A QUALITATIVE INVESTIGATION ON THE IMPACT OF MEMES ON STUDENT ENGAGEMENT IN 7th and 8th GRADE ENGLISH LANGUAGE ARTS

A Dissertation

Presented in Partial Fulfillment of the Requirements for the

Degree of Doctor of Philosophy

With a

Major in Educational Leadership in the

Department of Graduate Education

Northwest Nazarene University

by

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May 2022

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AUTHORIZATION TO SUBMIT

DISSERTATION

This dissertation of Stephan Lynch, submitted for the degree of Doctor of Philosophy in Educational Leadership with a major in Educational Leadership and titled "A Qualitative Investigation on the Impact of Memes on Student Engagement in 7th and 8th Grade English Language Arts," has been reviewed in final form. Permission, as indicated by the signatures and dates given below, is now granted to submit final copies.

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ACKNOWLEDGMENTS

The two and a half year journey was only possible because of the support from family and friends, colleagues and peers, Northwest Nazarene University and its faculty and staff, and my committee. Dr. Twiss, thank you for modeling how to be a master teacher. Your commitment to education is unparalleled and an inspiration. Thank you for consistently answering my phone calls and text messages. Above all, thank you for your friendship. Thank you, Dr. Randall, for always being accessible and providing speedy replies. I appreciate your words of affirmation and encouragement. Dr. Studebaker, you asked us to "trust the process" or as I understood your statement to be, trust you. The weekly check-ins, comprehensive feedback, reassuring guidance, and confidence in me allowed trusting process to be natural and possible. You are a gifted and talented teacher and I am forever grateful for you.

I began my undergraduate studies at NNU while fulfilling a dream to play collegiate athletics, and I now find myself finishing a lifelong educational and career goal as a proud Nighthawk. Thank you, Dr. Curtis, for your leadership and stewardship. Dr. Poe, thank you for your mentorship.

To my cohort, thank you. What an incredible group defined by helpfulness, generosity, wanting to see each other succeed, and being the best cheerleaders. Thank you especially to Monique and Warren for our collaboration. Diana and Molly, you are brilliant and compassionate, thank you. To my work colleagues, specifically Paul, thank you for your time and willingness to listen.

To my family and friends, thank you for your understanding and support. Mom, Melody, Michelle, Brian, and Anna, Beverly, Tom and Sandy, thank you for your love!

DEDICATION

By the grace and mercy from God, I have been blessed by four remarkable women in my life. Each have occupied influential moments in my life. Mother, Grandma, Mama Eliza, and Mom, this manuscript is dedicated to each of you.

Mother, you disregarded the recommendation from the doctors and ignored the plea from your husband to have your only child. I am eternally indebted for your ultimate sacrifice. Thank you, Grandma, for your unquestioned devotion to your grandson. I still remember how hard you labored every day to provide for me. Thank you for instilling a sense of honest and gratifying work. Thank you for consenting me to live with Mama Eliza. I am now able to realize your most difficult decision and understand your love for me to have a better life. Mama Eliza, thank you for coming back at the street market after hearing about my story. Thank you for accepting me as a son. I will always be a Spessard.

Mom, you are the person I want to become – selfless, humble, accepting, and loving. You are the reason I became an educator. I will cherish my first teaching position where our rooms were located across the hall from one another. What an unforgettable experience and memories. I am proud to be your son.

Mother, Grandma, Mama Eliza, and Mom, your individual care and collective love have allowed me to be in this position. This manuscript is a byproduct of your belief in me.

ABSTRACT

Research confirms that student engagement and motivation decline during middle school with a correlating decline in academic achievement. Adolescent students experience changes biologically, socially, cognitively, and emotionally which can contribute to anxiety, the need for peer relations, and establishment of identity and autonomy. The change in the school environment during the transition from elementary to middle school also contributes to the decline in student engagement. This study reviewed the evidence indicating the decline in student engagement and academic achievement during middle school. Additionally, this study analyzed the opportunities available to educators in preparing students for the demands of the 21st century and the influence of technology on teaching strategies and student learning. This qualitative investigation on the impact of memes on student engagement in 7th and 8th grade English Language Arts from the perspective of 7th and 8th grade ELA teachers analyzes the effect of introducing memes as an innovative teaching strategy using technology in 7th and 8th grade ELA classes. Memes are a recognized and an accepted 21st century method of communication and part of the adolescent culture. Using Kolb's theoretical framework, responses from the research questionnaires and semi-structured interviews with teacher participants were analyzed and organized into three categories: student responses to memes, application methods, and assessment. The results conclude that including memes in 7th and 8th grade ELA is a time effective strategy to positively increase student engagement and academic achievement. Students were excited to use memes, collaborated with classmates, and exhibited increased comprehension and the use of higher order critical thinking skills. Future research should investigate the impact of memes using a larger sampling of teacher participants, gathering data

from the student perspective, and analyzing the long term benefits of using memes vertically in English Language Arts and expanding horizontally to other content areas.

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Chapter I

Introduction

The goal of English Language Arts (ELA) in the K-12 educational system is to teach students reading, writing, speech, and listening skills that lay the foundation for success in higher education, careers, and life experiences (Graham & Harris, 2015; Kim et al., 2015; Olsen et al., 2015; Schaefer et al., 2016; Shanahan, 2015). ELA can expose students to literature that will develop a proficiency in reading as well as challenge and motivate them to evaluate ideas using critical thinking before forming opinions (De La Paz & Graham, 2002; Goldenberg et al., 2011; Graham et al., 2013; Graham et al., 2017; Guenther, 2017; Jeffery & Wilcox, 2013; Olson et al., 2015; Welsch et al., 2019). Research has identified a clear relationship between reading and writing and an increase in proficiency in reading and writing when teachers merge the reading and writing curriculum (Graham et al., 2015; Kim et al., 2015; Shanahan, 2015). Best practices in ELA should identify and implement strategies, methods, and tools to maximize student engagement and academic achievement (Busby et al., 2014; Guenther, 2017; Mustafaa et al., 2017; Orthner et al., 2013; Smith et al., 2016).

The scores on the American College Test (ACT) taken by high school seniors are an indicator of readiness to be successful in college and future careers (ACT, 2019). The results from the 2019 ACT indicate 41% of the seniors did not reach the readiness benchmark in English and 55% did not reach the benchmark in Reading (ACT, 2019). The overall readiness benchmark which includes English, Reading, Science and Math declined from 40% in 2015 to 37% in 2019 (ACT, 2019). The freshmen retention rate in 2017 at public colleges and universities with open admissions policies was 63% while those with selective admissions policies had retention rates as high as 97% (National Center for Education Statistics, 2019). The retention rate at two-year

community colleges was 62% in 2017 (National Center for Education Statistics, 2019). Based on data published from 2020 to 2022, the median earnings increase as the level of postsecondary education increased (National Center for Educational Statistics, 2021; Stobierski, 2020; U.S. Bureau of Labor Statistics, 2020; U.S. Department of Labor, 2022). The average unemployment rate decreases from 5.4% for those who did not graduate from high school to 1.1% for those earning a Doctoral Degree (Stobierski, 2020; U.S. Bureau of Labor Statistics, 2020). Since ELA is essential for success in high school, college, career, home and the community, it is imperative that ELA curriculum promotes learning and student engagement (Ellerbrock et al., 2015; Graham & Harris, 2015; Graham et al., 2017; Kelley & Decker, 2009; Kim et al., 2015). Table 1 shows the relationship between the level of education and median annual and weekly earnings.

Table 1

Education Level	Median Annual Earnings	Median Weekly Earnings
No High School Diploma	\$30,784	\$592
High School Graduation or GED	\$38,792	\$746
Some College	\$43,316	\$833
Associate Degree	\$46,124	\$887
Bachelor's Degree	\$64,896	\$1,248
Master's Degree	\$77,844	\$1,497
Doctorate / Professional Degree	\$96,772	\$1,861
Doctoral Degree	\$97,916	\$1,883

Median Income with Educational Levels

Many job opportunities in the 21st century require communication and writing skills in the application process, job performance, and eligibility for promotion (Jones & Rice, 2017; National Commission on Writing, 2004). Research indicates that writing is required in approximately two-thirds of salaried positions and 80% of blue-collar jobs nationwide to create a variety of documents including reporting manufacturing detail, safety issues, and operations for disposing of wastes (Graham & Harris, 2015; Kelley & Decker, 2009; Kim et al., 2015; National Commission on Writing, 2004). Moreover, an analysis of American companies indicated that upwards of \$3.1 billion each year is spent on training to correct writing deficiencies or improve writing skills to meet the needs of the company (National Commission on Writing, 2004).

The Common Core State Standards (CCSS) were introduced in 2009 to encourage teaching communication skills to improve student proficiency in reading and writing as well as prepare students to be college and career ready upon graduation from high school (Jeffery & Wilcox, 2013; Kim et al., 2015; Lessing et al., 2017; National Commission on Writing, 2004). Specifically, classes and careers in engineering, math, and science require the effective use of inquiry, argumentation, and presentation skills that are an essential part of the English Language Arts curriculum (Graham et al., 2017; Jeffery & Wilcox, 2013; Lessing et al., 2017; Schaefer et al., 2016).

Research confirms students often lack the reading and writing skills necessary for long term academic success (National Assessment of Education Progress, 2020; Shanahan, 2015; Lessing et al., 2017; Graham & Harris, 2015; Kelley & Decker, 2009, Orthner et al., 2013). The most recent report from the National Assessment of Education Progress (NAEP) in 2020 indicates 65% of fourth grade students and 66% of eighth grade students are not reading at or above the proficient level. Additionally, only 37% of twelfth grade students are reading at the

proficient or advanced level (National Assessment of Education Progress, 2020). The 2019 assessments for fourth and eighth grades indicate a decline in reading scores compared to the 2017 assessments (National Assessment of Education Progress, 2020). In 2019, 65% of fourth grade students were not reading at the proficient level compared to 63% in 2017 with 34% not reading above the basic level in 2019 compared to 32% in 2017 (National Assessment of Education Progress, 2020). The results for 2019 indicate 66% of eighth grade students were not reading at the proficient level compared to 64% in 2017 with 27% not reading above the basic level in 2019 compared to 24% in 2017 (National Assessment of Education Progress, 2020). The percentage of twelfth grade students reading at or above the proficient level in 2019 remained unchanged compared to 2015 (National Assessment of Education Progress, 2020; Shanahan, 2015). In 2019, 30% of the students were reading below the basic level compared to 28% in 2015 (National Assessment of Education Progress, 2020; Shanahan, 2015).

Moreover, the most recent report from the National Assessment at Education Progress (NAEP) for writing indicates 28% of fourth grade, 27% of eighth grade, and 27% of twelfth grade students are rated at or above proficient in writing (National Assessment of Education Progress, 2020). Therefore, 62% of fourth grade students, 63% of eighth grade, and 63% of twelfth grade students are not writing at the proficient level (National Assessment of Education Progress, 2020). The following tables show the proficiency and basic levels for reading and writing and in grades 4, 8, and 12 during the 2019 assessment.

Table 2

2019 Reading Proficiency Scores

At or Above NAEP Proficient in NAEP Reading Assessment			
Jurisdiction	4 th (2019)	8 th (2019)	12 th (2019)
Nation (Public)	35%	34%	37%

Table 3

2019 Writing Proficiency Scores

At or Above NAEP Proficient in NAEP Writing Assessment			
Jurisdiction	4 th (2019)	8 th (2019)	12 th (2019)
Nation (Public)	28%	27%	27%

Table 4

2019 Reading Basic Scores

At or Above NAEP Basic in NAEP Reading Assessment			
Jurisdiction	4 th (2019)	8 th (2019)	12 th (2019)
Nation (Public)	66%	73%	70%

Table 5

At or Above NAEP Basic in NAEP Writing Assessment			
Jurisdiction	4 th (2019)	8 th (2019)	12 th (2019)
Nation (Public)	86%	80%	79%

Student engagement and academic achievement decline during the middle school years (Barber et al., 2004; Barber et al., 2015; Bruhn et al., 2017; Busby et al., 2014; Fredericks et al., 2004; Hafen et al., 2012; Jeffery & Wilcox, 2013; Kelley & Decker, 2009; Lounsbury, 1960; Mustafaa et al., 2017; Orthner et al., 2013; Schaefer et al., 2016; Smith et al., 2016; Sokal & Katz, 2015), specifically in the English Language Arts content area (Barber et al., 2015; Kelley & Decker, 2009; Pennington, 2017; Sokal & Katz, 2015). Many middle school students become reluctant or resistant to reading, and teaching strategies often focus on reading independently rather than orally with class discussion (Barber et al., 2015; Fredericks et al., 2004; Guthrie et al., 2014; Kelley & Decker, 2009; Orthner et al., 2013). This leads to student disengagement (Barber et al., 2015; Fredericks et al., 2004; Guthrie et al., 2014; Kelley & Decker, 2009; Orthner et al., 2013). Research consistently reveals the importance of student engagement in academic success (Barber et al., 2004; Fredericks et al., 2004; Jeffery & Wilcox, 2013; Kelley & Decker, 2009; Orthner et al., 2013; Pennington, 2017; Sokal & Katz, 2015). The conflict between engagement and disengagement is evidenced in writing assignments that require reading, synthesizing and reporting data versus those that encourage creative writing and collaborative activities that give students a voice (Jeffery & Wilcox, 2013; Shankar-Brown & Brown, 2014). This is exemplified when students are required to write essays in content area classes such as math, science and

social studies (Barber et al., 2015; Jeffery & Wilcox, 2013). A challenge for English Language Arts teachers is to teach the skills necessary for formal writing that can be transferred to content area classes and later to higher education and the workplace while creating positive student engagement (De La Paz & Graham, 2002; Jeffery & Wilcox, 2013). Research suggests adding career education in the middle school curriculum has a positive impact on student engagement and academic achievement (Barber et al., 2015; Fredericks et al., 2004; Lapan et al., 2016). Since students are more engaged when the curriculum is relevant, authentic, and applicable, English Language Arts teachers should consider utilizing similar concepts when teaching reading and writing in the middle school (Barber et al., 2015; Fredericks et al., 2004; Lapan et al., 2016).

Statement of the Problem

Even with the enactment of No Child Left Behind (NCLB) and the introduction of Common Core State Standards, reading scores for eighth grade students not reading at the proficient level have only made modest gains (National Assessment of Education Progress, 2020). Reading scores for 2002 showed that 68% of eighth grade students were not reading at the proficient level with 66% not reading at the proficient level in 2019 with scores fluctuating within the time frame with a high of 69% in 2005 and 2007 (National Assessment of Education Progress, 2020). The results of the reading and writing assessments indicate students below the proficient level may lack skills in analyzing, evaluating, and synthesizing information required to formulate and support informed decisions, all of which are important for active participation in the 21st century world of work and socio-political engagement (Lesseig et al., 2017; National Assessment of Education Progress, 2020).

Student engagement and motivation decrease in middle school (Busby et al., 2014; Hafen et al., 2012; Mustafaa et al., 2017; Orthner et al., 2013; Pennington, 2017; Smith et al., 2016).

Student engagement is a critical factor in academic success (Hafen et al., 2012; Jeffery & Wilcox, 2013; Pennington, 2017; Sokal & Katz, 2015). Research indicates engagement is affected by multiple factors including the organization of the middle school compared to the elementary school, the relationships with teachers and peers, and the physical and emotional changes associated with adolescence (Abbott, 2017; Busby et al., 2014; Mustafaa et al., 2017; Orthner et al., 2013; Smith et al., 2016). Therefore, it is essential that the middle school creates a positive learning environment, adopts an integrated relevant curriculum, and implements teaching strategies and practices that will fully engage students in the learning process (Conner & Pope, 2013; Kelley & Decker, 2009; McConn, 2019).

While middle school years may be an awkward and demanding time for students, they are a critical and opportunistic time for teachers to engage and motivate students through the use of innovative teaching methods and strategies available in the 21st century that will impact academics for middle school, high school, higher education, and beyond (Bruhn et al., 2017; Graham et al., 2015; Lessing et al., 2017; Schaefer et al., 2016; Smith et al., 2016). These teaching methods and strategies may include integrating technology into the curriculum which will necessitate acquiring resources and providing professional development opportunities for teachers to gain competence for successful implementation (Bruhn et al., 2017; Hill & Ericsson, 2014; Howard et al., 2019; Jack & Higgins, 2019; Karatas et al., 2016).

The future of the educational landscape will be profoundly embedded in technology; reliance and confidence in computers, tablets, cell phones, and the internet have the potential to enhance teaching and learning (Jack & Higgins, 2018; Glover et al., 2016; Jones & Rice, 2017; Karatas et al., 2016; Sharma, 2018; Wood et al., 2013). Technology is pedagogical and catalytic: it has the potential to support teaching and learning and facilitate advancement in education (Glover et al., 2016; Hawkridge, 1990; Jack & Higgins 2018; Karatas et al., 2016; Wood et al., 2013). Recent studies indicate social media and digital devices can be used effectively to enhance student learning and engagement and improve academic achievement (Boyce et al., 2014; Cumming et al., 2013; Karatas et al., 2016; Smith et al., 2016).

Research supports the conclusion that proficient use of English Language Arts skills, particularly reading and writing, are essential for successful pursuit of higher education and career opportunities (National Assessment of Education Progress, 2020; Shanahan, 2015; Lessing et al., 2017; Graham & Harris, 2015; Kelley & Decker, 2009, Orthner et al., 2013). The vast majority of students who are not graduating from high school proficient in ELA are facing greater barriers for higher education careers and opportunities (Ellerbrock et al., 2015; Graham & Harris, 2015; Graham et al., 2017; Kelley & Decker, 2019; Kim et al., 2015). Research confirms that engaged middle school students are more likely to have higher academic achievement and lower high school dropout rates (Barber et al., 2004; Fredericks et al., 2004; Jeffery & Wilcox, 2013; Kelley & Decker, 2009; Orthner et al., 2013; Sokal & Katz, 2015).

Background

During the 20th century, the educational structure in the United States was reorganized with the advent of the junior high school and the middle school (Lounsbury, 1960; Schaefer et al., 2016). The first official junior high school opened for seventh and eighth grade students in Columbus, Ohio, in 1909 for a multitude of reasons not least of which was to better address the needs of adolescence and the concerns of universities and community leaders about the number of students leaving high school before graduating and the preparedness of graduates for the rigors of higher education and their potential impact on the economics of the country (Lounsbury, 1960). In 1950, Bay City, Michigan, was the site of the first middle school for

grades six through eight (New World Encyclopedia, n.d.). The middle school movement emerged in 1963 to further address educational challenges associated with students as they transition from elementary school to high school (Lounsbury, 1960; Schaefer et al., 2016). In response to the challenges of meeting the needs of middle school students, effective methods to enhance learning and student achievement were identified and include team teaching, collaboration, integrated curriculum, differentiated learning, and student engagement (Lounsbury, 1960; Schaefer et al., 2016).

With the enactment of No Child Left Behind in 2001 and the introduction of Common Core State Standards, standardized testing became the method for measuring student proficiency in core subjects and rating school performance which determined access to federal funding (Graham & Harris, 2015; Schaefer et al., 2016). Although these assessments provide a momentin-time view of student ability and school or teacher performance, they have had an impact on the structure of the curriculum and may reduce the time available for innovative and creative methods that encourage critical thinking and student engagement that currently are not measured by standardized assessment (Graham & Harris, 2015; Hayes & Olinghouse, 2015; Schaefer et al., 2016).

