The next chapter will detail the method for which this action research will be conducted.

CHAPTER 3

METHODS

Introduction

This study focused on student engagement and motivation when differentiated instruction in the form of learning activities is introduced in the classroom. During a short story unit, the researcher divided students in two groups; one group was provided activities with a focus on differentiated instruction and given the choice to pick the product they would use to demonstrate their knowledge. The second group did not have differentiated activities and all students completed the same learning activities. Research has shown students learn in different ways and classroom instruction should support the different learning intelligences to help keep students engaged. Implementing differentiated learning activities based on students' multiple intelligences helped the researcher determine how differentiated activities engaged students and motivated them to complete the work. In this chapter, the researcher will discuss how the research was conducted and the data was analyzed and apply that knowledge to future curriculum planning.

Research Question

What is the impact of differentiating learning activities by product on student engagement and motivation in the English Language Arts classroom?

Research Design

This study was conducted using a qualitative research design. Qualitative research design uses "narrative descriptive approaches to data collection to understand the way things are and what the research means from the perspectives of the participants in the study" (Mills, 2018, p. 6). Qualitative research gathers data through observations and interviews, both of which were used to collect information from students during this study. A qualitative approach decided as the best choice for this study because students were interviewed and surveyed to gather their thoughts on the learning activities provided. This research study was also conducted using an action research design. This study was conducted by the researcher, a teacher, for herself and was conducted within the teacher/learning environment; it focused

on gathering information on how well students learn (Mills, 2018, p. 10). Data analysis from this study was used to guide the researcher in making decisions within her own classroom.

Setting

This study took place in a rural high school. The school district is composed of six rural communities and ranks in the top 20 school districts in North Dakota based off student enrollment (Hall, 2021). The community consists of approximately 3,793 members and prides themselves on farming and their agricultural contribution as well as their accomplishments in athletics.

There are approximately 837 students enrolled in this school district and 349 in the Junior High/High School building. The school community demographic profile consists of White (96%), Black or African American (0-1%), Hispanic (2%), two and or more races (1%). The school has 12% of students receiving special education services and on individual education plans (IEPs, Itd, n.d.). At the high school level, 7.3% of students receive free or reduced lunch. Parents at the school are involved and have a positive involvement.

The high school ran a schedule with four block schedule days (Monday, Tuesday, Thursday, and Friday) and one day of seven class periods (Wednesday). With this schedule, the researcher saw the students at least twice a week, maximum of three times.

Participants

The study's population was made up of 31 students. Students ranged between 14-16 years of age and were in 9th grade for the 2020-20221 school year. The sample population was made up of 11 females (35%) and 20 males (65%). The ethnic breakdown of these students is: White (94%), Black or African American (6%). There is 1 student on a 504 plan, and 1 student on and IEP (3%).

Sampling. The study sample was comprised of 31 students in 9th grade English. It is convenience sampling because the researcher had easy access to these students. They were the students readily available in the researcher's classes. Utilizing the researcher's own students allowed the researcher to use the results of the study to improve her own teaching practice. The students were divided in two groups to

determine if differentiated learning activities increased student motivation and engagement. Observations, interviews with students, and surveys were used to assess the motivation and engagement of each student.

Instrumentation

Student engagement and motivation was documented through researcher observations, interviews between researcher and student, and surveys completed by students at the end of the unit. In order to be consistent between the two groups, the same questions were asked during interviews and on the final survey in both student groups. The same engagement and motivation categories were considered between the two groups for the researcher's observations and students were rated in each category using a scale of 1-5 (see Appendix D). These observations were recorded on a sheet of paper with student names listed. Interviews were conducted between the researcher and the student, and the teacher audio recorded the oral responses on the computer (see Appendix E). Later the interview responses were transcribed onto a document. The researcher kept track of students who were interviewed so students were not interviewed twice. Surveys were given at the end of the unit of study and completed on Google Forms. They were formatted as open-ended questions and the final question required students to rate the unit on a scale of 1-10 in comparison to their other learning experiences (see Appendix F).

Data Collection. This study was completed using qualitative data. To assess student engagement and motivation, the researcher acted as an active participant observer while lessons were taught (Mills, 2018). During these lessons, notes were taken regarding student interaction with the material taught. While observing, the researcher observed the outcomes of her teaching as students completed the learning activities. The researcher also acted as a passive observer which meant she focused on the data collection during the work time (Mills, 2018). Data was collected in numerous ways by using observations, interviews, and a final survey. These forms of collecting data were used in both groups of students, those provided with differentiated learning activities, and those who were not.

Data Analysis. After all data was collected, responses from the student group provided with differentiation were compared to the responses from the group of students who were not provided differentiation. For observations, students with high ratings were categorized as actively engaged,

meaning they were interacting with the content. For students who rated a 3, they were placed in the medium section indicating that for the most part, they were participating and engaged, but at times were off task. Students with a majority of low ratings were categorized as not engaged. The category of completing work was used to determine student motivation. If students completed the work, and it was done efficiently and effectively, they were considered motivated. Students with incomplete work were categorized as unmotivated unless there was discussion with the researcher, and it was determined it was motivation and not a lack of understanding that prevented the work from being completed. Those with incomplete work were categorized as unmotivated. The responses provided during the student interviews were categorized as positive or negative. These responses helped the researcher determine if the content was positively accepted by students or if they were not interested in the content. Student responses throughout the unit assisted the researcher throughout the unit of study and allowed for a preview of how students felt about the learning activities provided. Finally, the final survey was used to gather students' thoughts regarding the activities they participated in and whether they felt engaged and motivated. Student responses were sorted into positive and negative categories. Student responses gathered allowed the researcher to see how students felt about the activities and the choices provided to them.

All collection points were analyzed and used to calculate the percentage of students in each instruction group who answered positively or negatively in the observations and gathered information. The comparison of this data was used to determine if student motivation and engagement was affected by differentiation in learning activities.

Research Question and System Alignment

The table below provides a description of the alignment between the study Research Question and the methods used in this study to ensure that all variables of study have been accounted for adequately.

Table 3.1

Research Question Alignment

Research Question	Variables	Design	Instrument	Validity & Reliability	Technique (e.g., interview)	Source

How does differentiated instruction affect student engagement and motivation?	DV: Student engagement and motivation IV: Group arrangements (differentiated and not differentiated)	Qualitative Design And Action Research Design	DV: Interviews, surveys, and researcher observations (same questions, number of questions, and types of questions) IV: Group arrangements (either differentiated activities or not differentiated were noted on the interviews, surveys, and observations)	For the purpose of this study, students remained in the same group for the entirety of the study. Interviews, observations, and the final survey were used in both groups of students to retrieve the most data possible.	Interviews between the students and the researcher were used to gather information regarding student thoughts during the study for students in the two groups. Surveys were collected at the end of the study to determine if students felt motivated and engaged in the content. Observations were noted by the researcher with equal categories and a scale of 1-5 was used to rate each student during work time.	9th grade English students Sample size: Approximately 31 students

Procedures

      This study was completed at the beginning of the school year with observations noted on days

students were in the classroom and assigned a learning activity. Students were assigned to class periods

for English; one group of students was provided differentiated learning activities by product and the

second group of students was not provided differentiation. To begin the study, both groups were taught a

mini lesson focusing on Howard Gardner's nine intelligences. After the mini lesson, both study groups took two surveys taken from *Differentiating Instruction in the Regular Classroom* (Heacox, 2012). The first survey provided nine different lists of projects, presentations, and performances. Students went through and circled the activities they would enjoy doing to show what they learned. Each list offered activities based on the learning intelligences and the activities circled helped determine which intelligences were preferred by each student. The second survey was a checklist also found in Heacox's text. This checklist was completed by students checking which items accurately describe them. Again, each item is specifically related to an intelligence. Both the activity survey and the checklist were used to determine intelligences present in the classroom. After the intelligences were found and documented, the researcher continued with the English Language Arts curriculum. These intelligences would be referenced later during student interviews and in the final survey. Students will be asked if they feel the activities presented fit in with their learning preferences, and if they chose their activities based on this information.

The unit of study involved learning and reviewing basic literary elements such as plot, setting, point of view, and some figurative language. The unit also involved reading short stories related to the literary elements. Students in each grouping were provided the same mini lesson introducing the literary element to be studied which took approximately twenty minutes. After the literary element was introduced, students read the short story assigned. The short stories were read in a variety of ways, either whole group, partner/small group, or individually; however, both groups of students completed the short story in the same way.

After reading the short stories, a learning activity was assigned to both groups of students. One group was provided with differentiated learning activities catering to the some of the intelligences present in the classroom. These students were able to choose an activity aligning with their intelligence to create a final project that demonstrated their knowledge of the literary element studied and the short story assigned with it. In the student group not provided with differentiated learning activities, all students completed the same activity assigned by the researcher.

As the activities were completed, the researcher conducted interviews with students at random. The researcher ensured students were not interviewed more than once during the five-week time period. Interviews allowed the researcher to understand the thoughts of the students as they worked and determine if students were engaged based on their responses. During the work time, students were observed and rated on their engagement and motivation using the observation categories found in Appendix D. At the end of the five-week period, students completed the survey and answers were compiled and analyzed to determine how differentiated learning activities impacted student engagement and motivation. Interview questions, observation scales and categories, and the final survey can be found in Appendices D, E, and F.

Ethical Considerations

Student learning and consent was important and a top priority during this study. Parental consent and student consent were required, and student identities were kept confidential. Interviews conducted helped ensure student learning was taking place and to gather information on how students felt toward the content and instruction activities. Research supports students learning through different methods, so the possibility of harming students could come about in the form of one group of students not being provided differentiation. The researcher checked in with students to ensure learning was taking place.

Conclusions

This chapter discussed how the researcher collected and analyzed the data. There were specific questions asked related to student engagement and motivation as well as the activities that were provided during the study. There were three points of data collection used to gather information from the students and gain insight from both the student and researcher's point of view.

Chapter 4

DATA ANALYSIS AND INTERPRETATION

Educators know that what works for one student may not work or be beneficial for another. Ismajli and Imami-Morina (2018) noted that learners progress at different rates and are not all successful with the same learning techniques. Educators take this into consideration and create lessons and activities that cater to individual learning preferences and abilities. By forming lessons and activities based on students' intelligences or learning styles, teachers can increase student engagement and motivation (Winarti et al., 2019). This variation of curriculum is beneficial for students, meaning that it is important to design curriculum focused on benefiting the strengths of each student and also allowing opportunities to grow in their weaker areas of intelligence (Sener & Cokcaliskan, 2018). Student motivation and engagement is a focus for educators in the classroom. The research problem focused on measuring student motivation and engagement when differentiated learning activities were incorporated into the classroom. The researcher noted that in her own classroom, students tended to go through the motions of completing the work versus fully engaging in the work and the material taught. Knowing this, the researcher wanted to find a way to increase student motivation and engagement in her English Language Arts classroom. This led to teaching students about Howard Gardner's Multiple Intelligence Theory and guiding students in finding their own areas of strengths and weaknesses, and how those strengths could help them with learning material in the classroom.

Data Collection

Data was collected in a qualitative form for this study. Student engagement and motivation was documented through teacher observations, interviews between researcher and student, and surveys completed by students at the end of the unit of study. The teacher acted as an active participant observer while lessons were taught (Mills, 2018). Observations were made regarding student interaction with the mini lessons and material taught. The researcher also acted as a passive observer, meaning she focused on the data collection during work time (Mills, 2018). Student thoughts were gathered through the interviews

with the researcher and in the final survey completed individually by the students. Data was collected from both groups of students, those provided with differentiated learning activities and those who were not.

During the study, both class periods and student groups were provided information through direct instruction regarding Howard Gardner's multiple intelligence theory. Students completed two intelligence surveys to guide them in discovering their individual intelligences. After discovering their areas of strengths and weaknesses, the researcher moved into the English curriculum portion and taught mini lessons focusing on literary elements. Short stories relating to the elements taught were read. Both groups received instruction and read the stories in the same format. During this instruction time, student engagement was noted, and the researcher used the observation scale to rate each student.

After instruction, one class period was provided differentiated learning activities catered to learning preferences present in the class while the second class period was only provided with one activity to complete. For example, when studying plot structure and conflict, students in the differentiated group were provided the options to write a different ending for the short story, sketch the plot diagram, create a rap discussing plot structure, or create a graphic organizer focusing on the type of conflict that was demonstrated. The non-differentiated group was assigned to write an alternate ending for the short story.

When symbolism was studied, the differentiated group was given the option to choose between creating a Frayer Model diagram for the word symbolism or for a symbol within the story, designing a shield that symbolizes them and then explain the symbols, creating a flag with a new symbol for our school, or analyzing the symbols using a chart and telling what they represent. In the non-differentiated group, they were assigned to analyze the symbols in the story and explain what they represent.

Finally, to complete the final short story project, students in the differentiated group chose if they wanted to work individually or collaboratively. Individually, they chose three activities to complete to equal the same work and number of points as the collaborative choices. They could create timelines, collages, or summaries relating to the short stories, create a graphic organizer focusing on the literary elements we learned about in class, sketch a character from the stories, or write a letter from a character's

point of view. The collaborative work options were to create a board game using one short story including the setting, characters, and 15 plot points as moves within the game. The other option was to create a review poster describing literary elements, providing evidence and quotes from the story, and a summary of the short story.