Since student performance on the tests are viewed as increasingly important, teachers revert to teaching to the test rather than implementing best practices in teaching reading and writing (Graham & Harris, 2015; Hayes & Olinghouse, 2015; Schaefer et al., 2016). Teachers indicate they lack the training to effectively teach writing and have identified the need for professional development to aid students in achieving proficiency in reading and writing (Graham & Harris, 2015; Graham et al., 2013; Graham & Harris, 2015). Currently, Common Core State Standards do not adequately address the necessity of motivation and the writing

process in developing proficient writers (Graham et al., 2013; Graham et al., 2015; Hayes & Olinghouse, 2015).

Research indicates teaching methods may be a factor in the development of the skills required to create proficient writers (De La Paz & Graham, 2002; Goldenberg et al., 2011; Graham et al., 2013; Graham et al., 2017; Jeffery & Wilcox, 2013; Olson et al., 2015; Welsch et al., 2019). Students need more time to write and to write more lengthy pieces that require the analysis and synthesis of ideas and issues found in engaging and interesting text (De La Paz & Graham, 2002; Goldenberg et al., 2011; Graham et al., 2013; Graham et al., 2017; Jeffery & Wilcox, 2013; Olson et al., 2015; Welsch et al., 2019). The analysis, evaluation, and synthesis of information build competency in reading comprehension and interpretation and enable students to write documents using argumentation and persuasion (De La Paz & Graham, 2002; Goldenberg et al., 2011; Graham et al., 2013; Graham et al., 2017; Jeffery & Wilcox, 2013; Olson et al., 2015; Welsch et al., 2019). Teachers should continue using narrative and creative writing which provide an opportunity for collaboration, use of descriptive sensory vocabulary and exploration of cultural and community traditions (Hayes & Olinghouse, 2015; Graham et al., 2013; Olson et al., 2015). Sharing and publishing the final writing product enhance student engagement and are accessible for all levels of student ability (Nagle & Taylor, 2017; Olson et al., 2015; Smith et al., 2016).

Reading from elementary through high school transitions from reading for enjoyment to reading for information (Guthrie & Klauda, 2014; Kelley & Decker, 2009; Woolley & Bowen, 2007). Student motivation and engagement decrease as more emphasis is placed on learning the content (Ellerbrock et al., 2015; Guthrie & Klauda, 2014; Kelley & Decker, 2009). Research indicates students tend to value reading less as they advance from elementary school through high school and therefore are less engaged in reading (Ellerbrock et al., 2015; Guthrie & Klauda, 2014; Kelley & Decker, 2009; Woolley & Bowen, 2007). The Common Core State Standards in core content areas require many of the same skills as those taught in English Language Arts, including reading text, using critical thinking skills, and preparing summative documents (Bradley, 2016; Lessing et al., 2017). These skills focus on authentic learning and integration of English Language Arts that will equip students for life in the 21st century (Bradley, 2016; Lessing et al., 2017). Since reading in core subjects requires the development and use of vocabulary specific to the content area which may not be actively used by the students during class, it is important that English Language Arts classes equip students with the skills necessary to successfully gain and incorporate new words and meanings into their working vocabulary (De La Paz & Graham, 2002; Lesaux et al., 2010; Olson et al., 2015; Townsend, 2015). Research reveals that including career education in the middle school curriculum has a positive impact on student engagement and academic achievement (Lapan et al., 2016; Orthner et al., 2013; Perry, 2008).

Autonomy, self-efficacy and relationships are significant factors in determining student academic engagement and students are more engaged when assignments were worthwhile, relevant, and challenging (Sokal & Katz, 2015; Woolley & Bowen, 2007). However, students may be achieving academically and participating in activities but not be intellectually engaged if they are not using critical thinking skills to increase learning (Schaefer et al., 2016; Sokal & Katz, 2015).

While computers are prevalent in society, students must be prepared to use them (Hawkridge, 1990; Howard et al., 2019; Jack & Higgins, 2018). The emergence of the internet has revolutionized the methods in which information is created, stored, and shared and

communication is conducted (Ford, 2019; Sharma, 2018). The ability to access data has been expanded from the physical library to the internet and digital platforms thereby making information available to a wider audience, including students in classrooms (Karatas et al., 2016; Sharma, 2018). Although students may be using technology for games and communication, they may not know how to use technology effectively for learning (Bippert, 2019; Graham et al., 2013; Howard et al., 2019). The socio-economic status of the students is a factor in exposure to and use of technology (Boyce et al., 2014; Howard et al., 2019). Research indicates that students with less technology competencies are more likely to have lower engagement which may become even lower when teachers do not recognize their reticence in using technology and provide appropriate scaffolding to enhance competencies (Bippert, 2019; Boyce et al., 2014; Howard et al., 2019).

Richard Dawkins in his 1976 book *The Selfish Gene* introduced the idea of a mechanism for replicating and transmitting social concepts as a metaphor based on DNA and gene replication and Charles Darwin's theory of evolution; the device was called a meme (Blackmore, 1998; Boa Sorta, 2019; Burman 2012; Grundlingh, 2017; Kahmi, 2004; Mazambani, 2015; McGregor, 2014; Shifman, 2013; Wang & Wang, 2015). The concept of the meme gained notoriety in 1987 in the film *Wall Street* with the catchy line "Greed is good" (Burman, 2012). A meme is an image with a caption that may have an element of humor and is created to transmit an idea to an audience using social media (Boa Sorte, 2019; Burman, 2012; Cao, 2020; Grundlingh 2018; Ireland, 2018; Kulkarni, 2017; McNeill, 2017; Shifman, 2013; Woodworth, 2018; Wong & Holyoak, 2021). The meme can be shared quickly with other audiences or altered to advance a different message in much the same way that mutations occur in DNA and genes (Boa Sorta, 2019; Burman, 2012; Cao, 2020; Ford, 2019; Grundlingh, 2018; McGregor, 2014; Prokopeak, 2019; Wang & Wang, 2015; Wong & Holyoak, 2021; Woodworth, 2018).

Memes are a non-verbal form of communication and should be considered an element of speech since communication depends on someone sending to someone who receives (Cao, 2020; Grundlingh, 2017; Boa Sorta, 2019; Wiggins & Bowers, 2014; Wong & Holyoak, 2021).

Although memes appear to be a modern concept, the method is similar to the political cartoon "Join, or Die" published by Benjamin Franklin to recruit volunteers for the American Revolution (Ford, 2019). More recently, the Merkel meme pictured German Chancellor Angela Merkel and President Barack Obama with an appropriate humorous caption (Johann & Bulow, 2019). Because people respond to visual images, they are more likely to remember the message associated with the image and become engaged in the ideas advanced in the meme whether it is to enlist in a cause, vote for a particular candidate, purchase a product, explore the tenets of a faith, or present a culturally based idea (Brubaker et al., 2017; Cao, 2020; Ford, 2019; Johann & Bulow, 2019; Sharma, 2018; Shifman & Thelwall, 2009; Wong & Holyoak, 2021).

In recent studies, post-secondary students were required to create memes associated with topics in college classes (Purnama, 2017; Wells, 2018). College students responded positively to the use of memes in classes and were more engaged in the content of the courses (Purnama, 2017; Wells, 2018). The students showed a preference for technology using memes because memes were visually appealing, made the assignment achievable, and were effective and enjoyable (Purnama, 2017; Wells, 2018). The activities naturally guided students into critical thinking, developed awareness of social media websites, and caused them to become attentive to the information they read and shared (Purnama, 2017; Wells, 2018). The results indicate the effectiveness of using memes as a teaching strategy and its positive impact on student

engagement at the post-secondary level (Purnama, 2017; Wells, 2018). Therefore, the purpose of this study was to investigate the impact of memes on student engagement in 7th and 8th grade English Language Arts (Purnama, 2017; Wells, 2018).

This investigation is guided by the following three questions:

Research Questions

- What is the impact of memes on student engagement in 7th and 8th grade English Language Arts, as articulated by teachers?
- 2. What instructional practices using memes lead to increased student engagement?
- 3. How can memes be used an as assessment tool to measure academic achievement?

Description of Terms

Various definitions exist for each of the following terms in this dissertation. For the purpose of consistency and understanding, the researcher provides the following definitions:

Common Core State Standards (CCSS). An established collection of mathematical, English Language Arts, and social studies content standards detailing what students should know and be able to demonstrate at the end of each grade level.

Experiential Learning Theory. A learning theory developed in 1984 by psychologist Dr. David Kolb which identified concrete experimentation, reflective observation, abstract conceptualization, and active experimentation as the four essential stages to optimal and meaningful learning (Bohon et al., 2017; Groves et al., 2013; Osborn et al., 2003; Peterson et al., 2015).

Junior High. A site for seventh and eighth grade students that first opened in 1909 in Columbus, Ohio, and later ninth grade was included (Lounsbury, 1960).

Learning Styles Inventory. A preferred approach to learning also developed in 1984 by Dr. David Kolb and includes the Initiating style, Imagining style, Analyzing style, Deciding style, and Balancing style to complete the learning cycle (Bohon et al., 2017; Groves et al., 2013; Osborn et al., 2003; Peterson et al., 2015).

Memes. A meme is an image with a caption that may have an element of humor and is created to transmit an idea to an audience using social media Boa Sorte, 2019; Burman, 2012; Cao, 2020; Grundlingh 2018; Ireland, 2018; Kulkarni, 2017; McNeill, 2017; Shifman, 2013; Woodworth, 2018; Wong & Holyoak, 2021).

Middle School. Building for grades six through eight, introduced in 1950 in Bay City, Michigan (New World Encyclopedia, n.d.).

National Assessment of Education Progress (NAEP). The National Assessment of Educational Progress is the only assessment that measures what U.S. students know and can do in various subjects across the nation, states, and in some urban districts. Also known as The Nation's Report Card, NAEP has provided important information about how students are performing academically since 1969 (NAEP).

No Child Left Behind (NCLB). The No Child Left Behind Act of 2001 is a landmark in education reform designed to improve student achievement and change the culture of America's schools (U.S. Department of Education).

Student Engagement. Meaningful and active student involvement throughout the learning process (National Association of Independent Schools).

Significance of the Study

As students advance into seventh grade through high school graduation, academic engagement decreases (Busby et al., 2014; Mustafaa et al., 2017; Orthner et al., 2013., Smith et

al., 2016). English Language Arts at the secondary level also signify a fundamental shift in reading and writing (Guthrie & Klauda, 2014; Kelley & Decker, 2009). Argumentative and informative reading and writing demands have replaced narrative stories while simultaneously eroding student engagement, particularly in core subject areas (Barber et al., 2015; Guthrie & Klauda, 2014; Kelley & Decker, 2009; Sokal & Katz, 2015). This study investigated the impact of memes on student engagement in 7th and 8th grade English Language Arts.

Successful integration of memes may result in greater student engagement, utilization of and confidence in technology, evidence of critical thinking skills, and presentation of student originality and innovation (Boa Sorte, 2019; Cao, 2020; Prokopeak, 2019; Wong & Holyoak, 2021). Therefore, the inquiry detailed necessities, advantages, and challenges of implementing memes in a middle school core content environment. The 21st century demands proficient understanding and competent application of technology such as computers, laptops, tablets, smartphones, and the internet (Ford, 2019; Jack & Higgins, 2018; Jones & Rice, 2017; Karatas et al., 2016; Sharma, 2018). Technology is powerful and possible and the delivery system for memes in English Language Arts education (Glover et al., 2016; Hawkridge, 1990; Jack & Higgins 2018; Karatas et al., 2016).

Memes in popular culture have become a trending and preferred method of communication (Cao, 2020; Prokopeak, 2019; Wong & Holyoak, 2021). The originality and uniqueness of memes in education could increase student engagement not only in 7th and 8th grade ELA classes but also other classes and grade levels. Teachers may find memes to be an effective and creative method to capture student attention while developing critical thinking skills.

Overview of Research Methods

This study uses a qualitative approach to analyze the impact of the use of memes on student engagement in 7th and 8th grade English Language Arts. Qualitative research is conducted to identify and understand a leading phenomenon by studying and analyzing human participants in a specific setting (Bloomberg & Volpe, 2016; Creswell & Guetterman, 2019; Hoy & Adams, 2016). Case studies, field experiences, on-site observations, and interviews are qualitative methods to collect data (Bloomberg & Volpe, 2016; Creswell & Guetterman, 2019; Hoy & Adams, 2016). After the data is reviewed and interpreted, summative conclusions are provided on the individual experiences and outcomes (Bloomberg & Volpe, 2016; Creswell & Guetterman, 2019; Hoy & Guetterman, 2019; Hoy & Adams, 2016).

The methods used for research is the foundation on which a specific research study is built. A qualitative design allows the study to include multiple methods such as interviews and to provide the researcher with necessary information targeted in answering the research questions (Bloomberg & Volpe, 2016; Creswell, 2013). Using a qualitative design allows participants to share their perceptions of the experiences they have with the level of engagement in students while using technology as a student-centered strategy (Bloomberg & Volpe, 2016; Creswell, 2013).

Purposeful sampling was used to select six teachers of 7th and 8th grade ELA. The criteria for the selection included the requirement for the participating teachers to use memes in the classrooms. Semi-structured interviews were used to ascertain if the use of memes was having an impact on student engagement. In addition, the questions provided an opportunity to explore creative teaching strategies using memes.

Following the semi-structured interviews, the data collected were then transcribed and coded (Bloomberg & Volpe, 2016; Creswell, 2019; Maxwell, 2013). These codes were put into categories to determine what themes from the interview questions had developed (Bloomberg & Volpe, 2016; Creswell, 2019; Maxwell, 2013). The themes were then reported back to the teacher participants to determine their validity (Bloomberg & Volpe, 2016; Creswell, 2019; Maxwell, 2013). Finally, once verified, the themes were used to answer the research questions (Bloomberg & Volpe, 2016; Creswell, 2019; Maxwell, 2019; Maxwell, 2013).

Chapter II

Review of Literature

Introduction

Teachers possess the power to decide how students learn best (Alexander, 2014; Sokal & Katz, 2015; Tessier, 2014). Independent thinking, student choice, and teacher flexibility are three effective factors to ensure success in middle school (Allen-Lyall & Davis, 2020; Anfara & Schmid, 2007; Harmon et al., 2012; Patall, 2013; Patall et al., 2010; Wallace & Sung, 2017). Teachers use choices as an instructional tool because they value individual learning preferences (Alexander, 2014; Allen-Lyall & Davis, 2020; Anfara & Schmid, 2007; Harmon et al., 2010; Sokal & Katz, 2015; Wallace & Sung, 2017). Flexibility by the teacher is the skill of actively listening to students and making decisions to best support student learning (Alexander, 2014; Assor et al., 2002; Sagan, 2010; Sokal & Katz, 2015; Wallace & Sung, 2017).

Theoretical Framework

A theoretical or conceptual framework is a clear, concise, and sequential presentation of a research study to the target audience either through visuals or written words (Marshall & Rossman, 2016; Maxwell, 2013; Ravitch & Riggan, 2017). The framework is based on theories or concepts that ultimately establish the purposes of the research study, the significances of the study itself, and those likely to be impacted by the study (Aubrey & Riley, 2019; Maxwell, 2013; Ravitch & Riggan, 2017). It provides a prescribed structure and design to execute the research study - intellectual goals, identity and methodology, literature review, and topical research (Marshall & Rossman, 2016; Maxwell, 2013; Ravitch & Riggan, 2017).

The theoretical framework is embedded in central, comprehensive ideas and groupings that possess various and numerous activities, movements, and interactions (Maxwell, 2013; Ravitch & Riggan, 2017; Saldana, 2016). The deliberate and careful groupings allow for the ongoing construction of the theoretical framework based on new relationships and findings (Maxwell, 2013; Ravitch & Riggan, 2017; Saldana, 2016). The concluding outcomes are a result of the multiple and dynamic parts that have come together within the framework of the theories (Maxwell, 2013; Ravitch & Riggan, 2017; Saldana, 2016).

Following the ideas and theories of John Dewey, Kurt Lewin, Jean Piaget, and Jean-Jacques Rousseau, the concept of learning based on experience, Kolb's Experiential Learning Theory (KELT) identifies a direct involvement of an individual as essential to the learning process when the learner is engaged emotionally, intellectually, physically, and socially (Bergsteiner et al., 2010; Bohon et al., 2017; Groves et al., 2013; Heinrich & Green, 2020; McNamara & McNamara, 2019; Osborn et al., 2003; Peterson et al., 2015). Kolb's Experiential Learning Theory is composed of four specific impactful skills: experiencing, reflecting, thinking, and acting (Bergsteiner et al., 2010; Bohon et al., 2017; Groves et al., 2013; Heinrich & Green, 2020; Kolb & Kolb, 2005; McNamara & McNamara, 2019; Osborn et al., 2003; Peterson et al., 2015; Stokes-Eley, 2007; Su, 2015). Experiential learning begins with a concrete experience or feeling which is followed by reflective observation or watching (Bergsteiner et al., 2010; Bohon et al., 2017; Groves et al., 2013; Hayden & Osborn, 2020; Heinrich & Green, 2020; Osborn et al., 2003; Su, 2015). Abstract conceptualization or thinking relates prior knowledge to the new information obtained from the concrete experience and reflective observation to create a new base of information (Bergsteiner et al., 2010; Bohon et al., 2017; Groves et al., 2013; Hayden & Osborn, 2020; Osborn et al., 2003; Su, 2015). Active experimentation or acting applies the

information gained in the prior stages of the learning cycle to new situations and initiates a new learning cycle (Bergsteiner et al., 2010; Bohon et al., 2017; Groves et al, 2013; Hayden & Osborn, 2020; Su, 2015). Kolb theorized that individuals gain information either in a tangible and concrete or abstract and conceptual method and process information either reflectively or actively (Bergsteiner et al., 2010; Groves et al., 2013; Hayden & Osborn, 2020; Osborn et al., 2003).

Figure 1

Kolb's Experiential Learning Theory (KELT) Cycle



Five more learning styles are embedded in the learning cycle: initiating, imagining, analyzing, deciding, and balancing which is placed in the center of the cycle (Kolb & Kolb, 2005; Peterson et al., 2015). Initiating learning style is characterized by assertiveness, spontaneity, social aspects, and convincing (Kolb & Kolb, 2005; Peterson et al.,

2015). Imagining learning style can be described as the capacity to look forward and to be approachable thus building mutual trust (Kolb & Kolb, 2005; Peterson et al., 2015). Analyzing learning style is recognized by detailed consideration of ideas and follow-up through planning (Kolb & Kolb, 2005; McNamara & McNamara, 2019; Peterson et al., 2015). Deciding learning style is distinguished by goals that are clear and the commitment and determination to achieve the objectives (Kolb & Kolb, 2005; Peterson et al., 2015). Balancing learning style is adaptable, flexible, and sensitive and respectful of other options and opportunities (Kolb & Kolb, 2005; Peterson et al., 2015). Learning styles are based on the disposition, behavior, education, and social background of the individual (Bergsteiner et al., 2010; Heinrich & Green, 2020; Peterson et al., 2015).