As students worked, the researcher observed student engagement and motivation. A rating scale of 1 to 5 was used to note if students were actively working on the task and if they remained on topic. These categories filtered into the engagement portion being studied. Completed work was also noted and this factored into whether students were motivated by the activities provided. If students did not complete work, the researcher checked in with individual students to ensure students were not struggling with the concepts being studied rather than being unmotivated to complete the work.

Aside from the observations noted during work time, interviews were conducted between the students and the researcher. Students were interviewed individually and in a quiet place while the learning activities were completed (see Appendix D). These interview questions were used to determine student thoughts on their own engagement in the lesson and materials presented. Student answers were gathered and sorted into positive or negative responses. These responses helped the researcher find similar themes or ideas between students regarding engagement in the learning activities.

Finally, at the end of the unit students completed a final survey (see Appendix F). This survey focused on student's individual thoughts on their engagement and motivation as well as if they felt their learning preferences were provided for in the activities provided. Again, these responses were sorted into positive and negative responses and similar themes were grouped together.

Results

RQ 1: What is the impact of differentiating learning activities by product on student engagement and motivation in the English Language Arts classroom?

There were two 9th Grade English Language Arts classrooms that were observed, interviewed, and surveyed regarding engagement and motivation. Students in the fourth period English were provided non-differentiated activities to complete to demonstrate their knowledge. In the seventh period English,

students were provided with differentiated activities to complete to demonstrate their knowledge. Fourth period had 14 students in the class period and seventh period had 17 students. Students were observed in each class period during instruction and work time. Students were randomly interviewed during the activity work time, and at the end of the study, students completed a survey regarding multiple intelligences, motivation, and engagement during the short story unit.

The first set of data that was collected was the teacher observations of students during the instruction and work time for Activity #1. For the non-differentiated group during Activity #1, 100% rated high for being attentive during instruction and 100% completed their work by the due date. The observation data for the differentiated group during Activity #1 showed 63% rated high and 38% rated medium for being attentive during instruction. In the Completed Work category, 76% completed work by the due date and 24% did not complete the work by the due date. This data was presented by rounding percentages to the nearest hundred. Due to this rounding, percentages in the On Topic During Discussion category for the differentiated group equaled 101%. The percentages by non-differentiated and differentiated grouping and observation categories can be seen in Figure 1.

Figure 1

Activity #1 Observations
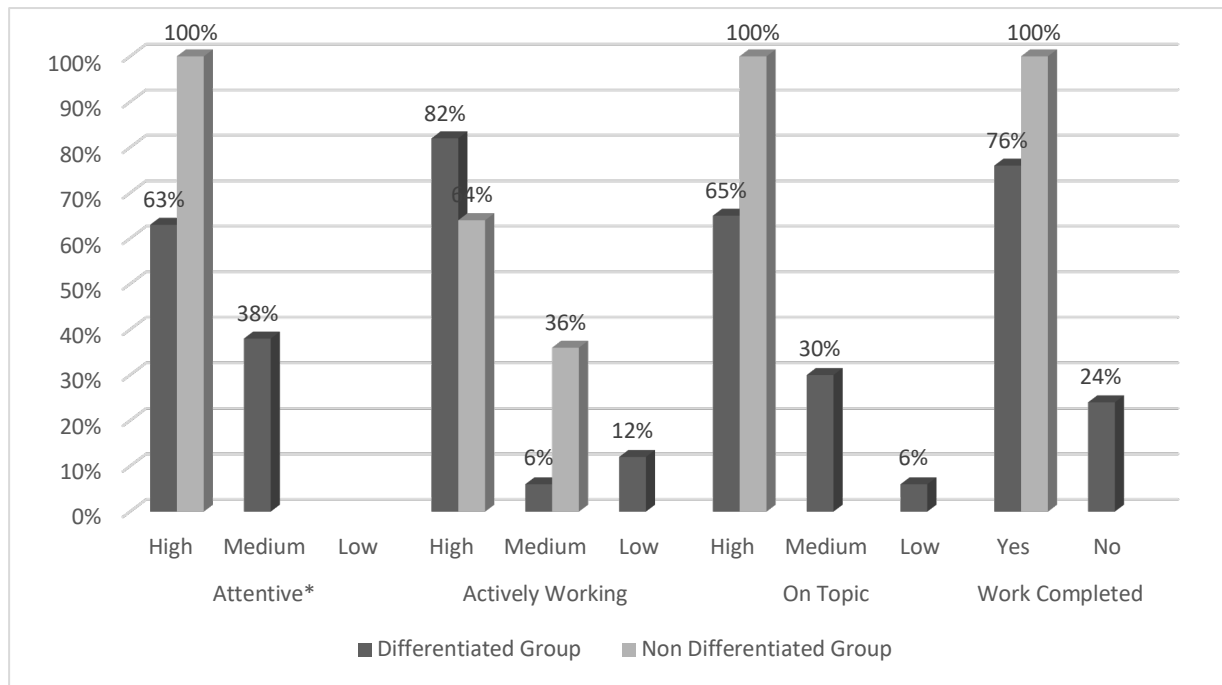
Note. This figure represents teacher observations of each grouping of students. The differentiated group, represented in dark gray included 17 students observed. The non-differentiated group, represented in gray, included 14 students observed.
*The Attentive category for the differentiated group of students reflects 16 students observed due to student absence.

The second set of data collected was the teacher's observations of students during instruction and work time for Activity #2. For the non-differentiated group during Activity #2, 100% rated high for being attentive during instruction and 100% of students completed their work by the due date. The observation data for the differentiated group during Activity #2 showed 71% rated high and 29% rated medium for being attentive during instruction. In the differentiated group, 65% completed work by the due date and 35% did not complete the work by the due date. Percentages were rounded to the nearest hundred. Rounding caused the Actively Working category for the non-differentiated group of students to equal 99%. The percentages by grouping and category can be seen in Figure 2.