Figure 2

Kolb's Learning Styles Inventory



Experiential Learning Theory has been successful because students participate in handson learning activities (Bergsteiner et al., 2010; Bohon et al., 2017; Groves et al., 2013; Heinrich & Green, 2020; McNamara & McNamara, 2019; Osborn et al., 2003; Peterson et al., 2015; Stokes-Eley, 2007; Su, 2015). New experiences have the ability to naturally build student engagement when the process of learning is more important than the end product (Bergsteiner et al., 2010; Kolb & Kolb, 2005; Peterson et al., 2015). To summarize, Kolb's Experiential Learning Theory is the process where knowledge is gained through experience (Bergsteiner et al., 2010; Bohon et al., 2017; Groves et al., 2013; Heinrich & Green, 2020; Kolb & Kolb, 2005; McNamara & McNamara, 2019; Osborn et al., 2003; Peterson et al., 2015; Stokes-Eley, 2007; Su, 2015).

American Classroom: An Historical Perspective

Historically, educated citizens have been a key component to the success of a country, particularly of a democracy or a republic which requires citizens to be actively involved in the governance of the community and the nation (Hiatt, 1994; Neem, 2017; Webb, 2006). Ignorance was viewed as threat to freedom and could be countered through education of the inhabitants (Neem, 2017; Webb, 2006). Education in American has evolved from parents teaching children at home by example and through apprenticeships to modern diverse classrooms instructed by certified trained professional educators with curriculum and resources that were beyond the scope of imagination in the 1600s in the land that would become the United States of America (Chen, 2021; Hiatt, 1994; Neem, 2017; Webb, 2006).

The earliest record of a school in the Colonial Era was in the Virginia colony in 1619-1620 when the London Company created a school to teach Christianity to young Indians; this was followed by the Syms School in 1635 for white children (Morison, 1965). During the Colonial Era, parents were expected to be actively involved in the education of their children and were responsible for instilling discipline, work ethic, religious beliefs, and the skills required for the survival of the family and the community (Hiatt, 1994; Neem, 2017; Webb, 2006). Education occurred at home until male students were old enough to be apprenticed to learn a trade (Arendale, 2011; Hiatt, 1994). Church leaders taught religion and reading so that students could read the Bible (Hiatt, 1994; Webb, 2006). The Boston Latin School, which was supported by tax dollars, opened in 1635 to teach Latin and Greek to prepare the sons of elite wealthy families for admission to higher education institutions in Europe and to Harvard University which opened in 1636 (Arendale, 2011; Morison, 1965). However, since the primary requirement to be a teacher in these schools was often that the applicant be of the same faith, the education was limited and students often lacked the skills necessary for full admission to the institutions of higher education and required additional tutoring to gain full admission status (Arendale, 2011; Neem, 2017; Outlaw et al., 2007).

When it was apparent that not all parents were teaching their children at home, the Massachusetts Bay Colony passed a law in 1642 making it mandatory that parents teach children reading, religion and a trade (Morison, 1965; Neem, 2017; Race Forward, 2006). To stress the importance of education, the Massachusetts Education Law was passed in 1647 requiring towns with a population of 50 families to open a school to teach religion, writing, and reading; towns with 100 families must establish a Latin school to include Greek and Latin in the curriculum (Morison, 1965; Neem, 2017; Race Forward, 2006).

The American colonies experienced the impact of the Age of Enlightenment (Age of Reason) and the philosophies of John Locke who advocated for the rights of the individual and the use of inductive reasoning and the scientific method in education (Neem, 2017; Webb 2006). Many of the leaders of the colonies believed education was vital in creating citizens capable of participating in colonial government (Hiatt, 1994; Neem, 2017; Webb, 2006).

After the American Revolution, the role of the citizen became increasingly important in the growth of the new nation, and the direction of education shifted from the purview of the church to the governing entity (Hiatt, 1994; Neems, 2017). Benjamin Rush, Thomas Jefferson, and George Washington were early supporters of public education (Hiatt, 1994; Neem, 2017;
Race Forward, 2006). However, the right to an education did not extend to enslaved children, Native Americans, and some immigrants (Hiatt, 1994; Neem, 2017; Webb, 2006).

The Continental Congress operating under the Articles of Confederation recognized the importance of education with the passage of the Northwest Ordinance of 1787 which created townships in the Northwest Territory (Britannica, n.d.,; Morison, 1965; Neem, 2017). The Ordinance stipulated that Section 16 be reserved for funding public schools (Britannica, n.d.,; Morison, 1965; Neem, 2017). The ordinance stated, "*Religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged*" (Johnson, 1997) The ordinance also led to the creation of public land grant universities (Neem, 2017; Race Forward, 2006),

In the developing country of the 18th and 19th century, the teacher could be a student who had just completed the final year in the same one-room school in which he or often she was now teaching (Neem, 2017; Outlaw et al., 2007). The pay was low, the school was cold in winter, the children's seats were hard, and the children were of varied grade and ability (Neem, 2017). Educational supplies were limited with the curriculum centering on reading, writing, and arithmetic with an emphasis on rote memorization and recitation (Neem, 2017). The first normal school opened in 1839 in Framingham, Massachusetts, for women only (Neem, 2017). The normal school arose as a professional school to prepare individuals for the teaching profession but often without the respect or privilege given to graduates of professional schools for doctors, lawyers, and ministers (Neem, 2017).

During this time, the country was expanding, the population was increasing, a middle class was developing, and the society was transitioning from a rural, agricultural orientation to a mercantile, industrial focus which required a more skilled labor force (Neem, 2017; Webb,

2006). However, workers were needed not only to survey land, navigate the waterways, and maintain accounting records but also to work in the emerging factories and mines (Neem, 2017; Webb, 2006). This created a dilemma for poorer families: send children to school to learn or to the factory or mine to earn money to help support the family (Neem, 2017; Webb, 2006). Educational reformers such as Henry Barnard and Thomas Mann continued to advocate for free public schools funded by tax dollars, often contributed by the more wealthy members of the society, including those benefitting from the revenues of industries (Hiatt, 1994; Neem, 2017; Webb, 2006). The use of funds raised through taxation created an increasing need for accountability which resulted in the creation of state boards of education and Thomas Mann's appointment as the first secretary of the Massachusetts State Board of Education (Hiatt, 1994; Neem, 2017; Race Forward, 2006). Immigration, notably from Ireland, continued to increase bringing additional workers, including children, for the growing industrial economy (Neem, 2017; Race Forward, 2006). If children were working in factories and mines to help support families, they were not in school (Neem, 2017; Race Forward, 2006). Educators and other members of society became concerned that these children would not be capable of meeting the responsibilities of citizenship if they were not receiving an education (Applied Research Center, 2006; Hiatt, 1994; Neem, 2017). Ultimately this resulted in the passage of mandatory school attendance and child labor laws (Applied Research Center, 2006; Hiatt, 1994; Neem, 2017).

With the culmination of the Civil War and the imposition of Reconstruction, state constitutions were amended to provide free public education for all children (Neem, 2017; Race Forward, 2006). However, schools were segregated, a condition which was supported by the United States Supreme Court in the *Plessy vs Ferguson* decision of separate but equal (Applied Research Center, 2006; Neem, 2017). The landmark 1954 *Brown vs the Board of Education of* *Topeka* decision declared separate but equal contributed to inequality and segregated schooling policy should end (Chen, 2021; Hiatt, 1994; Neem, 2017; Race Forward, 2006). However, segregation and equality continue to be issues in the American education system (Chen, 2021; Hiatt, 1994; Neem, 2017; Race Forward, 2006).

The American education system expanded from the one-room school to the elementary school and the creation in 1821 of the first public high school, Boston English, followed by high schools in Baltimore, Charleston, and Philadelphia (Neem, 2017; Race Forward, 2006). By 1851, eighty cities had high schools open to all students, including girls and children from poor and immigrant families (Neem, 2017; Race Forward, 2006). Indianola Junior High School in Columbus, Ohio, was established in 1909 and is recognized as the first junior high school for seventh and eighth grade students (Lounsbury, 1960; Race Forward, 2006; Schaefer et al., 2016). The junior high, a bridge between elementary school and high school, provided an opportunity to target the needs of the adolescent student with appropriate curriculum and environment for academic success and personal growth and development (Lounsbury, 1960; Schaefer et al., 2016). The structure was modified with the introduction of the first middle school for grades six to eight in Bay City, Michigan, in 1950 (New World Encyclopedia, n.d.). In 1963, the middle school movement was created to specifically address academic, physical, and social needs of students during the years of transition from elementary school to high school (Lounsbury, 1960; Schaefer et al., 2016).

Today, education has multiple delivery methods including public, private, religious or denominational, online, and home schooling. Parental involvement varies from limited to proactive with interest in a voucher system to provide the education of choice for the children. The physical structure of school districts is often dependent on population. Areas with higher population usually use one of two configurations: K-6th grade elementary school, 7th-9th grade junior high school, and 10th-12th grade high school or K-5th grade elementary school, 6th-8th grade middle school, and 9th-12th grade high school. Districts with lower population retain the elementary school with grades K-6 and create a combination middle school/high school for grades 7-12.

Middle School Student /Adolescent Challenges

Adolescence is the time when an individual makes the transition from a child to an adult starting at about 10 years of age and ending by age 19 (Armstrong, 2006; Borman et al., 2019; Pediatric Child Health, 2003). The beginning of adolescence is a time of profound changes in development physically, emotionally, socially, and cognitively and may be comparable to the changes that occur during the first three years of life (Armstrong, 2006; Borman et al., 2019; Brass & Ryan, 2021; Dawes et al., 2020; Fite et al., 2018; Grolnick et al., 2014; Lapsley, 2014; School During Adolescence; Vroman, 2020). Although less visible than the physical changes that occur, the brain is developing with the elimination of unnecessary synapses and the increase in myelin and connections between brain cells that are associated with coordinated actions, behavior, and thought (American Academy of Child & Psychiatry, 2016; Lapsley, 2014; Vroman, 2020). The frontal cortex, the center for reasoning and thinking, continues to develop during adolescence (American Academy of Child & Psychiatry, 2016; Armstrong, 2006; Brass & Ryan, 2021; Lapsley, 2014; Vroman, 2020). Due to the delay in maturation of this portion of the brain, adolescents are more likely to be impulsive, to take risks, and to disregard the consequences of their behavior (American Academy of Child & Psychiatry, 2016; Lapsley, 2014; Vroman, 2020). Several researchers have compared this to a car accelerating without

adequate brakes to control the speed (American Academy of Child & Psychiatry, 2016; Vroman, 2020).

The changes in the brain during adolescence affect both cognitive and emotional development (Akos & Shields Kurz, 2016; Dawes et al., 2020; Lapsley, 2014). Adolescents begin to process ideas and concepts more quickly and with greater comprehension (Akos & Shields Kurz, 2016; Lapsley, 2014). The hormonal changes during adolescences affect emotions and the desire for recognition and reward (Armstrong, 2006; Lapsley, 2014). They may have mood swings, show a greater response to stress, and exhibit attention-seeking behavior (Dawes et al., 2020; Fite et al., 2018; Lapsley, 2014; Sagan, 2010). On the positive side, adolescents may be more sensitive to inequality, have a desire to help others, and become involved in volunteer activities (Armstrong, 2006; Brass & Ryan, 2021; Dawes et al., 2020; Lapsley, 2014). If parents recognize, respect, and support the developing individualism of the adolescent, stronger and more mature adult relationships can be nurtured (Grolnick et al., 2014; Lapsley, 2014).

Experiences and environment during adolescences affect brain development either positively or negatively, which may result in depression, aggressive behavior, or substance abuse (Akos & Shields Kurz, 2016; Armstrong, 2006; Fite et al., 2018; Lapsley, 2014; Vroman, 2020). Positive experiences contribute to building fewer but lasting relationships, decreased stress and anxiety, and an optimistic view of life which enables them to better navigate the challenges of both the present and the future (Dawes et al., 2020; Fite et al., 2018; Lapsley, 2014; Vroman, 2020). The physical growth from child to adult can cause stress and anxiety as the adolescents deal with an evolving sense of self identity and a changing body image (Armstrong, 2006; Borman et al., 2018; Dawes et al., 2020; Pickhardt, 2017). They become self-conscious, embarrassed, and more vulnerable to comments and criticism about their clothing and appearance (Borman et.at., 2018; Pickhardt, 2017). The realization that the relationship within the family is entering a new phase may increase insecurity for the adolescents as they are seeking their own identity (Fite et al., 2018; Pickhardt, 2017; Vroman, 2020). The adolescents seek independence and begin to develop stronger bonds with peers and individuals outside the family which makes them more susceptible to peer pressure, bullying, exclusion, and isolation (Fite et al., 2018; Pickhardt, 2017; Sagan, 2010; Vroman, 2020). To counter the negative, they may resort to rebellion, exhibitionism, or risky behavior (Lapsley, 2014; Vroman, 2020). As adolescents define their identity, they value fairness, equality, justice, and loyalty and are often optimistic and idealistic (Brass & Ryan, 2021; Lapsley, 2014).

The middle school setting can either contribute to the stress, anxiety, and insecurity or aid the adolescent in the transition from child to adult (Akos & Shields Kurz, 2016; Brass & Ryan, 2021; Dawes et al., 2020; Fite et al., 2018; Grolnick et al., 2014; Kim et al., 2014; Lapsley, 2014; Peterson et al., 2014; Shell et al., 2014). The middle school students often leave an elementary school which is familiar and located in or near their neighborhood and travel to a larger middle school a greater distance from their home and familiar surroundings (Brass & Ryan, 2021; Grolnick et al., 2014; Holas & Huston, 2011; Lapsley, 2014; Peterson et al., 2014). Rather than having one teacher, the middle school students have multiple teachers in different rooms with diverse expectations and teaching styles (Brass & Ryan, 2021; Fite et al., 2018; Grolnick et al., 2014; Lapsley, 2014; Peterson et al., 2014). The time spent in each class is shorter than the time in the self-contained elementary classroom and offers less time to get to know the teacher and develop rapport that is encouraging and nurturing (Lapsley, 2014; Shell et al., 2014; Bruhn et al., 2017). Each class may be composed of a changing set of classmates from various elementary schools rather than a consistent set of students that function as a cohesive unit throughout the day (Brass & Ryan, 2021; Dawes et al., 2020; Fite et al., 2018; Grolnick et al., 2014; Lapsley, 2014; Shell et al., 2014). Staying organized can be a challenge to use a locker, take the proper materials to each class, and be in class on time (Bruhn et al., 2017; Eccles et al., 1993; Lapsley, 2014). Often the inability to meet these expectations is loss of privilege and/or isolation (Akos & Shields Kurz, 2016; Lapsley, 2014; Wellenreiter, 2018). The hallways may offer less security and more opportunity for teasing, bullying, and other activities that diminish the confidence of the middle school student (Brass et al., 2021; Lapsley, 2014; Wellenreiter, 2018). These conditions can be debilitating for vulnerable students and lead to greater isolation when acceptance and inclusion are most desired and needed for healthy development, engagement, and achievement in school (Akos & Shields Kurz, 2016; Dawes et al., 2020; Kim et al., 2014; Lapsley, 2014; Shell et al., 2014;).

Since the organization of school districts usually consists of elementary schools, middle or junior high schools, and high schools and are not subject to change, the challenge of meeting the developmental, emotional, social, and cognitive educational needs of middle school adolescents is largely the responsibility of classroom teachers and supportive administration and support staff to create an environment in which the students can grow and thrive (Akos & Shields Kurz, 2016; Dawes et al., 2020; Kim et al., 2014; Lapsley, 2014; Sagan, 2010). Curriculum in the 7th and 8th grade should be challenging yet attainable so that students develop critical thinking skills while building proficiency in reading and writing (Fite et al., 2018; Lapsley, 2014; Sagan, 2010). Students should have the opportunity to express reasoned opinions, develop and use creativity, and receive appropriate recognition (Akos & Shields Kurz, 2016; Batchelor & Bintz, 2013; Lapsley, 2014; Sagan, 2010). Learning opportunities that use collaboration and group work can lead to a more inclusive environment in which each student has an appropriate voice and the right to be heard and accepted without personal criticism that demeans the student's self-identity (Akos & Shields Kurz, 2016; Brass & Ryan, 2021; Dawes et al., 2020; Lapsley, 2014; Sagan, 2010). Projects that focus on volunteering can build community and the ability to work with others (Armstrong, 2006; Brass & Ryan, 2021; Lapsley, 2014). Additionally, the challenge for educators is that the middle school students are at different stages in the transitions of adolescence with some still in the earlier more child-like stage while others may be mature beyond their age (Lapsley, 2014). The importance and changing roles of the parents and community should not be disregarded in building a thriving, successful middle school that will result in academically achieving, engaged, healthy middle school students (Grolnick et al., 2014; Lapsley, 2014; Peterson et al., 2014).

21st Century Learners and Classrooms

The 21st century classroom often has two groups of individuals: digital natives and digital immigrants (Bagarukayo, 2018; Prensky, 2001). Digital natives are identified as those born after 1988 whereas digital immigrants were born before 1988 (Bagarukayo, 2018; Prensky, 2001). The modern 21st century "students have changed radically and are no longer the people our educational system was designed to teach" (Prensky, 2001). Students from kindergarten to college seniors have been immersed in technology including computers, social media, video games, and smartphones (Bagarukayo, 2018; Howard et al, 2019; Prensky, 2001; Wood et al., 2013). A typical college graduate will have spent more than 30,000 hours combined watching television and playing video games compared to just 5,000 hours reading during their formative years (Bagarukayo, 2018; Prensky, 2001).

Digital technology has profoundly impacted and will continue to heavily influence how the modern student gains and processes information (Bagarukayo, 2018; Jones & Rice, 2015; Prensky, 2001; Wood et al., 2013). The growth in and reliance on technology makes it necessary for students to become digitally educated to successfully enter the future work force (Bagarukayo, 2018; Jones & Rice, 2015; Prensky, 2001). Thus, digital literacy must be part of the school curriculum (Bagarukayo, 2018; Jones & Rice, 2015; Prensky, 2001; Wood et al., 2013). Digital natives ought to be educated using emerging teaching methodologies and supportive devices that align with their individualized learning personalities, curiosities, and tendencies (Bagarukayo, 2018; Beldarrain, 2006; Bosch, 2009; Duncan, 2010; Howard et al, 2019; Jones & Rice, 2015; Prensky, 2001; Wood et al., 2013). Digital natives and digital immigrants have gained valuable experience, possess an understanding of technology and have a desire to improve their knowledge by networking with colleagues and teachers (Bagarukayo, 2018; Beldarrain, 2006; Bosch, 2009; Kuhlthau, 2010; Prensky, 2001). However, integration of technology for students is more complex based upon their comfort level, purpose, and prior experience with technology (Bagarukayo, 2018; Beldarrain, 2006; Bosch, 2009; Howard et al, 2019; Kuhlthau, 2010; Prensky, 2001). The use of technology allows for personalized teaching, collaborative and hands-on learning, and effective communication between teacher and student (Bagarukayo, 2018; Beldarrain, 2006; Bosch, 2009; Cumming & Draper Rodriguez, 2013; Kuhlthau, 2010; Prensky, 2001). Technology further allows individuals to connect with others in the world as never before (Bagarukayo, 2018; Beldarrain, 2006; Bosch, 2009; Kuhlthau, 2010; Prensky, 2001).

Many organizations and businesses have successfully transitioned while education has been slower to respond (Aslan & Reigeluth, 2013; Bagarukayo, 2018; Duffy, 2009; Marcut, 2014). The delay has caused uncertainty and inconsistencies in how classes are taught and what is taught (Aslan & Reigeluth, 2013; Beldarrain, 2006; Howard et al., 2019; Pierce & Cleary, 2014). Frequently the technology is undependable, unattainable, or outdated thereby cancelling progress and potential (Beldarrain, 2006; Pierce & Cleary, 2014). Technology integration in education is often too erratic and complex to be effective (Beldarrain, 2006; Howard et al., 2019; Pierce & Cleary, 2014). These technological concerns further delay and ultimately prevent tremendous opportunities to grow instructionally, to ensure quality student learning, and to enable educational reform (Aslan & Reigeluth, 2013; Beldarrain, 2006; Pierce & Cleary, 2014).

Internet accessibility and connectivity are not enough to keep up with 21st century demands (Aslan & Reigeluth, 2013; Bagarukayo, 2018; Duffy, 2009; Kuhlthau, 2010; Pierce & Cleary, 2014). The education system must be receptive and pro-active to support and align with social expectations in the successful integration of technology (Aslan & Reigeluth, 2013; Bagarukayo, 2018; Duffy, 2009; Howard et al., 2019). To better prepare teachers for technology integration in the classroom, the inclusion of student perspective is important for the technology integration (Howard et al., 2019; Stevens, 2011).

In the midst of the Information Age, technology has been critical in meeting the demands of society (Aslan & Reigeluth, 2013; Bagarukayo, 2018; Duffy, 2009; Howard et al., 2019). The new normal in modern education can be defined as doing more with less (Duncan, 2010). This concept, while very familiar to educators, can be welcomed as an opportunity rather than an obstacle or barrier (Duncan, 2010). The pervasive factory model of education prior to the Information Age was characterized by misallocation of money to underused school buildings, outdated compensation systems, and inefficient school finance systems (Duncan, 2010). Doing more with less places a premium on creativity, originality, and willingness to experiment in the classroom and encourages sound decision-making to meet the 21st century demands by boosting educational productivity through virtual learning and online schools (Batchelor & Bintz, 2013; Duncan, 2010). The reliance on technology focuses on equipping and utilizing more effective methods to replace outdated educational systems by providing each person with the ability to do more with less (Duncan, 2010).

Professional development for teachers is necessary when integrating technology in the classroom (Botha & Herselman, 2015; Downes et al., 2016). Teachers often do not receive enough professional development to address and introduce new current and innovative teaching methods (Botha & Herselman, 2015; Glover et al., 2016; Jones et al., 2018). For example, researchers analyzed teachers in their existing environments and designed toolkits for use in their districts (Botha & Herselman, 2015; Downes et al., 2016). During the professional development, teachers gained knowledge and experience by handling the toolkits (Botha & Herselman, 2015; Downes et al., 2016). Teachers who successfully completed the professional development have applied similar methods in their own classrooms (Botha & Herselman, 2015; Glover et al., 2016). Teachers are utilizing toolkits to drive small-group instruction of the content thereby facilitating meaningful student engagement (Botha & Herselman, 2015 Downes et al., 2016). Downes et al., 2016).

Teachers in some school districts are unable to participate in professional development due to funding or the locations of schools (Hunt-Barron et al., 2015). Student demographics and socioeconomic factors may lead to inequalities that require professional development to introduce a variety of effective teaching strategies (Hunt-Barron et al., 2015).

The benefits of technology in education are undeniable, and evidence affirms the positive impact on student and teacher performance (Pierce & Cleary, 2014). Student learning, socializing through partner and group work, and utilizing resources such as laptops and mobile devices dictate how and why teachers integrate technology (Howard et al., 2019). If students

experience a positive interaction with technology, they will have encouraging attitudes on the value and impact of technology which in turn has the ability for greater engagement (Howard et al., 2019).

Innovative Instructional Practices in ELA

The curriculum and teaching strategies in English Language Arts classrooms are using a variety of new methods which include the appropriate use of technology to improve student learning, achievement, and engagement (Avsec & Kocijancic, 2016; Kuhlthau, 2010; Aslan & Reigeluth, 2013; Jones & Rice, 2017; Shankar-Brown & Brown, 2014).

Teachers should utilize technology to teach inquiry skills to access information (Avsec & Kocijancic, 2016; Kuhlthau, 2010). Inquiry that is guided enables students to gain a depth of understanding through a wide range of online sources (Kuhlthau, 2010). Guided inquiry equips students with abilities and competencies to address the challenges of an uncertain, changing world (Kuhlthau, 2010).

Blogging and micro-blogging are two forms of digital literacy that can be incorporated into the curriculum (Jin et al., 2017; Jones & Rice, 2017; Luo, 2016). Blogs are longer narratives to be circulated for a larger audience whereas micro-blogs are shorter and geared for a targeted audience (Jin et al., 2017; Jones & Rice, 2017; Luo et al., 2019). Both methods are examples of social media with the clear distinction of microblogs limited to 140 characters or less where blogs are greater than 140 characters (Jin et al., 2017; Luo et al., 2019). Micro-blogs were used to teach the elements of writing including citing, connecting, defining, redefining, exploring, investigating, organizing, brainstorming, and gathering data (Jones & Rice, 2017; Luo, 2016; Luo et al., 2019). Students improved in all areas of writing with the most improvement in brainstorming and organizing since the micro-blogs supported individual creativity (Jones & Rice, 2017).

Learner-centered education focuses on student learning through self-directed and projectbased learning (Aslan & Reigeluth, 2013; Avsec & Kocijancic, 2016; Krahenbuhl, 2016; Maher & Yoo, 2017; MacMath et al., 2017). Project-based learning, which includes problem-solving, case-studies, task-orientation, and inquiry, is an active, hands-on opportunity for students to take responsibility for their own learning (Aslan & Reigeluth, 2013; Krahenbuhl, 2016; Kuhlthau, 2010; Maher & Yoo, 2017; MacMath et al., 2017). Students, with support from their teachers and parents, identify the project and the tasks that need to be accomplished (Aslan & Reigeluth, 2013; Krahenbuhl, 2016). Student progress and results provide opportunities for reflection and growth (Aslan & Reigeluth, 2013). Two notable skills in problem-based projects are collaboration and time management (Aslan & Reigeluth, 2013). Students must develop the ability to interact with others while balancing time for individual and group work (Aslan & Reigeluth, 2013; Maher & Yoo, 2017). Learner-centered education is achieved when students define their projected outcomes, select their projects, execute their plan, and analyze their results (Aslan & Reigeluth, 2013; Krahenbuhl, 2016).

Vodcasts, integrated video podcasts, were introduced in an eighth grade Language Arts class (Shankar-Brown & Brown, 2014). Book report assignments have been considered to be boring by an overwhelming number of students (Shankar-Brown & Brown, 2014). The vodcasts were used to transform the typical book report assignment into engaging creative projects (Shankar-Brown & Brown, 2014). Each student read and analyzed a book of choice and then created a vodcast to share with the class (Shankar-Brown & Brown, 2014). Students were actively engaged, used critical thinking skills, and collaborated with other students to produce

the vodcasts (Shankar-Brown & Brown, 2014). Classroom observations, student interviews, and student journal entries were collected and analyzed to examine student engagement and attitude when using the vodcast for book reports (Shankar-Brown & Brown, 2014). Student attitude and execution of the assignment were positive, and student learning and engagement increased (Shankar-Brown & Brown, 2014).

VoiceThread is a digital discussion tool that enables students to merge auditory, visual and textual content into a presentation to be accessed by the teacher and classmates (Wood et al., 2013). VoiceThread was used in a research study as an alternative to the traditional book report (Wood et al., 2013). Students selected and read their chosen book (Wood et al., 2013). The teacher presented example of online book reviews used to promote books that include a rating scale (Wood et al., 2013). Students crafted their reviews, collaborated with their classmates to seek a response about the content and their rationale in establish the rating (Wood et al., 2013). They recorded the voice portion of the review which they uploaded with pictures and texts to a shared platform (Wood et al., 2013). The same format was used in writing and original poem and comparing it a selection from a known poet (Wood et al., 2013). Students could review and revise their presentation prior to uploading it as a final product (Wood et al., 2013). The students were excited and engaged in the learning process (Wood et al., 2013).

Virtual reality can be provide background information for reading in English Language Arts and content area classes (Pilgrim & Pilgrim, 2016). Students respond to visual image and gain an understanding of the setting in literature (Pilgrim & Pilgrim, 2016). A virtual journey through a cell prior to studying a cell structure in science, a tour of the Colosseum in Rome for history or geography (Pilgrim & Pilgrim, 2016). Virtual reality can also be used in ELA to enhance vocabulary acquisition (Pilgrim & Pilgrim, 2016). Using virtual reality taps in Kolb's concept of experiential learning to enhance student involvement and engagement (Pilgrim & Pilgrim, 2016).

Student Engagement

The biological, social, and emotional changes during adolescence influence academic development and student engagement (Alley, 2018; Barber et al., 2015; Borman et al., 2019; McTigue & Liew, 2011; Sokal & Katz, 2015; Vroman, 2020). Middle school adolescents experience rapid growth and development and the formation of attitudes and preferences in learning methods and areas of interest (Lapsley, 2014; Lesseig et al., 2017).

The role of the middle school was and is to address the unique developmental needs of students as they transition from elementary school to high school to ensure academic achievement and to encourage student engagement in the learning process; however, recent research consistently indicates student engagement declines during the middle school years (Lounsbury, 1960; Schaefer et al, 2016; Bruhn et al, 2017; Barber et al., 2015; Barber et al., 2004; Fredericks et al., 2004; Jeffery & Wilcox, 2013; Kelley & Decker, 2009; Orthner et al., 2013; Pennington, 2017; Sokal & Katz, 2015). Although gender, ethnicity, and learning disabilities may impact student engagement, the school environment, healthy relationships with teachers, and teaching methods and curriculum are often the major factors determining student engagement or disengagement (Conner & Pope, 2013; Kelley & Decker, 2009; Lesseig et al., 2017; McConn, 2019; Sokal & Katz, 2015;).

The middle school environment should be responsive to the needs of the students, empower the students to actively participate in the learning process, and be fair and equitable for all students (Conner & Pope, 2013; Kelley & Decker, 2009; Lesseig et al., 2017; McConn, 2019). Middle school students are confronted with significant changes in the school environment (Borman et al., 2019; Bruhn et al., 2017; Lounsbury, 1960; Schaefer et al, 2016; Sokal & Katz, 2015). Instead of one classroom with one teacher and one set of classmates, the middle school student usually has multiple teachers, a varying assortment of classmates in different classrooms, and a variety of teaching methods, classroom routines, and expectations which may lead to behavioral issues and decreased student engagement (Borman et al., 2019; Bruhn et al, 2017). Student attendance and effort, attention in class, and completion of assignments impact the adjustment to the school environment and the degree of achievement and engagement (Borman et al., 2019; Perry, 2008).

Schools need to create a positive environment with consistent routines and empathetic teachers, administrators, and staff Akos & Shields Kurz, 2016; Bruhn et al., 2017; Dawes et al., 2020; Kim et al., 2014; Lapsley, 2014; Sagan, 2010). A safe environment which is well organized yet flexible and that will challenge but not overwhelm the students cognitively or emotionally will have a positive impact on student engagement (McTigue & Liew, 2011; Orthner et al., 2013; Sokal & Katz, 2015). Students can become proactive by taking risks and accepting the challenges of learning, thereby becoming more engaged (Lesseig et al., 2017; McTigue & Liew, 2011). ELA curriculum that includes comments on writing assignments that are specific and focused, such as good descriptive adjectives, allow students to reflect and increase achievement which results in greater self-efficacy and engagement (Graham & Harris, 2015; Graham et al., 2017; McTigue & Liew, 2011).

Autonomy, self-efficacy, and positive relationships with teachers and peers contribute to student engagement (Perry, 2008; Sokal & Katz, 2015). However, the middle school schedule often does not provide time for hands-on active participation in learning activities that challenge

and involve students in class discussion, collaboration, and development of effective communication skills (Lesseig et al., 2017).

Students are more engaged when assignments are challenging and relevant (Sokal & Katz, 2015; Orthner et al., 2013; Woolley & Bowen, 2007). Engagement increases when students consider the curriculum to be authentic, interesting, challenging and to provide opportunity for choice in the learning process (Alexander, 2014, Allen-Lyall & Davis, 2020; Harmon et al., 2012; Orthner et al., 2013). Exploration of vocational and career opportunities influences student attitudes, abilities, and activities that aid in building self-efficacy and identity which increase student engagement (Lapan et al., 2016; Orthner et al., 2013; Perry, 2008; Schaefer & Rivers, 2012). Curriculum using collaborative learning, which addresses the social needs of the students, increases student knowledge and positively impacts self-efficacy, autonomy, achievement, and engagement (Perry, 2008; Sokal & Katz, 2015). However, students who are achieving academically may not be intellectually engaged if they are not using critical thinking skills (Perry, 2008; Sokal & Katz, 2015). Students who value education and reading, have a sense of belonging, and feel they are respected have a higher degree of engagement and are less likely to become disengaged (Kelley & Decker, 2009; Perry, 2008; Sokal & Katz, 2015).

Instructional Humor Processing Theory proposes that humor can be used effectively by teachers as a bridge to further student academic achievement (Bolkan & Goodboy, 2015). Instructional Humor Processing Theory further contends that humor can increase student attention and be a motivating factor (Bolkan & Goodboy, 2015). Humor properly utilized in the classroom may create an environment in which students are more comfortable and motivated to learn (Bolkan & Goodboy, 2015). Humor may also improve a sense of community between the students and teacher and increase the interest and desire to learn (Bolkan & Goodboy, 2015).

Students may be more attentive and willing to engage in the learning process (Bolkan & Goodboy, 2015). However, humor used improperly such as offensive jokes or insensitive comments, may hinder learning and thus create a negative impact in the classroom environment (Bolkan & Goodboy, 2015). Student motivation increases when students recognize they have the ability to achieve success in class, to make the decisions to participate, and to acknowledge that they belong (Bolkan & Goodboy, 2015).

Memes

The use of social media and the internet has increased significantly and has become the vehicle to portray popular culture, the culture in which the 21st century learners live (Bell, 2013; Boa Sorta, 2019; Brubaker at al., 2017; Grundlingh, 2017; Prokopeak, 2019; Sharma, 2018; Scardina, 2017). The internet has become more interactive enabling users to communicate and share content rapidly (Bell, 2013; Boa Sorta, 2019; Kulkarni, 2017; Prokopeak, 2019; Shifman & Thelwall, 2009; Woodworth, 2018). In addition, the internet has created opportunities for educators to develop new teaching strategies that will enhance student engagement by making learning more enjoyable and appealing to digital natives (Bell, 2013; Boa Sorta, 2019; Purnama, 2017; Scardina, 2017).

Richard Dawkins in his 1976 book *The Selfish Gene* presented the concept of the meme, based on the Greek *mimema* meaning imitation, as a unit similar to a biological gene that allows a cultural thought, idea, or opinion to quickly pass from one individual to another (Blackmore, 1998; Boa Sorta, 2019; Burman 2012; Grundlingh, 2017; Kahmi, 2004; Mazambani, 2015; McGregor, 2014; Shifman, 2013; Wang & Wang, 2015). The internet provides the mechanism for transmission of memes created by one individual to reach a larger audience which in turn can repeat or modify and send the meme to a still larger audience (Boa Sorta, 2019; McGregor, 2014; Prokopeak, 2019; Wang & Wang, 2015; Woodworth, 2018). Therefore, the internet meme has emerged as an accepted and effective communication tool of popular culture to impact the lives of people, including students, by influencing behavior, attitudes and opinions (Bell, 2013; Boa Sorta, 2019; Woodworth, 2018; Grundlingh, 2017; McGregor, 2014).

As indicated in the word meme, when a meme is modified and distributed on the internet, the process of imitation is involved (Blackmore, 1998; Kamhi, 2004; Latchem, 2014; Mazambani, 2015). Imitation is an integral and imbedded part of learning the language skills of listening, speaking, writing and reading whether in the home, community, or classroom (Blackmore, 1998; Kamhi, 2004; Lin, 2017).

Memes are a non-verbal form of communication and should be considered as an element of speech or even a genre since communication depends on someone sending a message to someone who receives it (Boa Sorta, 2019; Grundlingh, 2017; Wiggins & Bowers, 2014). Memes have a purpose and a meaning that is understood by the sender and the receiver due to their shared social culture (Boa Sorta, 2019; Grundlingh, 2017; Wiggins & Bowers, 2014). Although memes may include videos and references to websites, they are usually a visual image with a caption that conveys ideas and emotions that are humorous, serious, historical, political, religious, or even fallacious (Boa Sorta, 2019; Grundlingh, 2017; Ireland, 2018; Kulkarni, 2017; McNeill, 2017; Shifman, 2013; Woodworth, 2018). Since individuals tend to remember a message associated with a visual image to which they can relate, they may accept the concept presented in the meme to enlist in a cause, vote for a particular candidate, purchase an advertised product, explore the tenets of a particular faith, or further explore a culturallybased ideology (Boa Sorta, 2019; Brubaker et al., 2017; Johann & Bulow, 2019; Ford, 2019; Shifman, 2017; Sharma, 2018; Woodworth, 2018). Memes elicit a response that appeals to the intellect and the emotions of the individual and increase engagement (Kulkarni, 2017; Wang & Wang, 2015; Woodworth, 2018).

Memes have been used successfully in diverse sectors of society including advertising and social commentary but are subject to replication and modification that may portray a message dramatically opposite from the original or misrepresent or distort the meaning entirely (Boa Sorta, 2019; Patel, 2013; Wang & Wang, 2015; Wiggins & Bowers, 2014; Woodworth, 2018). Nevertheless, the meme provides a quick and effective method for advancing the culture and concepts with which it is associated regardless of the social status of the individuals and to influence their thoughts and practices (Patel, 2013; Wang & Wang, 2015)

In research of the effect of using memes in higher education, students were to generate memes to explore topics being studied in the college classes (Purnama, 2017; Wells 2018). The results indicate the students preferred using technology and memes due to the visual appeal of memes, the ease of creating memes, and the enjoyment in the learning process when memes were used (Purnama, 2017; Wells 2018). The activities required students to develop critical thinking skills, to become aware of social media websites, and to evaluate the authenticity, reliability, and accuracy of the information they read and subsequently presented in their own memes (Purnama, 2017; Wells 2018). The results indicate the effectiveness of using memes as a teaching strategy and the positive impact on student engagement (Purnama 2017; Wells 2018).

Memes have been introduced in professional development and the K-12 classroom to increase interest and engagement and to nurture positive relationships between and understanding with colleagues and students (Ask & Abidin, 2018; McNeill, 2017; Scardina, 2017). Memes can be used in English Language Arts classes to teach students that the interpretation of a text may vary based on the culture and the experience of the reader (Boa Sorta, 2019; McGregor, 2014; McNeill, 2017). Teachers should help students realize that when they are reading text, including memes, they are often interpreting the text through their own experience and prior knowledge and perhaps not with the meaning intended by the author (Boa Sorta, 2019). The interpretation of memes and the extraction of meaning require higher order critical thinking skills (Boa Sorta, 2019; Scardina, 2017). In the 21st century classroom and the era of fake news and misinformation, educators must teach students the research skills necessary to identify and validate the creditability of sources (Boa Sorta, 2019; Ireland, 2018).