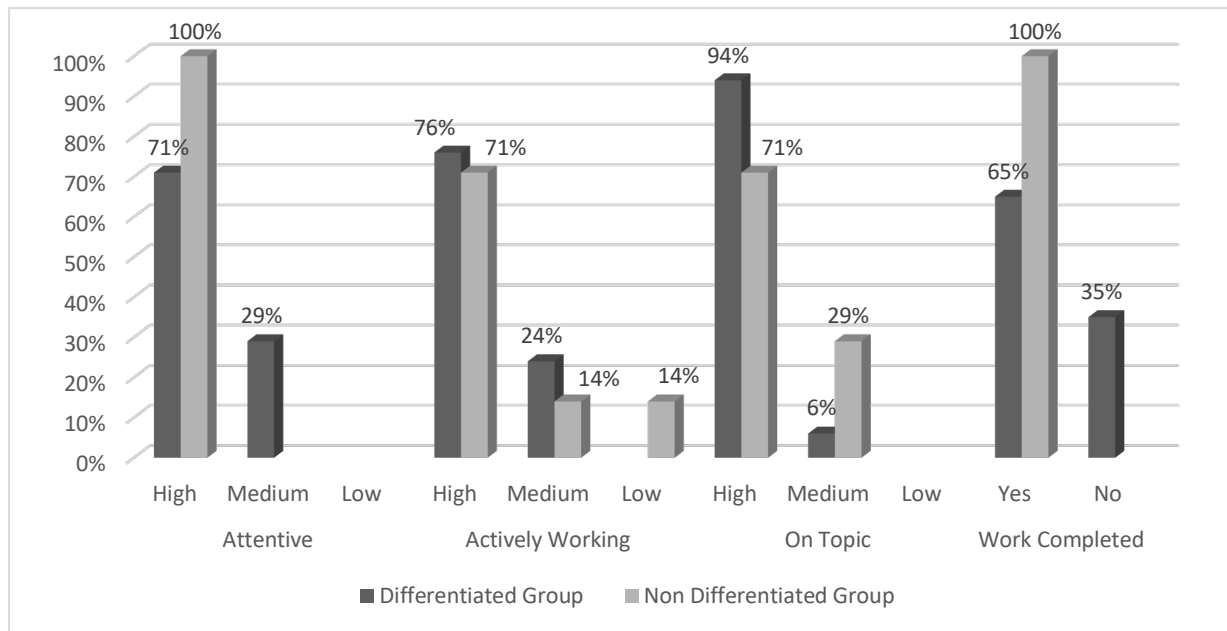**Figure 2**

Activity #2 Observations

Note. This figure represents teacher observations of each grouping of students. The differentiated group, represented in dark gray included 17 students observed. The non-differentiated group, represented in gray, included 14 students observed.

The third set of data collected was the teacher's observations of students during instruction and work time for Activity #3. For the non-differentiated group during Activity #3, 100% rated high for being attentive during instruction. In the non-differentiated group, 100% completed their work by the due date. The observation data for the differentiated group during Activity #3 showed 100% rated high in the attentive during instruction category while 59% completed work by the due date and 41% did not complete the work by the due date. Due to rounding percentages to the nearest hundred, the Actively Working category for the differentiated group equaled 101%. The percentages by grouping and category can be seen in Figure 3.
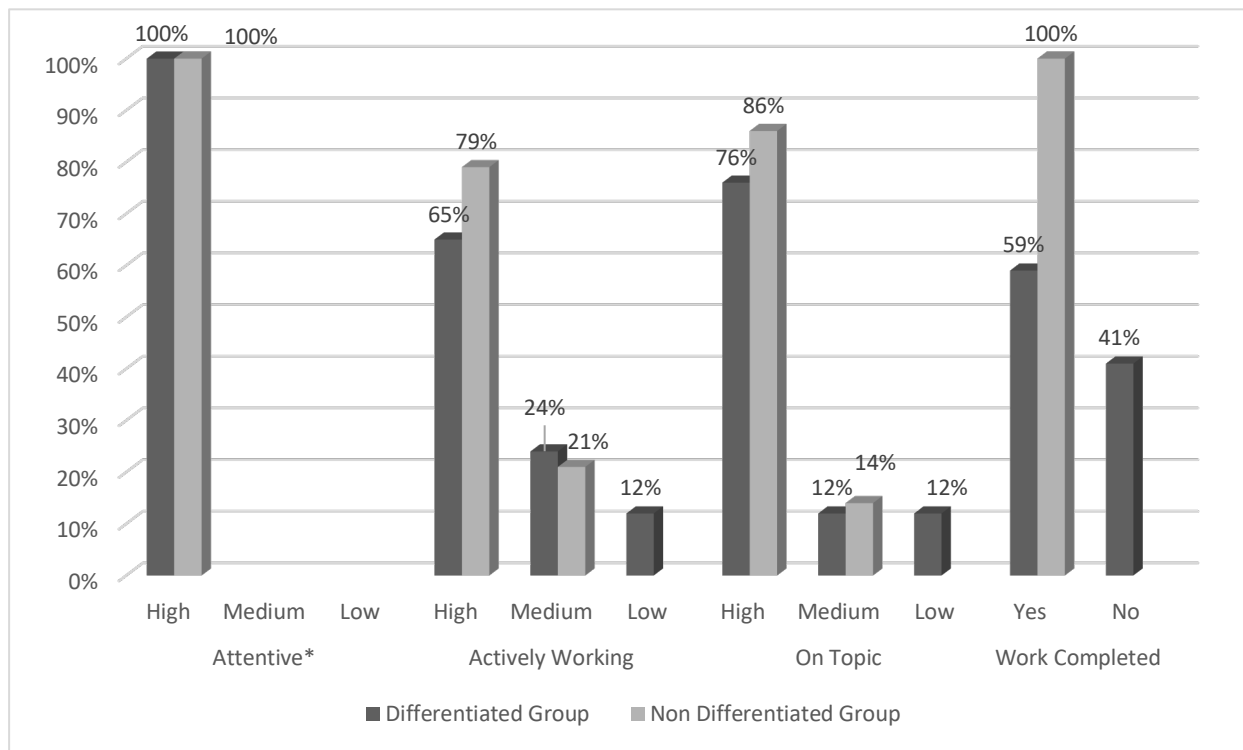
Figure 3

Activity #3 Observations

Note. This figure represents teacher observations of each grouping of students. The differentiated group, represented in dark gray included 17 students observed. The non-differentiated group, represented in gray, included 14 students observed.

*The Attentive category for the differentiated group of students reflects 16 students observed due to student absence.

The third set of data observed were the student's interview responses with individual questions that pertained to students' opinions on their enjoyment, participation, mastering of skills taught, and creativity (see Appendix D). During student work time, the researcher interviewed students focusing on their thoughts and reflections regarding the activities being completed. Data was analyzed and responses were categorized as positive or negative. Student responses are represented by percentages in Figure 4.