The concept of the meme – a picture with words – is used in teaching language skills and in enhancing learning with illustrations in all aspects of life for all age groups (Bell, 2013; Lin, 2017). Memes are an innovative teaching strategy similar to vodcasts and project-based learning that enhance student engagement in middle school ELA classes (Aslan & Reigeluth, 2013; Bell, 2013; Shankar-Brown & Brown, 2014). When students create, share, and analyze memes, they are using creativity, critical thinking, and communication skills which increase student engagement (Bell, 2013; Boa Sorta, 2019; Purnama, 2017).

Conclusion

Research clearly identifies the relationship between student engagement and academic achievement. Since student engagement and academic achievement during middle school is reflected in the decline in standardized assessment for reading and writing, it is imperative that middle school ELA teachers use teaching strategies that will engage students in the learning process. The middle school student is undergoing significant changes biologically, socially, emotionally, and cognitively that affect their ability to learn. In addition, they live in a society that is rapidly evolving for which they must be prepare to function as adults. The development in technology impact many aspect of their lives including the expectations for a comprehensive education that will require communication skills, analysis of information from varied sources, and the ability to utilize technology. The challenges for 21st century ELA teachers is to identify teaching strategies that will engage the middle school student in learning while teaching the required curriculum. The purpose of this qualitative research is to investigate the impact of memes in 7th and 8th grade English Language Arts. Memes are recognized communication methods that has visual appeal and is part of the culture of the middle school student.

Chapter III

Design and Methodology

Introduction

This chapter introduces the research study design and methodology used to collect and analyze data with respect to the impact of memes on student engagement in the 7th and 8th grade English Language Arts classrooms. Research shows that student engagement gradually decreases each year from middle school through high school graduation (Orthner et al., 2013; Woolley & Bowen, 2007). Full student engagement is difficult to identify in high-performing middle school and high school students (Connor & Pope, 2013). For seventh and eighth graders, middle school is an important and decisive time to motivate and prepare students for future academic and career success (Schaefer & Rivera, 2014). The purpose of this research study was to investigate the impact of memes on student engagement in 7th and 8th grade ELA. The objective of this study was to explore three research questions:

- What is the impact of memes on student engagement in 7th and 8th grade English Language Arts, as articulated by teachers?
- 2. What instructional practices using memes lead to increased student engagement?
- 3. How can memes be used an as assessment tool to measure academic achievement?

Research Design

A research design of any study is the comprehensive blueprint that outlines the data collection, data analysis, and reporting (Bloomberg & Volpe, 2016; Creswell, 2019; Marshall & Rossman, 2016; Maxwell, 2013). It is a structured procedure, used by researchers and recognized by others, that validates the research questions and results (Bloomberg & Volpe, 2016; Creswell, 2019; Marshall & Rossman, 2016; Maxwell, 2013). In education, both quantitative and qualitative

research is needed to address existing situations with the common goal of both research methods to improve the educational outcomes for all students (Creswell, 2019; Marshall & Rossman, 2016; Maxwell, 2013).

Quantitative research is the investigation of a problem using mathematical analysis to record and evaluate specific predetermined questions with a limited number of possible choices (Creswell, 2019; Marshall & Rossman, 2016; Maxwell, 2013). The researcher's role is to confirm or negate outcomes based on the findings. In contrast, qualitative research involves a personal connection between the researcher and participants in which the researcher is asking open-ended questions to gain a deeper understanding (Bloomberg & Volpe, 2016; Creswell, 2019; Marshall & Rossman, 2016; Maxwell, 2013). Data collection is composed of words and images which are coded into themes and categories and later analyzed for emerging and significant trends (Bloomberg & Volpe, 2016; Creswell, 2019; Marshall & Rossman, 2016; Maxwell, 2013). Central to qualitative research is the importance and recognition of individual voice compared to the quantitative research where numbers represent the participants (Bloomberg & Volpe, 2016; Creswell, 2019; Marshall & Rossman, 2016; Maxwell, 2013). Although a qualitative design has fewer participants, the process is dynamic and evolving, flexible and reflective, and authentic and considerate (Bloomberg & Volpe, 2016; Creswell, 2019; Marshall & Rossman, 2016; Maxwell, 2013). Therefore, a qualitative research design was used to address the research questions for this study.

Participants

Research questions and research methodology are two significant components of research. However, crucial to any qualitative research are the participants (Bloomberg & Volpe, 2016; Creswell, 2019; Marshall & Rossman, 2016; Maxwell, 2013). Participants provide meaningful and essential information that further increase and strengthen the existing knowledge, advance professional practices, and provide evidence to drive policy (Bloomberg & Volpe, 2016; Creswell, 2019; Marshall & Rossman, 2016; Maxwell, 2013). Methodology is the design or strategy to obtain answers (Bloomberg & Volpe, 2016; Creswell, 2019; Marshall & Rossman, 2016; Maxwell, 2013).

The teacher participants routinely read the stories aloud in class with the students, discussed the reading, and analyzed the meaning and application of the story (De La Paz & Graham, 2002; Goldenberg et al., 2011; Graham et al., 2013; Graham et al., 2017; Jeffery & Wilcox, 2013; Olson et al., 2015; Welsch et al., 2019). Students were required to write a summary or to explore an idea or concept from the reading. When the students successfully finished the writing, they were required to create a meme. Critical thinking skills were activated to evaluate and synthesize the reading and writing in order to create the meme.

Purposeful sampling was used as the primary recruitment strategy to select participants (Bloomberg & Volpe, 2016; Creswell & Guetterman, 2019). Purposeful sampling is the premeditated and planned selection of individuals to be recruited for participation in a research study (Bloomberg & Volpe, 2016; Creswell, 2019; Hoy & Adams, 2016; Maxwell, 2013). The researcher used criterion sampling to identify and select participants for this investigation. Criterion sampling is characterized by the meeting of prerequisites (Bloomberg & Volpe, 2016; Creswell, 2019; Hoy & Adams, 2016; Maxwell, 2013). Additionally, snowball sampling, a form of purposeful sampling where recommendations persuade other participants to join, was used to identify teachers for participation in this research (Bloomberg & Volpe, 2016; Creswell, 2019; Hoy & Adams, 2016; Maxwell, 2013).

Following the successful completion of the National Institute of Health (NIH) training (see Appendix E) and approved by the Institutional Review Board (IRB) at Northwest Nazarene

University (see Appendix F), the researcher utilized a social media platform to solicit teachers who teach either seventh and/or eight grade ELA and were willing to introduce memes in their curriculum. Using social media created opportunities for snowball sampling to take place (Bloomberg & Volpe, 2016; Marshall & Rossman, 2016).

Once a teacher participant agreed, a written consent form was sent through email indicating their commitment to participate and be audio recorded during the research. This email included the right of the participant to decline or withdraw from the research study at any time. Each participant was required to submit the written consent form before participating in the research study (see Appendix B). The researcher assigned a pseudonym to each participant to conceal their identity. Table 9 provides information for each participating teacher.

Data Collection

The purpose of this study was to investigate the impact of memes on student engagement in 7th and 8th grade English Language Arts. After the initial participating teachers were selected via social media, semi-structured interviews with open-ended questions were used to gather data. The results were transcribed, coded and analyzed for themes and trends (Bloomberg & Volpe, 2016; Saldana, 2016). Follow-up contact with the teachers was used to elicit responses when additional information for clarification was needed.

Semi-structured interviews were chosen as the primary and preferred method to conduct qualitative research because the participants were able to comfortably and truthfully share their individual ideas, opinions, and experiences (see Appendix A). The semi-structured interviews were used to ascertain and isolate instructional practices of memes and the subsequent impact of memes on student engagement. Six teacher participants in the Pacific Northwest took part in the study. Individual one-on-one interviews were completed and the researcher documented responses via an audio recorder from each participant one at a time (Creswell, 2019; Maxwell, 2013). Every interview lasted between 30 to 60 minutes in length. The researcher attached a pseudonym to ensure protection and security for each participant and their identity (Bloomberg & Volpe, 2016; Creswell, 2019; Maxwell, 2013). The researcher further guaranteed the information would be private and locked in a filing cabinet and digital files would be password protected on a computer (Bloomberg & Volpe, 2016; Creswell, 2013).

Pilot Interview Groups

The focus group questions were piloted with three teachers to validate the instruments. The researcher used data collected from the pilot to modify the instruments to ensure clarity, reliability, and specificity. Additionally, the pilot certified the focus groups questions yielded data related to the impact of memes on student engagement in 7th and 8th grade ELA classes.

Analytical Methods

Data analysis involves organizing, classifying, summarizing, and interpreting the relationships between data segments and generating a conclusion for the research questions (Bloomberg & Volpe, 2016; Creswell, 2019; Marshall & Rossman, 2016; Maxwell, 2013). Qualitative data was analyzed through the examination and organization of data, coding of data into themes and categories, description of the data, interpretation of the findings, and validation of results (Bloomberg & Volpe, 2016; Creswell, 2019; Maxwell, 2013). Teacher interviews were conducted through phone calls. The interviews were audio recorded and transcribed verbatim by the researcher (Creswell, 2019; Marshall & Rossman, 2016; Maxwell, 2013; Saldana, 2016). After thorough review of the transcriptions, the recorded data were arranged and coded and common themes and trends identified (Creswell, 2019; Marshall & Rossman, 2016; Maxwell, 2013;

Saldana, 2016). To summarize the key steps in data analysis are as follows: 1) preparing and organizing data; 2) coding information; 3) creating potential themes and categories; 4) developing narratives; 5) interpreting findings; and 6) reporting results (Bloomberg & Volpe, 2016; Creswell, 2019; Marshall & Rossman, 2016). Member checking (Appendix C) by the participants allowed the researcher to verify the accuracy of the written report and findings (Bloomberg & Volpe, 2016; Creswell, 2019; Creswell, 2019; Maxwell, 2019; Maxwell, 2013).

Limitations

Every research study possesses limitations (Bloomberg & Volpe, 2016; Marshall & Rossman, 2016) and this particular study is limited by the criteria established by the researcher on the teacher participants. Introducing memes as an anticipatory setting to a lesson is simple. However, implementing memes as a consistent form of assessment during a unit can create anxiety and uncertainty, especially if memes had not been introduced before. Using memes to measure student mastery requires time, creativity, and resources and many teachers are unable to exert all three. Including memes into grading must be advantageous and rewarding for the teacher participants in order to be considered. A key limitation was the small sample size of the teacher participants. Another possible limitation is that memes maybe better suited for other content area classes such social studies, history and government. The use of memes may be more prevalent in metropolitan and urban areas than rural communities that may not have as much access to the internet and social media. Finally, COVID-19 limited the access to in-class observations of teacher participants using memes. Given the pandemic climate, the impact of COVID-19 on student engagement is unknown.

Role of the Researcher

The researcher is responsible for clearly defining the scope of the research so that the teacher participants can provide accurate and complete data (Bloomberg & Volpe, 2016; Marshall & Rossman, 2016). The ability of the researcher to elicit these responses depends on establishing a professional relationship with all teacher participants so they are aware that their responses are valued and appreciated (Bloomberg & Volpe, 2016; Marshall & Rossman, 2016). The researcher must be authentic and sincere, thoughtful and reflective to gain the confidence and trust of the participants (Marshall & Rossman, 2016). The researcher must be prepared and respect the time limitation set for the interviews (Bloomberg & Volpe, 2016; Marshall & Rossman, 2016). The researcher must provide an opportunity for each participant to review his/her own responses and data including the researcher's interpretations and conclusions before the search is finalized (Bloomberg & Volpe, 2016; Marshall & Rossman, 2016).

The researcher is a family-oriented son and brother who has been a friend, partner, educator, coach, and, most importantly, a believer. The researcher enjoys travel, cooking, home improvement, lawn maintenance, and recreational activities. The researcher has worked in education for 20 years in public, private, and non-profit settings. During this time, the researcher has interacted with families, students, and co-workers to provide the most appropriate and advantageous services to ensure personal growth and development. The researcher was born in South Korea, adopted in the United States, and learned to speak English as an eight-year-old first grader. The researcher received education at both the private and public schools and universities. Due to the varied education and experiences, the researcher is interested in ways to increase student motivation using innovative and progressive teaching strategies.

The uncertainty to observe classrooms due to COVID-19 and personal bias are two possible researcher-based liabilities to the research study (Bloomberg & Volpe, 2016; Marshall

& Rossman, 2016; Maxwell, 2013). COVID-19 limited access for non-essential people in the schools and classrooms. The researcher has used memes for student engagement and instructional strategy in multiple classes including 7th and 8th grade ELA. The researcher used participant validation to counter any bias (Bloomberg & Volpe, 2016; Maxwell, 2013).

Chapter IV

Results

Introduction

Academic progress and achievement are positively associated with student engagement (Jeffrey & Wilcox, 2013; Smith et al., 2016). The more students are engrossed and interested, the greater their learning and success (Jeffrey & Wilcox, 2013; Smith et al., 2016). This is especially true for seventh and eighth grade students who are fully entrenched in self-consciousness, self-questioning, and impulsive and erratic behaviors (Ellerbrock et al., 2015; Fredericks et al., 2014; Guthrie et al., 2014; Kelley & Decker, 2009; Lessing et al., 2017; Smith et al., 2016; Sokal & Katz, 2015). Seventh and eighth grade teachers who recognize the characteristics of middle school students can seize the opportunity to involve and inspire students to actively participate in learning (Bruhn et al., 2017; Graham et al., 2017; Lessing et al., 2017; Schaefer et al., 2016; Smith et al., 2016). A positive classroom setting where students feel safe and in which curriculum is integrated with relevant activities and practices should result in increased student engagement and participation (Conner & Pope, 2013; Kelley & Decker, 2009; McConn, 2019).

Innovative teaching methods and learning strategies including the use of technology will equip and prepare students for the 21st century demands (Bruhn et al., 2017; Cayvaz et al., 2019; Hill & Ericsson, 2014; Howard, et al., 2019; Jack & Higgins, 2019; Karatas et al., 2016; Lessing et al., 2017; Schaefer et al., 2016). Technology which is functional and progressive will increase student engagement and learning while supporting the teaching process (Boyce et al., 2014; Cumming et al, 2013; Hawkridge, 1990; Jack & Higgins, 2018; Karatas et al., 2016; Smith et al., 2016). Chrome books and mobile devices have accelerated the emerging communication methods on the internet (Jack & Higgins, 2018; Jones & Rice, 2017; Karatas, 2016; Sharma, 2018). Research supports the use of social media and digital devices to engage students and thus improve academic achievement (Boyce et al., 2014; Cumming et al., 2013; Karatas et al., 2016; Smith et al., 2016). Memes are among the emerging methods of communication on the internet (Boyce et al., 2014; Cumming et al., 2013; Karatas et al., 2016; Smith et al., 2016).) Memes which are recognized as communication are preferred due to their visual appeal and creativity (Purnama, 2017; Wells, 2018). The organic uniqueness of memes can be used as an educational strategy to support students in analyzing information with greater understanding (Purnama, 2017; Wells, 2018). The purpose of this study was to examine the impact of memes on student engagement in 7th and 8th grade English Language Arts.

Emergent Themes

Research indicates a noticeable decrease in student engagement in the formative years of middle school and supports a direct correlation between student engagement and academic achievement (Barber et al., 2004; Fredericks et al., 2004; Jeffery & Wilcox, 2013, Kelley & Decker, 2009; Orthner et al., 2013, Sokal & Katz, 2015). This qualitative investigation of the impact of using memes on student engagement in 7th and 8th grade English Language Arts classes is significant due to this decrease in student engagement during middle school (Busby et al., 2014; Mustafaa et al., 2017; Orthner et al., 2013; Smith et al., 2016). Student engagement decreases when reading and writing are taught with limited opportunities for creativity and the expression of individualized student voice (Barber et al., 2015; Fredericks et al., 2004; Guthrie et al, 2014; Jeffery & Wilcox; Kelley & Decker, 2009; Orthner et al., 2013; Shankar-Brown & Brown, 2014).

Integration of memes into the curriculum is an opportunity to increase creativity and expression of student voice. The researcher's goal was to determine whether the use of memes in

7th and 8th grade ELA classes would fulfill the need for creativity and expression of student voice and thereby increase student engagement and academic achievement.

The research questions provided the blueprint for the interview protocol (Appendix A). Semi-structured interviews were conducted with six middle school teachers, each of whom has taught ELA for at least ten years. Teacher participants were asked for details about their previous experience with and observations of memes. The results of the interviews are provided within this chapter and were informed by the following three research questions:

- What is the impact of memes on student engagement in 7th and 8th grade English Language Arts, as articulated by teachers?
- 2. What instructional practices using memes lead to increased student engagement?
- 3. How can memes be used an as assessment tool to measure academic achievement?

The first section of interview questions centered on student attitudes and behaviors.

Teacher participants were asked to share their observations of student responses during the following three stages:

- 1. Beginning of the unit when memes were first introduced
- 2. During the unit when memes were used
- 3. At the end of the unit.

The second section of interview questions focused on the instructional practices and strategies using memes. Teacher participants were asked to do the following:

- 1. Discuss their previous knowledge and interactions with memes
- 2. Itemize resources and training necessary for using memes in the classroom
- 3. Specify the unit and lessons developed to include the use of memes.

The third section of interview questions concentrated on academic achievement. Teacher participants were asked about the following:

- 1. Grading methods
- 2. Evaluative strategies to measure student growth
- 3. Barriers which hindered the inclusion of memes
- 4. Successful narratives and teacher reflection on the use of memes in the classroom.

Kolb's Experiential Learning Theory (Bohon et al., 2017; Groves et al., 2013; Osborn et al., 2003; Peterson et al., 2015) provided the framework for examining how using memes impacted student engagement and academic achievement 7th and 8th grade English Language Arts. Fundamental discoveries and evidence were gathered from semi-structured interviews. The responses to the interview questions were analyzed and organized into three categories: impact on student engagement, instructional practices, and academic achievement.

Table 6 illustrates the categories and codes with corresponding themes that emerged from the interview process.

Table 6

Research	Categories	Codes	Themes
Question 1	Impact on student engagement	Excitement, motivation, familiarity, anxiety/reluctance	Student responses
Question 2	Instructional practices	Previous experiences, resources, unit and lessons	Application
Question 3	Academic achievement	Standards/rubric, growth, barriers, reflection, success	Assessment

List of three themes and categories

Research Participants Profile

Six middle school teachers who taught ELA participated in the research study. Five taught eighth grade ELA while one taught seventh grade ELA. Teacher participants were given pseudonyms to safeguard and protect their identities throughout the research process. The pseudonyms given were Cara, Jessica, Kelsey, Mary, Patricia, and Rachel. The teacher participants consisted of six females with teaching experience ranging from ten to twenty-three years. Table 3 provides the gender, ethnicity, number of years taught, and the level of education of the teacher participants. The six educators provided valuable information based upon their use of memes in the classroom.

Table 7

Participants' Profiles

Pseudonym	Gender	Ethnicity	Teaching Grade	Years Taught	Education
Cara	Female	Caucasian	8 th Grade	10	B.A. English
Jessica	Female	Caucasian	8 th Grade	10	B.A. Special Education; M.A. Special Education
Kelsey	Female	Caucasian	8 th Grade	10	B.S. Science in Middle School; M.A. Curriculum and Instruction
Mary	Female	Caucasian	8 th Grade	16	B.A. in Education; M.A. in Teaching; Ed.S.
Patricia	Female	Caucasian	8 th Grade	15	B.A. English M.A. Leadership
Rachel	Female	Caucasian	7 th Grade	23	B.S. Language Arts

Participants selected were representative of middle school seventh and eighth grade ELA teachers. Purposeful sampling was used to identify a population of teacher participants who met the research conditions (Bloomberg & Volpe, 2016; Creswell & Guetterman, 2019; Marshall & Rossman, 2016). The selection of teacher participants serving various populations of students in different classroom settings along with their educational background, training, and familiarity
with the topic allowed for the successful research study on the impact of memes in seventh and eighth grade ELA.