Figure 4

Student Interview Responses
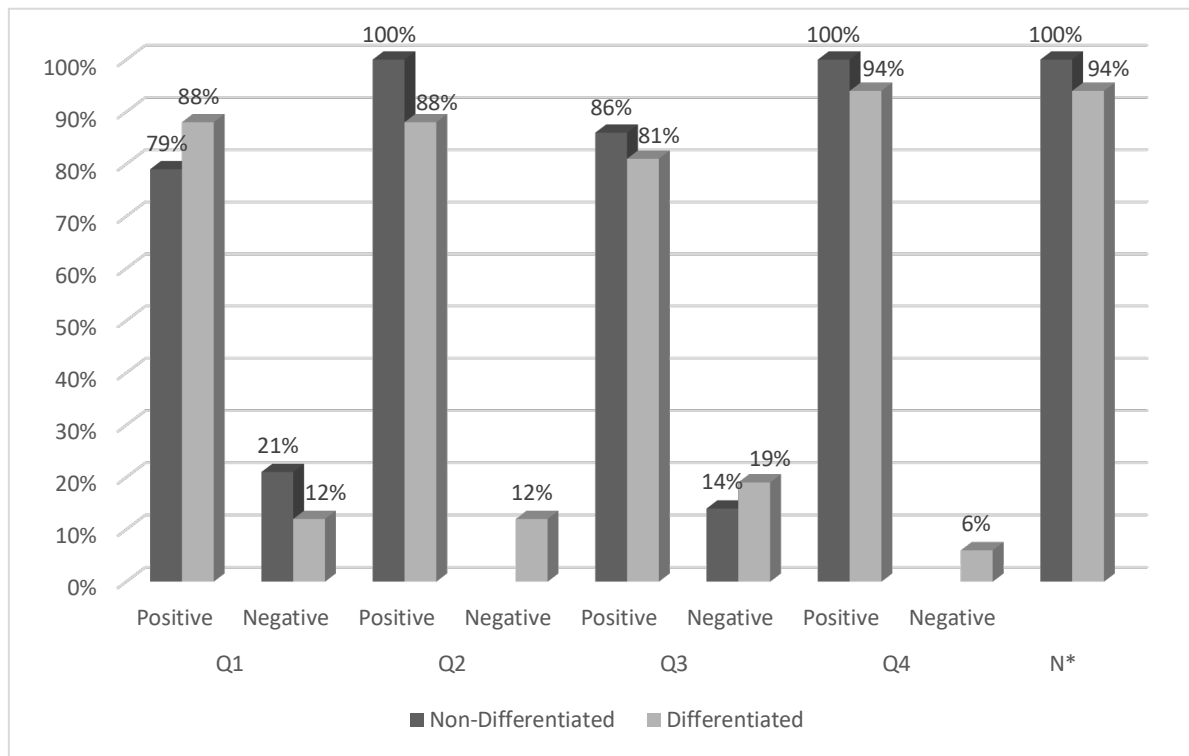
Note: The non-differentiated group is represented in dark gray, and the differentiated group is represented in gray.
*The *N* column represents the percent of students interviewed. The non-differentiated group had 100% of students interviewed, and the differentiated group had 94% of students interviewed.

Figure 4 shows student responses categorized as positive or negative for each question asked.

The questions are listed along the bottom of the graph with positive and negative columns listed for each

question. The numbers along the left side of the figure represent the percent of students categorized as

positive or negative. Question 1 focused on if students enjoyed the activity. In the non-differentiated

group, 79% of students responded positively and 21% responded negatively. Common positive responses

included the students stating they enjoyed the actual stories and that they were able to incorporate their

own experiences into the writing. Negative responses included similarities such as they did not like

making the posters or truly disliked the activity all together. In the differentiated group, 88% of students

responded positively and 12% of students responded negatively. Similarities in the positive student

responses included themes such as being able to pick what they were able to do and being able to draw or express themselves in pictures. Students who responded negatively focused on feeling like there were not enough choices provided to them.

The student interview Question 2 focused on students actively participating. The non-differentiated group responded with 100% positive responses. Students focused on wanting to earn a good grade and also listed specifically how they helped complete the product to support that they were participating. In the differentiated group, 88% of students responded positively and 12% of students responded negatively. Positive student answers again focused on which aspects of the project they individually worked on. Negative responses had similarities based in the student not enjoying the activity or feeling like they hadn't accomplished much with the assignment.

Question 3 focused on the skills students felt they were or were not mastering. Students responded with 86% positive responses and 14% negative responses in the non-differentiated group. When asked what skills they felt they mastered, plot structure and characterization were mentioned often. For the negative responses, many students stated they were unsure which skills they mastered or if they knew the skills they were supposed to be mastering. In the differentiated group, 81% of students responded positively and 19% of students responded negatively. Similar responses between the positive answers involved feeling like they mastered plot structure. Negative responses included similarities in that they were not sure if they mastered the skills, or they felt like they had learned enough about the skills.

Finally, Question 4 asked if students felt creative. In the non-differentiated group, 100% of the students responded positively. Common responses included pointing out specific activities such as the poster or rewriting assignment as when they felt creative. Some students mentioned why they felt creative and the idea of using color or making it your own poster were in the responses. For the differentiated group, 94% of students answered positively and 6% of students answered negatively. Students who responded positively mentioned that they enjoyed the board game or making pictures versus completing the writing assignments. When asked why they felt creative, students mentioned deciding how to color or

design their board games. Students who answered negatively had similar responses in that they were unsure if they were creative or didn't enjoy the activity.

Another set of data analyzed by the researcher was the final survey responses from the students in the non-differentiated and differentiated student groups. Students were asked to answer six questions on Google Forms regarding their reflection on the activity, representation of their learning intelligences, engagement, participation, mastery of skills, and overall rating of the unit in comparison to other units they have completed. The first five questions were sorted into positive and negative responses and the final question, regarding the rating of the unit, was analyzed and presented in percentages of students and the rating they selected. The non-differentiated group had 93% of students complete the final survey due to student absence and the differentiated group had 100% student completion.

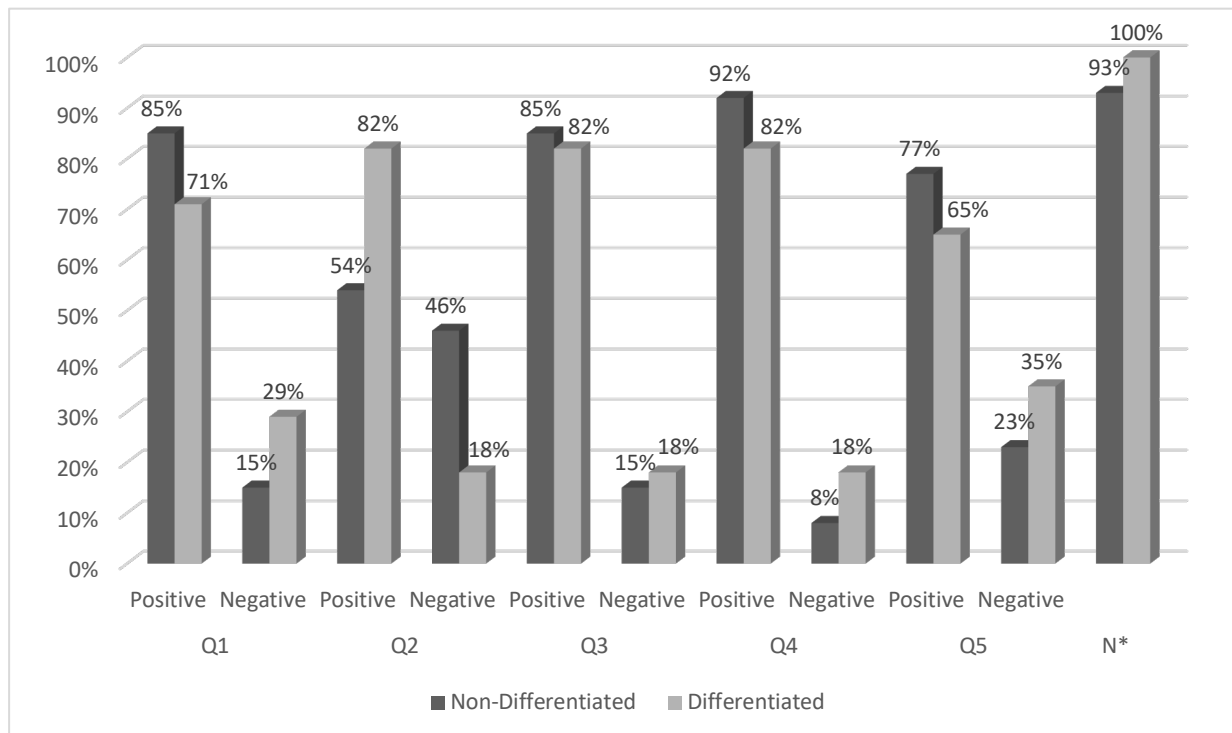**Figure 5**

Final Survey Student Responses

Figure 5 focused on the first five questions in the final survey. The first question pertains to student reflection on the activity. Students were asked to reflect on and provide their thoughts regarding

the activities that were provided. In the non-differentiated group, 85% of students answered positively and 15% of students answered negatively. Common positive responses focused on working in groups and noting that the activities were more fun than a discussion or worksheet. Negative responses stated the activities were uninteresting. For the differentiated group of students, 71% of students responded positively and 29% of students responded negatively. Similar positive responses included being able to choose from the options provided or that the activities were fun to complete. Common negative responses in the differentiated group noted that the activities were not their favorite or the students did not enjoy them at all.

Question 2 on the final survey focused on the learning intelligences and if students felt their intelligences were represented in the activities presented. In the non-differentiated group, 54% of students responded positively and 46% of students responded negatively. Students responded positively noting some representation, but not much. Negative responses included feeling the intelligences were used in some and not others or that their intelligences were not present, but others were accommodated. In the differentiated group, 82% of students responded positively and 18% of the responses were negative. Positive responses mentioned that there were multiple options to choose to fit the interests or intelligences and that there were group activities to complete. Negative responses noted they would rather just read, or they were unsure if they were represented.

The next question, Question 3, asked students if they felt engaged in the content with the activities they completed. Non-differentiated students had 85% respond positively and 15% respond negatively. Positive student responses noted they felt engaged because they were able to work in groups and they liked what they were doing. Others noted they were engaged and listed the work they did to complete the task such as coloring or writing. Negative responses noted the activities were not interesting, so they did not feel engaged. In the differentiated group for Question 3, 81% of students responded positively and 19% responded negatively. Positive responses included students feeling engaged because they were things they enjoy doing to learn or because they found them interesting. Negative responses

mentioned having too many stories to remember or that the assignments were limited or repetitive of things they had done in the past.

Question 4 focused on student motivation. The non-differentiated group had 92% positive responses and 8% negative responses. Common positive responses for motivation included their desire to earn a good grade or being allowed to work with their peers. Negative responses focused on not being able to complete activities students felt were useful. In the differentiated group, 82% of students provided positive responses and 18% of students provided negative responses. Similar responses focused on earning good grades or that the activities were fun. Negative responses included that none of the activities interested them, or they felt they were hard.

The final question presented in Figure 5 is Question 5 which asked students if they felt they mastered the skills being taught in this unit. Positive responses were when students responded yes, they felt they mastered the skills. Negative responses were students stating they did not master the skills or were not sure what the skills were. Students in the non-differentiated group responded with 77% positive responses and 23% negative responses. In the differentiated group, 65% of students provided positive responses and 35% of students provided negative responses.

Figure 6 shows the overall rating students gave to the unit in comparison to units they have completed prior. Students were asked to rate on a scale of 1-10, 1 being the worst and 10 being the best, how they rated the activities in this unit compared to activities in past units.

Figure 6

Overall Rating of the Unit
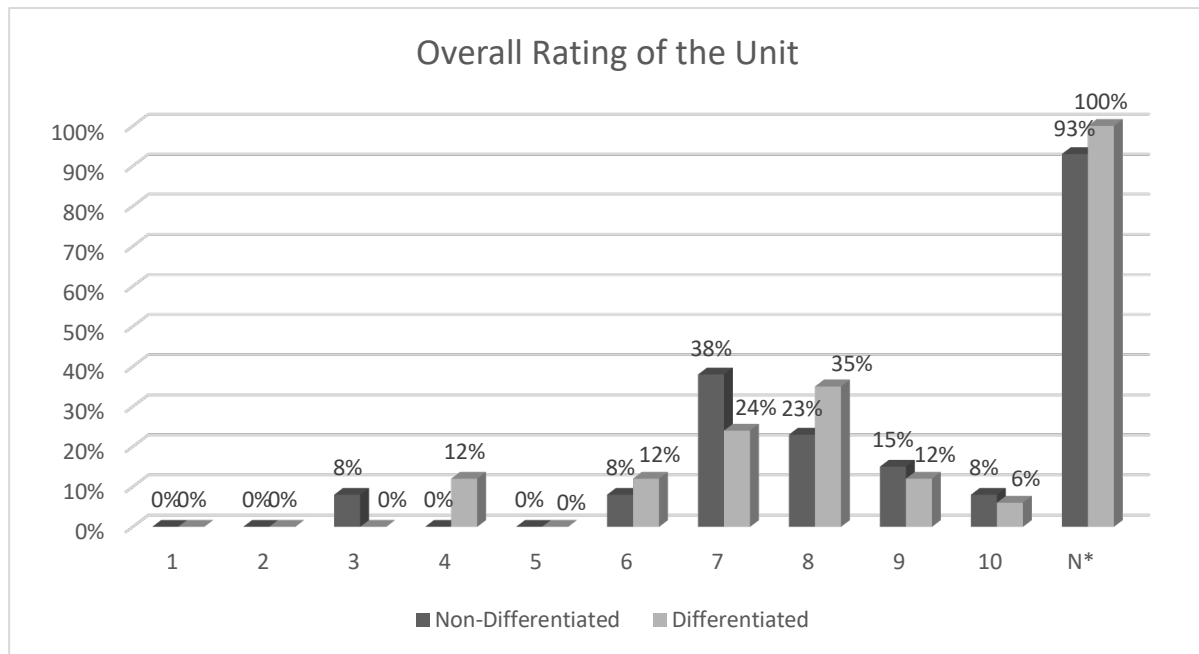
Note: Due to rounding to the nearest hundred, the differentiated group, represented in gray, total percent equals 101%.