Each teacher participant contributed a distinct perspective and valuable data on the impact of memes. The five 8th grade teachers (Cara, Jessica, Kelsey, Mary, and Patricia) worked together as a department and oversaw all eighth grade students in their Pacific Northwest middle school. The seventh grade teacher was in a rural school district also located in the Pacific Northwest.

Each teacher participant was willing to implement teaching strategies and assessment techniques designed to be appealing and engaging for the students. The teacher participants provided assessment and engagement data and thus became active research contributors. The teacher participants provided detailed professional experiences, including their previous contact with memes, the necessity for alternative teaching and learning devices such as memes, and their comprehensive implementation of memes in their unit of study.

Cara

Cara teaches four classes and has approximately 100 8th grade students. Cara introduced memes within a traditional paired reading-writing response unit. After reading an assigned text, students responded by writing a paragraph summarizing the reading. The students created a meme based on the summary paragraph. The meme represented a way to link their thought process to the written paragraph and to transfer it to an image or visual format. The caption in the meme had to directly connect to the paragraph. Five different meme examples were created by the students in conjunction with the written paragraphs. By the end of the unit, the students were more fluent in the process of creating memes. However, the novelty had worn off by the end of the unit. The students did find success with the memes and enjoyed making memes.

Jessica

Jessica has four classes with close to 80 8th grade students altogether. One of the classes is an inclusionary class in which half of the students have Special Education reading and writing concerns and the other half do not quality for Special Education but are identified as needing reading and writing intervention. Jessica introduced memes as part of a fictional short story unit and embedded memes within the writing and comprehension lessons. Initially the students were excited about memes but realized the difficulty in finding images for their memes. Therefore, scaffolding was required to help students discover and use meme generation websites. This resulted in more focus on the content during the lessons. Students really enjoyed the memes and would share them with each other, often giggling during the process. Students had fun making memes. When the unit was finished, the students asked if memes would be used in the future.

Kelsey

Kelsey teaches two eighth grade classes and has a combined 40 students who are in the general education population. She introduced memes after her classes had read a short story together. Kelsey and her ELA department created memes as examples for the students. Ensuing conversations explained how memes could be used to represent the main idea in the reading using a creative yet interesting method. Students responded well and were willing to experiment with memes. The first hands-on lesson started by dedicating time for students to select their favorite meme backgrounds and insert them into a shared Google folder so they had a grab bag of options. When the possible backgrounds were accessible, students, especially nervous students, felt more comfortable and confident in the meme creation process. By the end of the unit, the magic associated with the introduction of memes had decreased because students began viewing memes as an accepted part of the curriculum. Nevertheless, Kelsey observed that using

memes helped students identify and communicate the main idea of the reading. Kelsey pointed out that, "The overall quality of student memes and their ability to identify the central ideas had improved significantly."

Mary

Mary teaches one 8th grade English Language Arts class of 18 students. She introduced memes in partnership with use of the RICE writing strategy: restate the question, add background information, cite the source of the information, and explain the evidence. The use of memes was an additional strategy to demonstrate understanding of the short stories in a fun and creative way. A template was initially created for students to ensure success. Instructions gave guiding steps including how to use Google Drawing, insert Google Drawing, and add text. A folder containing blank meme backgrounds was provided for students to access and use. Mary presented an example of a meme for a short story that the class had read and discussed the process to create a meme. In some instances, students had to have a deeper understanding of the themes and nuances of the text, which may be poignant, for memes to be effective. For example, A Passage to Freedom is a fictional story of a Japanese embassy official who helps protect and save Jews in Poland during World War II from the Nazis. Class discussions led to questions and thoughtful reflections on the appropriateness of using memes for this story. Mary posed the following questions to her students: Are memes always intended to be humorous? Can they highlight important facts? Can memes bring to the forefront the deeper meaning and details? She was pleasantly surprised not only by the maturity but quality of the memes created by the students depicting A Passage to Freedom. Students handled the assignment tactfully and respectfully while pinpointing the important parts of the story. The students enjoyed sharing memes with each other and would often make two or three when the assignment was to make

one meme. The students were excited to share their ideas and encourage each other. They also were quick to provide feedback to other students whose memes did not match the paragraph they had written. Students thought it sounded like fun but complained that they were going to have to do work. Students were pretty quiet during the meme creation, which Mary pointed out is usually a sign of concentration. Students volunteered to copy and paste their memes into a shared Google Slideshow, and many accessed this to look at their classmates' memes.

Patricia

Patricia has four 8th grade classes and nearly 94 students. She introduced memes as a way to energize the short story unit. An open-ended paragraph was required to check for comprehension for each story. However, students were becoming burned out with the typical open paragraph responses. Instead, a meme was used to illustrate the main idea of the writing. The majority of students were engaged with using memes. Some designed more than one meme and debated which meme to submit. With the paragraph, students did not create multiple paragraphs or debate which paragraph to submit. Patricia expressed that a few students were nervous about the uncertainty of completing a meme. These students generally took longer to develop unique ideas and felt an original assignment is an extra thing to do. While these students were capable of creating ideas, they were often their own obstacle. Students were given an option to upload their memes to Google Slide to share their memes with all the ELA classes. Approximately 80% of Patricia's students shared their memes and chuckled when viewing other memes.

Rachel

Rachel teaches two seventh grade English Language Arts classes with a combined 24 students. Rachel had previously used memes in her freshman class when they were studying

Romeo and Juliet. Students successfully created a summary of one act using a meme, indicating they understood the meaning. For them, it was exciting since memes are one way to communicate. Memes were introduced to her seventh grade class early in the fall semester to observe their reaction. The students created a meme summarizing the theme of a story they read together in class. Some confusion was noticeable and they questioned the presence and use of memes in ELA. Other students struggled with the content but preferred memes when given a choice between a summary and a meme. Upon completion of the unit and emphasis on memes, the majority of the seventh grade students were relieved. Rachel expressed that memes had forced her students to think differently and more critically. Thus, the thought of memes being easier was in stark contrast to their initial thoughts. While the students were ready to move to a new unit and traditional methods of assessing comprehension, Rachel indicated that she would probably use memes later in the school year.

Results for Research Question One: Student Responses

Research indicates authentic hands-on learning activities increase student engagement (Groves et al., 2013; Osborn et al., 2003; Peterson et al., 2015; Stokes-Eley, 2007; Su, 2015). When students become actively involved in learning rather than focusing on the final product, they become enthusiastic and engaged in learning (Kolb & Kolb, 2005; Wallace & Sung, 2017; Tessier, 2014). Offering students choice enables students to learn using the modalities that enhance their ability to learn (Allen-Lyall & Davis, 2020; Harmon et al., 2012; Wallace & Sung, 2017; Tessier, 2014).

The first research question of this study asked: What is the impact of memes on student engagement in 7th and 8th grade English Language Arts, as articulated by teachers?

To answer this question, teacher participants were asked to provide their thoughts on student engagement, how memes were introduced to students, how memes were used by students, and how students responded to the memes at the beginning of the unit, during the unit, and at the end of the unit, including the reflection component.

Student Responses surfaced as the primary theme. Teacher participants described how students responded to memes.

Theme	Codes
Student responses	Excitement, motivation, familiarity, anxiety/reluctance

Theme for Research Question One

All six teacher participants provided information based upon their observations of students when memes were initially introduced to the class, when student began using the memes, and at the conclusion of the unit. Table 8 provides the frequency of response codes under the theme of student responses.

Table 8

Student Responses Codes

Student Responses at Various Stages	Frequency of Description
Initial Introduction	
Excitement	6 of 6 teacher participants
Motivation	4 of 6 teacher participants
Familiarity	3 of 6 teacher participants
Anxiety/Reluctance	2 of 6 teacher participants
Using Memes	
Interested	6 of 6 teacher participants
Challenged	5 of 6 teacher participants
Shared	4 of 6 teacher participant
After Using Memes	
Would use again	6 of 6 teacher participants
Improved reading and writing skills	5 of 6 teacher participants
Became routine	3 of 6 teacher participants

Student Responses at Initial Introduction of Memes

Student engagement is especially sensitive at the middle school due to the decline in student engagement, motivation, and enthusiasm which affect learning and hinders academic growth and achievement (Busby et al., 2014; Jeffery & Wilcox, 2013; Mustafaa et al., 2017;

Orthner et al., 2013; Smith et al., 2016; Sokal & Katz, 2015). The initial student responses of using memes in their English Language Arts classes were dependent on the degree of technological ability and their familiarity with memes. Students who were familiar with memes were excited at the prospect of using memes which are a part of their 21th century culture. The students who had weaker technical skills, were not familiar with memes, or who struggled with reading and writing exhibited nervousness and anxiety.

Cara and Jessica remembered the sheer excitement when memes were initially mentioned for the unit. Kelsey noted the reactions of her students:

"It was definitely a mixed bag. Each year, I have a mix of students that are highly motivated to those who have trouble engaging on a basic level. Most of the students were excited to use memes. It is something they see in their own lives, so they were naturally excited to get started. However, a small but outspoken population who were not memeliterate and have not used memes were very nervous about creating memes."

Mary had a similar experience with the onset of memes. Students were excited about creating memes as part of the assignments.

The students were saying, "Oh yeah, memes are fun." A couple students who complain about absolutely everything grumbled memes were just going to be more work. However, the overall idea of memes was, "Oo, this is going to be cool and fun!"

Patricia observed greater ambition from her students. She described her students as being "Very excited." Many of them had statements like, "Oh cool" or "This is going to be awesome!" She recalled her students immediately started Googling possible images to use even though they did not even know what the was assignment was, yet. Suffice to say, there was a high level of enthusiasm. Similarly, Rachel noted that just the idea and opportunity to do something that the students liked and was within their culture - student culture - were motivating factors. The students were excited but they were not really sure why. Rachel shared:

The students saw "Theme Meme" on the whiteboard and said, "Wait, what? A meme? We get to do a meme?" The students did not feel memes were an English thing, so it was fun just to mix it up a little bit more.

The observations relayed from Cara, Jessica, Kelsey, Mary, Patricia, and Rachel described their in-person, in-class experiences when memes were first introduced to their students. Teacher participants summarized the initial student responses of the introduction of memes from overwhelming excitement to anxiety and uncertainty.

Student Responses Using Memes

Students entered the active experimentation stage of the Experiential Learning Cycle and thus began to create memes in new situations (Bohon et al., 2017; Groves et al., 2013; Su, 2015). All six teacher participants ensured that students were given opportunities to create memes as part of their curriculum and units of study.

The responses of students indicated an overall high level of engagement. Significantly, all teacher participants reported that students were excited and willing to experiment with memes. To alleviate the frustration and anxiety level of students who were not technologically savvy or familiar with memes, teacher participants shared they provided resources for the background memes. This enabled students to focus on the literary content and purpose of the assignment thereby increasing their ability to engage with memes. The shared folder allowed students to submit their completed memes for their classmates to see and thereby gaining recognition. As a result of using memes, students demonstrated an increase in understanding and comprehension

as well as the abilities to analyze, synthesize, and communicate effectively.

Cara recorded that the students were interested in memes though some struggled because they did not consider themselves to be technologically savvy and had not given much attention to memes. Some of the others students performed much better because they actually seemed to understand what was being asked of them. So, their interest was still present. Cara modeled the approach by creating memes in Google Docs using a meme generator. Students now had multiple options to start a meme. They did struggle with finding images that connected with the content.

Jessica observed that her students really enjoyed and shared their memes with each other. They would giggle quite a bit. Students would often create two or three memes when the assignment required only one meme. Similarly,

Kelsey noted her students responded well to the idea of using memes. They were willing to try. Kelsey reflect on the process:

We actually started by taking about five minutes for the students to pick their favorite meme background and put them into a class shared Google folder so that they would have a grab bag to access. Therefore, it was not the entire internet they were searching. Once they had those background images, especially the students that were nervous at first, they felt more comfortable in trying to pick a background for their memes.

Mary provided background information in preparing to implement memes. She shared the the 8th grade teachers built a template of how to build a meme. The teacher participants gave students instructions on how to use Google Drawing, insert images, and add text. Mary explained, "I went through the process so that the students could see a demonstration on how to create memes and execute the technical aspects. Another teacher had created a folder of blank meme backgrounds that the students could choose." Students could also go online and find different backgrounds they wanted to use. Mary continued:

"I gave an example for a story that we had already read together and talked them through my process of creating the meme: what elements of the story did I want to discuss, what was the big message, how did I select a background, and how did I choose words for the meme?"

Patricia indicated the vast majority of the students were excited enough to have peers next to them say, "Oo, look at this meme" and "What do you think of this one?" Patricia continued:

"Some students created more than one and then had big debate about which one to actually submit with the assignment, which they are not going to do that with a paragraph. They are not going to write an extra paragraph and then show their friends. A few students were very nervous about the memes because they were concerned about how they were going to complete the assignment. These tend to be the students who are slower with their writing and take longer to think of unique ideas."

Patricia indicated approximately 5% of each class was thinking of it as one extra thing to do and the students would ask, "How am I going to come up with a good idea?"

Rachel relayed that some students did say, "This is hard." Students had different reactions depending on why they were making a meme. But students still enjoyed creating memes. On one occasion, Rachel told them, "Well, you can either do a summary or a meme", and they decided to do the meme.

Through the observation of the teacher participants, students during the active experimentation stage can be placed into two groups based upon their previous exposure and experience with memes: those who were familiar with memes and excited to create memes and those who are unfamiliar with memes, uncomfortable with technology, and exhibited anxiety. To increase the comfort level and decrease anxiety, teacher participants created blank background images for students to access. Creating memes required students to identity key literary components within the stories and to analyze and synthesize the meaning into concise texts to place on the meme background image. This process activates the higher order critical thinking skills. The social needs of the middle school students were met through the interaction of peers and sharing their product to gain feedback and recognition. To increase motivation, teacher participants created a shared drive for students to post memes to be viewed by their classmates. The results indicate using memes in the classroom was positive, increased student engagement, and activated higher order thinking skills.

Student Responses After Using Memes

Reflection is the last specific learning skill within the Experiential Learning Theory Cycle (Bohon et al., 2017; Groves et al., 2013; Osborn et al., 2003; Peterson et al., 2015; Su, 2015). Reflection requires the willingness and ability to analyze new experiences, such as the construction of memes (Bohon, et al., 2017; Groves et al., 2013; Su, 2015). Memes increased student comprehension and understanding of the content and concepts in the literature they were studying. Because memes were successful in both student engagement and academic achievement, they became a dependable routine in the ELA curriculum. Due to the results and impact of using memes, teacher participants decided they would use memes again.

Cara summarized the process and analyzed the results of using memes. Her students created five different meme examples with their writing paragraphs. By the end, they were

getting more fluent and faster in creating the memes. The novelty of memes had worn off a little toward the end, but students were still doing well with the memes assignments.

Jessica was encouraged when the students asked if they were going to be using the memes again in the future. The students did not really say much when the unit was over, but when memes were brought back about two months later for another short story, they were really excited to see it again.

Kelsey reflected that the magic had definitely worn off a little bit. Memes were becoming more routine so they did not have as much excitement as when they first started using memes. However, the positive benefit was the quality of student memes and ability to identify the idea they were trying to express with them had improved significantly even though the memes were becoming routine. Kelsey noted:

"When something is introduced in middle school and students realize they have to actually put work and effort into it, they became more knowledgeable at creating memes. Creating memes helped the students understand the main idea they were trying to communicate. They developed greater skills in determining and communicating the main idea."

Mary discussed the meme experience with the students giving them the opportunity to express their thoughts. She asked the students, "What do you think about memes?" A couple of them said, "Well, it was more work", and "It was another thing." Mary continued:

"However, the students were so engaged they almost got a little competitive with memes. One of the students struggles with reading comprehension and the deeper level of thinking. It really was more work for her and difficult. To create memes well really requires a deep understanding of themes and text. Many of my other students thought it was really enjoyable because they got to be creative." One of my super quiet students mentioned that he really appreciated the addition to the formulaic writing that we teach. He liked that he was allowed to be creative and funny, for the most part, with his memes. Memes gave him an extra outlet."

Mary provided additional context for the responses. One of the stories studied is *Passage* to *Freedom* which is about a Japanese embassy worker who helps save Jewish people in Poland during World War II and the Nazi invasion. Mary expanded:

"Before we began our writing and creating memes for that story, we discussed several issues. Are memes always funny? Can they point out important? Can they bring to light deeper meanings and details? How do we approach something like that respectfully?"

She was overwhelmed and pleased by the memes students created. Since it was the last story in the unit, students had been practicing for a while and these were the best memes my students created. Mary concluded, "I was very proud overall of how students handled the complexity of the story tactfully and respectfully and identified the important points of *Passage* to *Freedom*."

Patricia finished the unit by giving students an option to submit their meme on a Google Slide to be shared with all 8th grade ELA classes. About 80% of the students chose to copy and paste their meme into the meme slideshow. They then chuckled and looked at what the other students had created.

Rachel noticed that the students were relieved at the conclusion of the unit because memes were forcing the 7th graders to think differently and it was not as easy as they thought it might be. Although they were ready to move on to a new unit, Rachel will probably include memes again later in the school year. Teacher participants unanimously agreed the use of memes positively impacted student growth academically and socially. Memes enhanced student comprehension and interpretation of the reading. The memes enabled students to capture the essence of the story and communicate the main idea in a creative and considerate manner to the targeted audience. Teacher participants additionally supported the use of memes in their future English Language Arts classes. However, in order for memes to maintain their impact as an engaging and effective teaching strategy, memes should be used judicially and where appropriate.

Results for Research Question Two: Application

Student engagement improves when authentic, relevant, and hands-on learning opportunities are used in the classroom (Groves et al., 2013; Osborn et al., 2003; Peterson et al., 2015; Stokes-Eley, 2007; Su, 2015). When more emphasis is placed on the learning process rather than the final product, student engagement and academic achievement increase (Kolb & Kolb, 2005; Wallace & Sung, 2017; Tessier, 2014). The learning process in creating memes encourages creativity, guides critical thinking, and supports communication skills (Bell, 2013; Boa Sorta, 2019; Purnama, 2017). Memes, a popular communication method and innovative instructional tool, provide students that opportunity to learn using their preferred modalities (Aslan & Reigeluth, 2013; Bell, 2013; Shankar-Brown & Brown, 2014). Creating, sharing, and analyzing memes demonstrate student creativity, higher order thinking skills, and communication skills which impact student engagement and academic achievement (Bell, 2013; Boa Sorta, 2019; Purnama, 2017).

The second research question of this study asked: What instructional practices using memes lead to increased student engagement?

To answer the second research question, teacher participants were asked to describe their

previous experiences with memes, identify the resources utilized, explain how memes were included within a unit and lesson plans, and discuss the time requirements.

Application surfaced as the primary theme. Teacher participants described how students responded to memes.