* The column labeled *N* indicates the percent of students who completed the survey. Due to a student absence in the non-differentiated group, 93% of students rated the unit.

Based on the data presented, Figure 6 shows that students in the non-differentiated group had 8% rate the unit 1 3, 8% of students rated the unit a 6, 38% of students rated the unit a 7, 23% of students rated the unit at an 8, 15% selected a rating of 9, and 8% of students selected a rating of 10. Due to a student absence, 93% of students answered this question in the final survey. For the differentiated group, 12% of students selected a rating of 4, 12% of students rated the unit a 6, 24% of students selected a rating of 7, 35% of students rated the unit at an 8, 12% of students selected a rating of 9, and 6% of students rated the unit a 10. All students were present in the differentiated group and answered the question in the final survey.

Data Analysis. The results found in this action research study were surprising based on the literature regarding differentiation and the Multiple Intelligence Theory. Based on the teacher observation data collected during the three activities, the non-differentiated group of students consistently had higher

ratings than the differentiated group. In terms of motivation, students in the non-differentiated groups completed their work 100% for each assigned task while the differentiated group never had 100% completion. Some of the literature discussed updating teaching methods. Malacapay (2019) noted that changing teaching methods to fit learning styles would improve student motivation and performance. It was also stated that by differentiating the learning materials, the learning experience would be enriched, and personal motivation would be increased (Brualdi, 1998). This was not evident in this study as the students who were provided the differentiated learning activities based on their learning intelligences had a lower percent of completion or motivation.

Considering the interviews and the final survey where student thoughts were collected, the non-differentiated group had a high percent of positive responses in comparison to the differentiated group. Both groups stated they felt motivated and engaged. However, based on my knowledge of the individual students and their performance in the classroom, the students who answered that they were engaged and motivated were the students who have a strong record of completing work and being motivated academically. In other words, the students who already completed work and were interested in the English curriculum continued to be engaged and motivated while the students who struggled to focus and complete work prior to this unit continued to struggle with engagement and motivation.

While collecting data, the researcher noticed students frequently mentioned working in groups as a motivator. Regardless of the activity assigned, when students were able to work with one another, they responded as being more motivated and engaged. They also stated that they liked the activities they were completing while working with their groups or partner. One other common response dealt with providing students with options. The differentiated group focused on the fact that they had choices rather than one assignment or worksheet to complete.

Recommendations for Future Research

The results of this action research are relative only to the setting of the rural high school in North Dakota where it was conducted, which is a limitation of the generalizability of the study.

The next steps in research stemming from this study could be to use the same sampling and switch which group of students were presented with the differentiated learning activities to demonstrate their knowledge and which group was provided one activity to complete. This would provide observations and work completion data that could help determine whether differentiated activities impact student motivation and engagement when comparing it to the previous data.

When considering changes that could be made to improve the study, the researcher determined that using all students in the 9th English courses, three class periods, would provide a larger sampling. Instead of having two different groups, she would have all students provided with differentiated activities and later provided with only one activity to complete. Data would be collected through observations and a survey, and the researcher could compare each individual student and their responses to the different activities assigned.

Based on the research and data collected in this action research study, more questions were revealed. Would other variations of differentiation, such as academic tiering, impact student engagement and motivation?

Conclusion

Overall, students reported feeling engaged and motivated, but students in the non-differentiated group had a high percent of positive responses in the interviews and final survey. The researcher's observations during instruction and work revealed the non-differentiated group had consistently higher ratings throughout the three activities in comparison to the differentiated group. This indicates that differentiating activities for students based on the Multiple Intelligences Theory had little impact on student engagement. In terms of motivation, the students in the non-differentiated group completed their assigned work 100% of the time throughout all three activities, whereas the differentiated group never had 100% completion. When considering students reflections and responses to the interview questions and the final surveys, students noted they felt engaged and motivated, but there were few mentions of the cause being the activities relating to their individual intelligences. Instead, students responded they enjoyed

working with classmates, the content in general, having choices to choose from, or they were motivated because of grades.

CHAPTER 5

IMPLICATIONS FOR PRACTICE

In the classroom, educators are tasked with providing students with engaging tasks and motivating them to complete assigned tasks. Depending on the content area, being engaged and motivated can be a challenge for students. Considering this information, this action research focused on Howard Gardner's Multiple Intelligence Theory and how using the intelligence to differentiate learning activities could impact student engagement and motivation. Based on the data collected through observations, student interviews, and student responses to a final survey, it was determined that student motivation and engagement was not impacted by providing differentiated learning activities. Instead, the researcher found that students who were already motivated in the classroom prior to this unit of study continued to be motivated regardless of the activities provided to them. Students reported feeling engaged and motivated, but reported that working in groups, having options provided to them, enjoying the content, and grades were the factors that impacted their engagement and motivation.

Action Plan

After five weeks completing this action research study involving multiple intelligences theory and differentiated learning activities, I better understand what motivates and engages the students in my 9th Grade English classroom. In terms of multiple intelligences theory, I will continue to use these intelligences to help me create activities that students will like and be successful in. Even though there was little impact on student engagement, students still have ways they feel they learn best, and I will continue to provide options for them. Based on student interviews, providing students opportunities to pick the activities they want to complete as well as giving opportunities for students to work with their peers are two aspects of my curriculum I plan to incorporate more often. I found that allowing students to reflect on their learning provided me with insight regarding students' feelings regarding the tasks they were assigned. Having students continue to complete reflections can guide me when I am creating activities and tasks students will complete in order to demonstrate their knowledge. By providing options

to students and allowing them opportunities to decide which activity or task is best suited to them, I can help them feel motivated and engaged. These types of assignments and opportunities for students to choose activities is already common in my classroom. When it is possible to provide students different outlets for demonstrating their knowledge, I do my best to ensure there is an activity for each student to feel motivated and successful. Throughout the process of this study, I have learned more about multiple intelligences theory, student motivation and engagement, and differentiating instruction to provide students with more opportunities to enjoy the content. This will open multiple discussions with my students and their parents regarding what motivates students to complete an assignment and to feel engaged in the English curriculum.