Theme	Codes
Application	Previous experience, resources, unit/lessons, time requirement

Theme for Research Question Two

All six teacher participants gave insights about their own acquaintances with memes, itemized the required resources for students to create memes, specified the unit study with examples of lessons, and discussed the time needed for creating memes. Table 9 recorded the frequency of teacher participants' responses to the theme of *Application*.

Table 9

Application Codes

Application of Memes	Frequency of Description
Previous experience	
Hook	3 of 6 teacher participants
Other subjects	2 of 6 teacher participants
Personal	1 of 6 teacher participants
7 th and 8 th ELA	0 of 6 teacher participants
Resources	
Meme Generator	5 of 6 teacher participants
Google Suites	4 of 6 teacher participants.
Shared folder	2 of 6 teacher participants
Unit/Lessons	
Thank You, Ma'am	5 of 6 teacher participants
Tell-Tale Heart	5 of 6 teacher participants
Monkey's Paw	5 of 6 teacher participants
Passage to Freedom	5 of 6 teacher participants
Time Requirement	
Memes	
10-15 min.	4 of 6 teacher participants
20 min.	1 of 6 teacher participants

Previous Experience

During the interviews, all six teacher participants discussed their past exposure to memes and their reactions to them. Additionally, the teacher participants recalled when and why they were interested in using memes within their 7th and 8th grade classrooms.

One teacher participant had prior personal encounter with memes. With regards to teaching, half of the teacher participants have only used memes as a hook to engage students while explaining building rules or classroom expectations. The same percentage also used memes to introduce themselves during the first day and first week at school. While two teacher participants had previously used memes in a class, none of them used memes as part of the English Language Arts curriculum in 7th and 8th grade classes.

Cara recalled her previous experience, "I've used memes here and there just as a hook, but never had the students create them. I started using memes in teaching ten years ago. Usually it was stock memes, or ones that I had made." Jessica used memes as a way to introduce rules and expectations in her classroom. She added, "I think the Nyan cat was one of the first memes I remember seeing maybe ten years ago on Facebook." Kelsey had not used memes in the classroom. However, a few years ago, she participated as an advisor in an academic competition called Destination Imagination. Part of the team project was to create a meme. The students were sixth to eighth graders at the time and stayed after school to work on the team project which included memes. Mary had previously used memes as an Advanced Placement Human Geography teacher. She explained, "We selected different parts of our AP units and turned them into memes. AP students took it to a whole other level." Mary has not used memes in ELA. Patricia had not formally used memes. She clarified," I used them in getting-to-know you slideshows with humorous memes more about my life and personality, pet peeves, and things like that." Rachel had used memes with her freshmen class to summarize information; students made a concerted effort that demonstrated memes were successful.

The interviews indicated teacher participants had limited experiences with memes and none had implemented memes into their 7th and 8th grade ELA curriculum. The common use of memes prior to the research study was for presenting rules and expectations and as an introduction to getting to know the teacher. The use of memes in the curriculum as an instructional tool was unique and new for the both the students and teacher participants.

Resources Utilized

Producing memes required resources, most notably, a device such as Chromebook, internet, and programs to store memes, i.e., Microsoft Word and PowerPoint or Google Docs and Slides.

Cara used Google Docs and then inserted the image using the draw tool. The students also used a web meme generator and then added text to the image to create their memes. Jessica also used a particular meme generation website. Kelsey used Google Suites with memes. She explained, "The students actually created memes in Google Drawings and it turned out to be the best place for them." The 8th grade teacher participants created a Google folder for the students to retrieve and collect memes. Students found a meme generator that searched key words to find backgrounds. Kelsey added, "We kept a class Google folder of meme backgrounds and used a meme generator website. Google Drawings App was used to create the memes." Mary used Google Drawing and Google Docs. A shared folder was created with blank background images. Students had access to the folder and images to help them to efficiently find background images.

Patricia needed individual student computers with internet connection. She noted, "I used Google Classroom for posting the assignment. The student used Google Docs, Google Drawings, and Google Image Searching to create memes. They also used a variety of online meme-generators." Rachel used a meme generator. She commented, "Students seemed very familiar with it and did not require additional support."

The interviews confirmed the predicted necessity of resources in order to create memes. Students and teachers used one-to-one computers and relied on Google Suites to create and save memes. Without dependable equipment and consistent support, the use of memes could not be effectively implemented into the curriculum. If teachers are not using or comfortable using technology, professional development is essential for teacher preparation and confidence in the implementation of memes into their classrooms.

Unit and Lessons

The teacher participants were asked to specify the literature used in their units and the time required to cover the material. Since the five 8th grade teacher participants are in the same school district, they studied the same common four short stories: *Thank You, Ma'am* by Langston Hughes, "The Monkey's Paw" by W.W. Jacobs, *Passage to Freedom* by Ken Mochizuki, and "Tell-Tale Heart" by Edgar Allan Poe. Two 8th grade teacher participants included an additional selection to the curriculum.

Cara said, "I paired memes with short answer response questions. Students had to complete the written response first then tie their meme to the written response." Cara included *Touching Spirit Bear* by Ben Mikaelsen. Jessica stated, "We actually only got to four short stories. The entire unit lasted about a month." Kelsey added *The Chaser* by John Collier to the four pre-selected short stories. She explained, "Each of the stories explore the choice that the characters made and the ramifications of their decisions." The unit for Kelsey lasted about six weeks. Mary also used the same short stories and her unit was about a month in length. Patricia complemented her unit by adding "The Raven" by Edgar Allan Poe; the unit lasted for eight weeks.

Rachel used memes with a nonfiction/text structure unit in her 7th grade classes. She mentioned, "Students had to read articles and find the controlling idea, identify the main structure, find supporting details, complete graphic organizers and note signal words." Using this information, the students created a meme that conveyed the controlling idea, structure, and details. The unit was about four weeks in length.

The eighth grade teacher participants used *Thank You, Ma'am* by Langston Hughes, "The Monkey's Paw" by W.W. Jacobs, *Passage to Freedom* by Ken Mochizuki, and "Tell-Tale Heart" by Edgar Allan Poe in addition to other texts. The 7th grade teacher participant used grade appropriate articles for her unit. The units lasted between four to eight weeks in length.

Time Requirement to Create Memes

To evaluate the time needed to successfully incorporate memes in the curriculum, teacher participants were asked to provide details to substantiate the time requirement. Implementation of the memes should not negatively impact the time available for instruction.

Cara estimated it probably took students ninety to ninety-five minutes to complete both the writing assignment and to create the memes. She stated:

"Memes required twenty minutes which was about right the amount of time. The first couple of memes took a little bit longer because they were figuring out how to use the technology and the tools to actually create the memes. Some students had difficulty with the creative aspect. Allowing more time helped in some of those instances. Typically we would read the selection and then discuss and analyze the story. The students were required to answer a written response question, using a structured paragraph response. Then they created a meme to exemplify the paragraph they had written. Students were graded on relevance of the image and written text."

Students in Jessica's classes worked on an entry task such as grammar for about fifteen minutes. She detailed,

"We read the stories aloud and discussed major parts. We reviewed each story, took a comprehensive quiz for each, and then worked on the writing assignment. The memes were built into the writing assignment. The students created a total of five memes, one for each of the five stories. It took maybe ten, fifteen minutes for each meme."

Kelsey explained her procedures:

"Students had previously read and discussed a short story. Students wrote a paragraph response to an open-ended question that focused on a theme or ambiguous element of the story. Then students would create a meme to represent their paragraph."

Mary used memes about once a week for five weeks. When memes were introduced to the students, she explained:

"They kind of just rolled with it. After we read and discussed a short story, students responded to two short answer questions. They produced a meme that related to one of their short answer questions. Other than helping a few students with some technology issues or, 'Hey, does this make sense?' or, 'Am I on the right track with this?', it did not take long. About five minutes was devoted for the meme parade to showcase student memes." Patricia similarly used memes once a week for five consecutive weeks. For the meme portion of the assignment, students had two sixty minute class periods of work time. In that time, they had to write two open responses short answer paragraphs in relation to the text and then create their memes. Patricia clarified, "Students probably spent about twenty minutes on their meme. The meme had to directly showcase the main idea of the paragraph they had written."

Rachel used memes as a tool to get students to think about how information is organized and how ideas are connected. The students completed one meme for the six articles they read. She observed:

"The students took longer than I thought it would because they were having to think differently by matching pictures with words and ideas. It was probably twenty-five minutes for each meme created. Depending on the stage in the unit, a typical lesson might have more or less scaffolding, but generally went as follows: students would read an article and annotate for clues to the organization. They would organize the controlling idea and supporting details into a graphic organizer and then write a summary to maintain the structure. The meme came after we had verified all of the above. My intent was for students to maintain all the key information in their memes. This proved more difficult for some of the structures, but there was value in the process of presenting information visually."

Initial time was required to introduce memes and to properly explain the process to create memes. The teacher participants then followed their established protocol of reading and discussing the stories and completing the writing assignment. The actual time to create memes varied from ten to twenty-five minutes though that was dependent on the content of the story. Since only three teacher participants reported the time to create the meme, the actual time requirement is not definitive. However, none of the teacher participants indicated a negative impact on time. The number of memes created matched the number of stories read although some students were motivated and made more than one meme per story. This would strongly suggest a higher degree of student engagement when creating memes because students did not choose to write more than one written response per assignment.

Results for Research Question Three

Social media and digital devices, both of which are involved in creating memes, enrich student learning and impact academic achievement (Boyce et al., 2014; Cumming et al., 2013; Karatas et al., 2016; Smith et al., 2016). Research indicates students who shared and published memes were more engaged resulting in greater academic achievement (Nagle & Taylor, 2017; Olson et al., 2015; Smith et al., 2016).

The third research question of this study asked: How can memes be used an as assessment tool to measure academic achievement?

To answer the third research question, teacher participants were asked to explain the grading process, barriers encountered, and successes and reflections.

Assessment surfaced as the primary theme. Teacher participants described how students responded to memes.

Theme	Codes
Assessment	Grading, barriers, success and reflection

Theme for Research Question Three

Through the interview process, teacher participants reiterated how assessment confirmed

and validated the rationale to implement and feature memes as a teaching strategy and assessment tool. Table 10 recorded the frequency of teacher participants' responses to the theme of *Assessment*.

Table 10

Assessment

Assessment of Memes	Frequency of Description
Grading	
Rubric	4 of 6 teacher participants
Relevance	3 of 6 teacher participants
Connection/Relationship	3 of 6 teacher participants
Understanding Comprehension	4 of 6 teacher participants
Barriers	
Too much freedom	3 of 6 teacher participants
Creativity	2 of 6 teacher participants
Humor	3 of 6 teacher participants
Critical thinking	2 of 6 teacher participants
Success and Reflection	
Engagement	4 of 6 teacher participants
Assignment completion	1 of 6 teacher participants
Critical thinking	1 of 6 teacher participants

Teacher participants built and used tailored rubrics to assess student comprehension and understanding. The memes were graded based upon relevance and accuracy of how well the meme depicted the meaning of the reading. Teacher participants identified Common Core State Standards under which memes were graded. Appendix G provides the Assessment Rubrics for grading from the eighth grade teacher participants.

Cara graded memes on image and text relevance to the question that was asked and the written paragraph. Memes were scored on a 4-3-2-1 standards-based accuracy. Cara explained:

"Sometime students had a hard time connecting the text or explaining how they wanted the image to connect to the paragraph. But for the most part, the images that they chose were good and were tied to the same document as the written response. Students gained a better understanding of the process and as a result, memes improved."

Jessica elaborated:

"Memes were part of a larger assignment requiring students to write a paragraph response to the reading, like a Smarter Balanced Assessment Consortium (SBAC) level question. The meme was the second part of the assignment and graded based on a rubric. The meme was worth twenty points. Ten of those points assessed the relevance of the image. Was the image relevant to the story and did it have a connection? The other ten points assessed the writing on the memes. Did the text accurately capture the relationship to the image?"

In addition, students had to give one to two sentences, or more, that directly related the meme to the story. Memes were evaluated within the reading for literature comprehension standards.

Kelsey and Mary used a rubric to evaluate the relationship between the writing and meme. Both the image and words on the meme had to demonstrate an understanding of the reading. Producing an effective meme requires comprehension of the text at a relatively deep level. Patricia followed the same procedure of Kelsey and Mary but provided the two standards from Common Core.

CCSS.ELA.LITERACY.RL.8.2. - Determine a theme of central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text. CCSS.ELA.LITERACY.RL.8.10. -By the end of the year, read and comprehend literature, including stories, dramas, and poems, at the high end of grades 6-8 text complexity band independently and proficiently.

Rachel required content and image to relate to the article. The words and pictures had to work together. She stressed, "It was a little bit tricky. The memes were used more as reinforcement of a skill so the assessment came in the form of a test and a writing assignment." Both formative and summative assessments had rubrics that were based on the standards.

Memes were an addition to the typical reading and writing process. An effective and successful meme had to show a clear relationship to the reading. Teacher participants stressed the necessity of exhibiting comprehension and interpretation of the literature. Results from this study indicate memes can be used as an evaluation tool under ELA standards.

Barriers

When implementing any new teaching strategy, the anticipated barriers should not exceed potential beneficial outcomes. Anticipated barriers may include student attitudes, behaviors, and abilities, actual or perceived. The teacher participants in this study had adequate supporting technology. This included the number of computer devices available for student use one-to-one, access to the internet, and use of Google Suites or comparable software. Teachers must be responsive and proactive in eliminating or minimizing anything that would impede the implementation of the strategy.

Cara indicated creating memes provided too much freedom for some students and thus their privilege of making memes was taken away. She said:

"They could not manage making appropriate or kind memes for school assignments. Some students had a real creative block while others were frustrated because the critical thinking skills required for writing narratives and creating memes have not fully developed. However, most of the students did pretty well with memes."

Jessica cited several challenges in implementing memes. The students would just Google search and find a random meme that might relate to the story. For example, Jessica said:

"The Tell-Tale-Heart" is a well-known story with existing memes on the internet. The challenge was to make the students understand I wanted them to make their own memes. The second challenge for the students was to write how the meme related to the story. This required analysis and synthesis, which are the higher order thinking skills. The students would skip that part completely or would write just really basic, basic sentences."

Kelsey identified two challenges with memes – backgrounds and humor. Some students spent too much time finding a background. The second barrier was that some students were super focused on making the meme funny and wanting it to be entertaining instead of using it to reflect what was in their paragraph. The challenge was to focus on the actual purpose for this meme.

Mary indicated: "Students exhibited a very middle school attitude. Memes were not very hard to implement and once I taught the students how to do it and they practiced it a couple times. I did not find any barriers." Patricia's class read a heavy text *Passage to Freedom* that tells the story of a man in Lithuania, a Japanese diplomat, who writes illegal visas against his government's wishes to help save Polish and Jewish refugees. She explained:

"One of the big struggles was how do we create a meme that is (a) culturally sensitive and (b) appropriate to the tone of the story which was so serious. The students had to think outside the box on that because memes, by nature, tend to be funny. Students wanted them to be light and humorous but the topic was so serious. That was the last one that we did. A challenge for them was to come up with a more serious tone while also having the light, humorous aspect."

Rachel stated distractions were a barrier for students. Depending on the story, students might have more access to memes that were already created on the internet. If students Googled problem and solution meme, some were going to come up with memes that might be somewhat similar to the story. Rachel concluded, "I thought originality was a potential barrier."

Barriers encountered in this investigation were student-oriented. Some students experienced a creative block and thought they were unable to make original memes. Students searched websites for premade existing memes that did not necessarily relate to the assignment. Another barrier was the misconception that memes must be hilarious. The teacher participants presented an opportunity to discuss the elasticity and responsiveness to expand the use of memes to express complex and serious concepts.

Successes and Teacher Reflections

Success in this research investigation was revealed through the completion rate, comprehension, and student engagement. The reflection of teacher participants provided a valuable birds eye view of the introduction of memes in 7th and 8th grade ELA.

Cara elaborated that student engagement is difficult to measure. Students have always been more interested in things with which they are familiar and comfortable.

Jessica echoed similar concerns that student engagement is difficult, especially with computers. She explained:

"This is a hard balance because computers are more functionally appropriate to use for ELA assignments but it is also easy for students to become distracted (email, games, etc.) without consistent supervision. While using memes my students were not as off-task on their computers as they sometimes are. For example, generally during an assignment, I would have to redirect 1-2 students per activity to be on the assigned task. However, when they were working on the memes, I did not have to do any redirects. I feel I had a lot of buy-in and my assignment completion rate overall increased even though some of the memes were not high quality. Most of the work that my students do is not high quality. But the overall assignment completion rate was higher than it has been in previous years."

Kelsey had students that were able to take the story and create a meme that identified the central conflict or the central theme within a story. She added, "I definitely saw a lot of success in being able to represent what they were trying to tell me in a creative way and make that connection within their brain."

Mary enjoyed seeing that students were getting some deeper comprehension and were starting to identify important information. She continued:

"But I really loved hearing from my colleagues in other classes that students were making memes for whatever they were learning in Social Studies or Art. It was cool to see them apply what we were doing in English Language Arts and use memes in other areas. Patricia concluded:

"Technology and my experience have changed to make me more effective. With memes, students try to engage with the essential ideas and lessons of the stories more, rather than focusing on the surface level events. Reading stories, my own enthusiasm and passion, and building relationships have all served me well."

Patricia also stated:

"I did have a hundred percent assignment completion rate. This is probably a rare occurrence because in our school, students do turn in their work. We have a really awesome culture of work at our school. But it was probably the first assignment ever where not a single student failed to turn in all five memes assigned. All of the students completed a meme every time, one hundred percent! None of the memes were just half done or just the picture."

Patricia further elaborated, "I do not feel that students have changed much pre- and post-Covid as much as it is about the tone the teacher sets. The 8th graders loved the addition of memes. I was worried that memes would make our assignments much longer, but there were no complaints, which I think speaks for itself. Some students complained about having to write, but none complained about having to make a meme after reading."

Rachel, the 7th grade teacher participant, observed excitement when her students created memes. She added, "Their end products were, for the most part, pretty good. Memes did help generate conversations about the topics and enabled students to communicate with each other and share their ideas." Rachel stated, "Memes are exciting for students because it belongs to them and is their method of communication." Rachel is consistently looking for ways to engage students, having to stay in front of the game. Furthermore, she commented:

"Things that were engaging ten years ago are not as engaging now. It used to be enough to have students using technology or an app. However, over the past few years, more and more students are asking for paper copies of work. Covid probably had some effect on that as well. Many students were overwhelmed with everything being on computers. Like anything engaging, memes may have a life-span as well."

Academic achievement is directly linked with student engagement (Jeffery & Wilcox, 2013; Sokal & Katz, 2015). This research provided evidence that students were actively engaged and bought in when memes were introduced and used throughout the unit. The completion rate increased and in some instances, exceeded the expectations of the assignments. Students were better able to identify the central idea and comprehend material with deeper understanding. They gained confidence in their creative abilities which is evidenced by their willingness and desire to share their memes. Furthermore, students transferred the skill of creating memes to aid comprehension in other content areas. Therefore, memes have emerged as a viable teaching to increase student engagement and academic achievement.