Plan for Sharing

The first place I will share the results of the study will be with my students. I will discuss their reflections and thoughts on what engages them in the classroom and what motivates them to complete their work. Providing this information to my students can help create a classroom of opportunities for students to enjoy the English curriculum in numerous ways. In addition to sharing the results with my students, I will share the results with my English department during our professional learning community time. Sharing the results with the English department will allow us to compare experiences and discuss how we can support students in our classrooms and what we could change to increase engagement and motivation. Beyond my students and the English department, there are some fellow educators in my family and friends groups I have discussed this topic with and who are interested in my research.

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APPENDIX A

IRB Approval

Institutional **R**eview **B**oard

MINNESOTA STATE UNIVERSITY
MOORHEAD®

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DATE: September 30, 2021

TO: Tiffany Bockelmann, Ed.D
                         Abbey Zens

FROM: Lisa Karch, Chair
                         Minnesota State University Moorhead IRB

ACTION: **APPROVED**

PROJECT TITLE: [1807024-1] The Impact of Differentiated Learning Activities on Student
                         Engagement and Motivation in the English Language Arts Classroom
SUBMISSION TYPE: New Project
APPROVAL DATE: September 30, 2021
EXPIRATION DATE: September 30, 2022
REVIEW TYPE: Exempt Review

Thank you for your submission of New Project materials for this project. The Minnesota State University
Moorhead IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit
ratio and a project design wherein the risks have been minimized. All research must be conducted in
accordance with this approved submission.

This submission has received Exempt Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the project and
insurance of participant understanding followed by a signed consent form. Informed consent must
continue throughout the project via a dialogue between the researcher and research participant. Federal
regulations require that each participant receives a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this committee prior
to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED
adverse events must be reported promptly to the Minnesota State University Moorhead IRB. Please use
the appropriate reporting forms for this procedure. All FDA and sponsor reporting requirements should
also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to the
Minnesota State University Moorhead IRB.

This project has been determined to be a   project. Based on the risks, this project requires continuing
review by this committee on an annual basis. Please use the appropriate forms for this procedure. Your
documentation for continuing review must be received with sufficient time for review and continued
approval before the expiration date of .

Generated on IRBNet

APPENDIX B

District Approval

KINDRED PUBLIC SCHOOL DISTRICT

255 Dakota St. Kindred, ND 58051

High School - (701) 428-3177 Elementary School (701) 428-3388

Steve Hall, Superintendent
Nancy Kochmann, Elementary Principal
Eric Burgad, Assistant Elementary Principal

Kent Packer, Secondary Principal
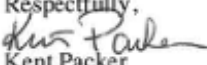Matt Crane, Activities Director/Dean of Students

Mission
To Educate, Prepare, and Maximize Student Potential

September 2, 2021

To Whom It May Concern:

This letter is to grant permission to Abbey Zens to conduct an action research study at Kindred High School during the 2021-2022 academic school year. I understand that this study poses no risk to those persons involved or to the Kindred Public School District. I also understand that the information collected will be kept confidential and will only be used for the purpose of the study.

Respectfully,

Kent Packer
Principal

"Student-Centered, Community-Supported"

APPENDIX C

Informed Consent Letter

Dear Parent or Guardian,

Your child has been invited to participate in a study to determine if differentiated instruction increases student motivation and engagement in the English classroom.

Your child was selected because he/she is in my regular education classroom. If you decide to participate, please understand your child will be asked to do the following, and these are typical classroom activities that involve no risk to your child.

1. Your child will learn about their preferred learning preference based on Howard Gardner's Multiple Intelligences Theory. These learning preferences will help determine flexible learning groups throughout the study.
2. Students will be observed and interviewed throughout the study and notes will be taken regarding their motivation and engagement in the classroom.
3. At the end students will be given a survey for them to answer and provide their opinions on the differentiated learning methods implemented into the classroom.

Although Principal Kent Packer has granted me permission to conduct this study, I need to have parental consent to use this information in my final paper I am required to complete as part of completing my master's degree at Minnesota State University Moorhead. It is similar to the research I would conduct in my normal everyday lessons. If you sign this form, you are giving me consent to use the information I gather. All information used will be confidential and names will not be used. Please note your child can choose to not participate at any time without any consequences.

Please feel free to ask any questions you have regarding this study. You may contact me at 701-428-3177 or abbey.zens@k12.nd.us. You may also contact my advisor Dr. Tiffany Bockelmann at 218-780-0757 or tiffany.bockelmann@mnstate.edu or Lisa Karch, Ph.D., Chair of the MSUM Institutional Review Board at 218-477-2699 or lisa.karch@mnstate.edu.

You will be offered a copy of this form to keep. You are making a decision whether or not to participate. Your signature indicates you have read the information provided above and have decided to participate. You may withdraw at any time without prejudice after signing this form should you choose to discontinue participation in this study.

Sincerely,

Abbey Zens

_____   _____

Signature of Parent or Guardian   Date

APPENDIX D

Example of Interview Questions

Student Name:

1. Did you like or enjoy this activity? (Yes) What did you like or enjoy with this activity? (No)

   What did you dislike?

2. Did you feel you were actively participating with this activity? Why or why not?

3. What skill(s) from the lesson do you feel confident you have mastered?

4. When were you the most creative, and why do you think that is?

APPENDIX E

Example of Student Observation Categories and Scales

Student Name:

Attentive during mini lesson   1 – 2 – 3 – 4 – 5

Actively working on task   1 – 2 – 3 – 4 – 5

Remains on topic during discussions   1 – 2 – 3 – 4 – 5

Work completed   Yes   No

Other Comments:

APPENDIX F

Example of Final Survey Completed on Google Forms

Student Name:

1. What are your thoughts regarding the activities provided to you?

2. Did you feel your learning intelligences were represented in the activities you participated in? Why or why not?

3. Did you feel you were engaged in the content with the activities you completed? Why do you think this is?

4. Were you motivated to participate in the activities? Why do you think this was?

5. Do you feel you mastered the skills being taught in this unit?

6. Rate the content, activities, and overall experience of the unit of study in comparison to other units. 1-10 (1 being the worst and 10 being the best)

APPENDIX G

CITI Training Certificate

Completion Date 27-May-2021
Expiration Date 26-May-2024
Record ID   42739865

This is to certify that:

Abbey Zens

Has completed the following CITI Program course:

Not valid for renewal of certification through CME.

Social & Behavioral Research - Basic/Refresher
(Curriculum Group)
Social & Behavioral Research
(Course Learner Group)
1 - Basic Course
(Stage)

Under requirements set by:

Minnesota State University Moorhead

Collaborative Institutional Training Initiative

Verify at www.citiprogram.org/verify/?w401b2d84-334c-4e88-8607-0d52e002ed64-42739865