Conclusion

Chapter four presents a summary of the qualitative data collected from interviews with and responses provided by six middle school ELA teacher participants. Three distinct themes emerged from the research data: 1) student responses, 2) application, and 3) assessment. The researcher presented the data collected from each teacher participant to aid in the analysis of using memes in ELA classes. The data collected further revealed teacher participants were using teaching strategies of oral reading and class discussion which have been documented to improve student engagement. The research indicates that using memes challenged students to develop higher order critical thinking skills while providing opportunities for creativity, expression of student voice, and collaboration and positive interactions with both teacher and peers. This resulted in increased student engagement as evidenced by the improved quality of memes created by the students and the overall higher submission rate of the memes assignments. The results from this investigative study indicates memes could be a valuable and effective teaching strategy to use in middle school ELA classes to increase student engagement and academic achievement.

Chapter V

Discussion

Introduction

Research consistently indicates student engagement decreases during middle school (Barber et al., 2015; Busby et al., 2014; Mustafaa et al., 2017; Orthner et al., 2013; Smith et al., 2016; Sokal & Katz, 2015). Studies have analyzed the necessity of engaging middle school students for academic achievement (Barber et al., 2015; Fredericks et al., 2004; Jeffery & Wilcox, 2013; Kelley & Decker, 2009; Orthner et al., 2013; Sokal & Katz, 2015). The purpose of this qualitative research study was to investigate the impact of memes on student engagement in 7th and 8th English Language Arts classes. This investigation provided insight from the perspectives of six middle school ELA teachers. Key factors used in this research to measure student engagement included: 1) initial student responses when introduced to memes, 2) student responses when using memes, and 3) student responses after using memes. This study pursued an innovative and cultural communication methodology to determine its effectiveness with middle school students. This study sought to better identify and comprehend variables that contribute to the academic achievement of students when memes were integrated into ELA classes.

Summary of the Results

The purpose of this qualitative research study was to gain an understanding from the perspective of six middle school English Language Arts teachers who implemented memes in the curriculum to determine the impact of using memes on student engagement and academic achievement.

Kolb's Experiential Learning Theory (Bohon et al., 2017; Groves et al., 2003; Osborn et al., 2003; Peterson et al., 2015) functioned as the theoretical framework. According to Kolb's

Experiential Learning Theory, the student must be actively engaged in the learning process intellectually, emotionally, physically, and socially (Bergsteiner et al., 2010; Bohon et al., 2017; Groves et al., 2013; Heinrich & Green, 2020; McNamara & McNamara, 2019; Osborn et al., 2003; Peterson et al., 2015). The four key components are: concrete experiencing; reflective observation; thinking and abstracting conceptualization; active experimentation (Bergsteiner et al., 2010; Bohon et al., 2017; Groves et al., 2013; Heinrich & Green, 2020; Kolb & Kolb, 2005; McNamara & McNamara, 2019; Osborn et al., 2003; Peterson et al., 2015; Stokes-Eley, 2007; Su, 2015). In this investigation, students entered Kolb's Experiential Learning Theory at the concrete experience when they were introduced to a meme and heard an explanation of the parts of a meme (Bergsteiner et al., 2010; Bohon, et al., 2017; Groves et al., 2013; Hayden & Osborn, 2020; Heinrich & Green, 2020; Osborn et al., 2003; Su, 2015). The reflecting occurred as teachers explained the process of creating a meme based on the concepts or ideas that would relate the meme to the reading (Bergsteiner et al., 2010; Bohon, et al., 2017; Groves et al., 2013; Hayden & Osborn, 2020; Heinrich & Green, 2020; Osborn et al., 2003; Su, 2015). The students processed the information in the thinking and abstract phase and visualized how they could apply the information in creating a meme (Bergsteiner et al., 2010; Bohon, et al., 2017; Groves et al., 2013; Hayden & Osborn, 2020; Osborn et al., 2003; Su, 2015). The active experimentation phase occurred when the students created a meme relating to the reading which created a new learning cycle when students viewed peer memes and provided feedback meme (Bergsteiner et al., 2010; Bohon, et al., 2017; Groves et al., 2013; Hayden & Osborn, 2020; Su, 2015). In the larger view, Kolb's Experiential Learning Theory begins with the reading followed by discussion, evaluating the meaning, and applying the knowledge to writing and creating a meme.

Students were introduced to memes, created memes, and then reflected on the meaning represented by the memes. This investigation was inspired and guided by the following research questions:

- What is the impact of the use of memes on student engagement in 7th and 8th grade English Language Arts, as articulated by teachers?
- 2. What instructional practices using memes lead to increased student engagement?
- 3. How can the use of memes be used as an assessment tool to measure academic achievement?

Student engagement decreases significantly during middle school and is a crucial indicator of academic achievement (Barber et al., 2015; Busby et al., 2014; Jeffery & Wilcox, 2013; Mustafaa et al., 2017; Orthner et al., 2013; Smith et al., 2016; Sokal & Katz, 2015). Additionally, variables such as the structure of a middle school especially when compared to an elementary school, interactions with teachers and peers, and maturational changes that occur during adolescence further contribute to the decline in student engagement and academic achievement (Abbott, 2017; Busby et al., 2014; Mustafaa et al., 2017; Orthner et al., 2013; Smith et al., 2016). Recent advancements in technology have opened the doors to include relevant and authentic learning in the classroom (Bradley, 2016; Bruhn et al., 2017; Graham et al., 2015; Lessing et al., 2017; Lessing, 2017; Schaefer et al., 2016; Smith et al., 2016; Wood et al., 2013). Middle school years provide a decisive opportunity for teachers to implement instructional strategies in order to fully engage the modern student (Conner & Pope, 2013; Kelley & Decker, 2009; McConn, 2019). Six middle school teacher participants were selected using a purposeful criterion sampling approach, and a snowballing effect was followed to gather additional teacher participants. Each teacher participant was interviewed and their responses were transcribed and coded to develop
themes. The researcher organized and classified three emergent themes through the coding process: 1) student responses, 2) application, and 3) assessment.

Student responses

Interviews and discussions with six 7th and 8th ELA teacher participants focused on the following:

- Set-up of memes within their respective classrooms
- Student responses when introduced to memes before the unit
- Student responses when memes were used within the unit
- Student responses after the unit was completed.

In all six cases, students were excited about the idea of using memes when memes were introduced. The 7th grade teacher Rachel said, "Just the idea of using something from their culture - student culture - was exciting even though they did not know what the assignments were going to be. Memes are something students see commonly in their lives, so they were excited to get started." Mary notes, "A small number of students who were not meme literate were nervous about using them in the class. A couple of students complained but they tend to complain about everything." The overall reaction can be captured by the student statements, "Wait, what? A meme? We get to do a meme? This is going to be awesome!"

Using memes within a unit generated a variety of student responses with the overall response being positive. Students were willing to experiment with the actual creation of memes. They encouraged one another and gave feedback, especially when the meme did not match the reading. They enjoyed sharing their memes with peers and posted their meme to a shared classroom drive so all 8th grade ELA classes could view them. Some students expressed anxiety and nervousness to create memes. Other students struggled due to the lack of exposure and familiarity with memes or were uncomfortable because of the technical skills and savviness required to create memes. Some viewed memes as an extra assignment to complete and questioned their abilities to come up with a new idea. However, students became more comfortable as the process of creating memes continued. This was evidenced by students smiles and giggling when creating their memes and looking at memes created by the peers. When presented with a choice between writing a paragraph or creating a meme, students unanimously opted for memes. There were situations when students created two or three memes instead of one. And these students engaged in a big debate to determine which was the best to submit. The teacher highlighted "They would never do that with a paragraph." Creating memes challenged critical thinking skills while providing opportunities for collaboration and social interaction which are essential in increasing engagement for middle school students.

At the end of the unit where memes were used as a teaching strategy, the novelty of the magic of memes had worn off. Memes had become a part of the routine and students were ready for something new. Others wanted to move forward because memes forced them to think differently. Overall, the students were still performing well with memes. Students demonstrated increased fluency in creating memes and in their abilities to identify and articulate meaning from the reading. In addition, their written communication skills improved.

Students realized memes did not have to be funny. Memes could be used to express serious concepts and ideas. They managed the difficult subjects tactfully and respectfully and articulated important points of the stories.

A strong indication of the success in using memes as an engaging instructional strategy was confirmed when students requested memes to be used memes again. Students were excited when memes were integrated into new assignments. Consequently, teacher participants are continuing to use memes in their classes.

Application

Interviews and discussions with the teacher participants focused on the following:

- Previous experience
- Resources
- Units and Lessons
- Time Requirement

The six teacher participants had limited experience with memes and had not used memes in the 7th and 8th grade curriculum. However, they were willing to introduce and experiment with memes as a potential engaging strategy to increase student achievement. Teacher participants had the freedom to use memes and the resources for the students to create memes. Teacher participants instinctively incorporated memes as the third element in their already existing reading and writing protocol.

Prior to the research study, teacher participants primarily used memes to deliver classroom expectations and rules which are often perceived by students as dry and boring. The use of humor in memes lessened the anxiety of the first day while increasing student participation and engagement. Additionally, memes have been used as a method of introducing and getting to know the teacher. Memes allowed teacher participants to show a funny and creative side of their personalities. Memes were also used by teacher participants as a hook to introduce a topic.

Teacher participants utilized Google Suites as their preferred platform in which students created memes. This included Google Drive, Docs and Drawings. Additionally, students used

websites and meme generators. The templates and memes were stored in a class folder for the 8th grade. Individual computers and internet were necessary.

The teacher participants followed a similar pattern of reading, discussing the reading, and analyzing the story which research confirms increases student engagement (De La Paz & Graham, 2002; Goldenberg et al., 2011; Graham et al., 2013; Graham et al., 2017; Jeffery & Wilcox, 2013; Olson et al., 2015; Welsch et al., 2019). Students then responded by writing to a prompt or specific instruction. Memes were created only after the written assignment was completed. The written assignment was also used as a bridge to the meme which required the students to synthesize the writing to a visual with a caption, a process that engaged their critical thinking skills. Additionally, using memes required students to think deeper when analyzing the reading and writing the answers to the prompts. The meme was a motivating factor to complete the writing assignment. Students worked hard because they wanted to create and share the memes. Students enjoyed creating memes and one teacher indicated she did not hear a single complain about making memes. In comparing completion rate of assignments for memes versus paragraphs, memes were completed 100% of the time whereas paragraphs were not. Furthermore, the quality of memes improved over the course of the study. Students were excited to do something different and eager to complete memes.

The 8th grade teacher participants indicated they would not use memes for 7th grade due to the maturity level of 7th graders. However, the 7th grade teacher participant found success despite students expressing difficulty in creating memes. The 7th grade teacher participant further advocated for the use of memes, supporting the positive connection between memes and student engagement. For 7th grade students, creating a meme summary is more appealing than writing a

summary. It may seem like less work even though memes actually requires greater analysis and synthesis of the reading.

An indicator of the success of memes or any other instructional tool is the willingness of teachers to re-use that strategy. The entire 8th grade teacher participants are committed to using memes next year. The seventh grade teacher participant will be using memes in the future. And the 7th grader students are excited to be able to create memes next year when they saw the memes created by the 8th grade students.

Assessment

Assessment or the evaluation of student work and progress developed as a strong theme during the interviews of the six teacher participants. A grading rubric based on standards for academic achievement, barriers limiting the learning process, and success stories and teacher reflections were present under the assessment umbrella.

When applying an innovative teaching and learning approach, some challenges can be anticipated while others emerge through the implementation process. Creating memes requires adequate and available computers, software, and the internet. Emerging challenges included too much freedom, especially when students worked independently on computers using the internet. Some students lacked confidence in their technical skills and their creative ability to generate meme. Most students recognized memes possesses the flexibility and range to express serious and heavy content rather than just comical and humorous ideas. This further illustrates and confirms the significance of developing of critical thinking skills.

When implementing any new teaching strategy, the anticipated barriers should not exceed potential beneficial outcomes. Anticipated barriers may include student attitudes, behaviors, and abilities, actual or perceived. The teacher participants in this study had adequate supporting technology. This included the number of computer devices available for student use one-to-one, access to the internet, and use of Google Suites or comparable software. Teachers must be responsive and proactive in eliminating or minimizing anything that would impede the implementation of the strategy.

Overall, students were able to demonstrate deeper comprehension and understanding of the text. The introduction and use of memes were directly associated to the increased engagement and academic achievement. To successfully complete a meme requires the identification and understanding of the theme and main idea and determining the most effective presentation for the target audience. Their student peers were able to appreciate the memes more because of the culture in which the students live. Because of higher order thinking skills required to create memes, they were a challenge. Even though it was difficult, memes forced students to analyze the reading. Memes helped further develop thinking and communication skills.

Memes were scored on the accuracy and degree of relevance in representing elements and contents of the stories. Rubrics assessed both the image and caption. During the unit, students showed greater connectivity between the meme and the writing. Overall, student engagement and academic achievement improved when memes were used.

Research Question # 1: What is the impact of the use of memes on student engagement in 7th and 8th grade English Language Arts, as articulated by teachers?

The leading and foremost purpose in this investigation was to determine the impact of memes on student engagement in 7th and 8th grade English Language Arts. Discoveries from this research indicate a positive link between the use of memes and student engagement. The theme of student responses from the perspectives of teacher participants were derived from the three stages of memes usage: when memes were introduced, when using memes, and after memes

were finished as part of the unit. Each teacher participant attributed the use of meme to increasing student engagement. Kolb's Experiential Learning Theory (Kolb & Kolb, 2005; Peterson et al., 2015; Su, 2015) provided the basis upon which this research question was created, and it ultimately offers a foreshadowing of student engagement when memes are introduced and used. The testimonials of teacher participants that memes possess the natural yet potent ability to engage students in middle school ELA classes. In summary, teacher participants indicated they will continue to use memes in their future ELA classes and perhaps expand the use to other content areas.

Research Question # 2: What instructional practice using memes lead to increase student engagement?

The investigation to determine the impact of memes on student engagement was successful due to the hands-on comprehensive instructional approach. The definition of memes is to imitate and teacher participants modeled the entire memes process. Teacher participants created a meme and displayed it for students to see. Then the memes were discussed to communicate central ideas of the paragraphs. Dialogue became meaningful and students were willing to collaborate with peers. It was commonplace to see students share their work with one another. And in doing so, students became more critical and offered valuable feedback. Allowing students to exercise individual creativity based on the background image and matching words increased student engagement. Students were proud of their work.

Student motivation increased with memes. Students were more willing to complete a meme compared to a written paragraph assignment. These instructional practices of using memes indicated that a positive connection exists to increase student engagement.

Research Question # 3: How can the use of memes be used as an assessment tool to measure academic achievement?

Teacher participants used standard methods of assessments including teacher-made rubrics to evaluate the memes for relevance, accuracy, and understanding. The rubrics focused on reading comprehension and writing to the intended task with the meme being the final product. The meme had to display a clear connection to the story and depict a main idea with an appropriate and matching image to the text.

Student learning can be assessed using both objective and subjective methods. Objective assessment relies on rubrics, quizzes, tests, and other devices in which a numerical measurement is assigned. The teacher participants used rubrics aligned with Common Core State Standards to evaluate the memes created by the student to demonstrate the understanding of the content of the reading and literary elements. Equally important were the subjective evaluations of the understanding exhibited by the students during class discussions and the interactions between the students. Creating memes required the students to consider ideas and develop a deeper understanding that came from reading and discussing challenging literature. The teacher participants recounted that students developed deeper connection and insight from analyzing and synthesizing concepts in the stories. The communication skills of the students improved when informally discussing and debating which memes best conveyed the meaning of the stories. The subjective assessment indicated the active student engagement in the learning process which lead to increased academic achievement.

Major supporting quotes from the participants

It has been well documented that student engagement and academic achievement decline at the middle school level (Barber et al., 2015; Busby et al., 2014; Jeffery & Wilcox, 2013; Mustafaa et al., 2017; Orthner et al., 2013; Smith et al., 2016; Sokal & Katz, 2015). However, research has countered and confirmed that hands-on, relevant, and authentic learning opportunities increase student engagement and academic achievement (Bruhn et al., 2017; Graham et al., 2015; Lessing et al., 2017; Schaefer et al., 2016; Smith et al., 2016). The experience and observation of teacher participants revealed that using memes in 7th and 8th grade English Language Arts classes resulted in students being excited and eager to learn.

Cara: Memes were a good hook for students to complete the rest of the assignment. Once they got through it, students were actually processing their answers a little bit more because they were connecting their meme - whatever they said, had to be linked. And then towards the end, we read a story that was more sensitive and the students questioned, "How do we do this and still be respectful and make sure that it's still on topic?" They were internalizing the discussion about the different points the author was trying to express with the story.

I think with anything that is correlated to something students are used to seeing, the more it helps them make a familiar connection to the work they are doing. Sometimes the work that we do in ELA seems contrived and I think memes created a different outlet for them to connect to what we were reading.

Jessica: Students really enjoyed memes. They would share them with each other. They would giggle quite a bit. I felt like they had a really fun time making them and sharing them.

I do feel like students started putting more effort into the memes once I started sharing their memes. I would pull my favorites and share them after each story. And I do feel like that made the students work a little bit harder on the memes because they really wanted theirs to be shared. So by the last story that we read, they were making some really quality ones.

I do feel the memes increased their engagement in the assignment. I am not entirely sure it increased their comprehension of the passage. The memes were kind of basic, on a level one recall knowledge level. But overall, students were very excited to create memes and so they were very excited to complete the assignments.

I feel I had a lot of buy-in and I do think my assignment completion rate overall was a lot higher than it has been in previous years.

Kelsey: I think initially memes definitely raised student engagement because they wanted to be able to participate. I had students complete a writing exercise and then create a meme to go with the writing exercise. In order to get to the meme part, they had to finish the writing first. And I think that really helped motivate some of the students that maybe would have gone a little bit slower. That definitely engaged students. Creating memes also made them think deeper about their answers and writing because the meme had to relate to the writing. The ability to identify the main idea and key elements in the stories improved significantly when students created memes. Memes were an effective communication tool.

Mary: Memes definitely showed student understanding of deeper elements from the text. To make a good meme, students really must understand the themes of the story or the most poignant pieces of the overall lesson. And it shows understanding of the audience too when they are making their memes. Will the intended audience understand and appreciate the humor in the meme?

I am looking forward to using memes next year. Maybe if I find an appropriate time with what we are doing in the future, I will use it again this year. I can tell you that my seventh graders saw an assignment that my eighth graders were doing with their memes and got super excited. They questioned, "Why aren't we doing memes? We want to do stuff with memes, too." I responded, "Well let's learn our material first. Once you can show me that you know how to do the writing part, then we'll add the fun part in." So it was almost like a carrot for them. We are not there yet, but...

I like seeing that students were getting some deeper comprehension and starting to be able to pull out important information. But I really loved hearing from my colleagues in other classes that students were making memes for whatever they were learning in Social Studies or Art. It was cool to see students apply memes into other content areas.

Patricia: Students were very excited with the introduction of memes. Lots of them had statements like, "Oh cool" or, "This is going to be awesome!" Many students immediately started Googling possible images to use even if they did not know what the assignment was yet. So I would say there was a high level of interest.

When making memes, I would say the vast majority of students were excited enough to have students next to them look at them, "Look at this, and what do you think of this one?" Some students created more than one meme and then had a big debate about which one to actually submit with the assignment. They are not going to do that with a paragraph and they are not going to write an extra paragraph and show their friends.

I think memes definitely increased student engagement. I did not hear a single complaint about memes. I liked to hear the buzz in the classroom, to see students leaning over and showing pictures, chuckling while saying, "Look at mine, check this one out." I had multiple students take their own time and email me meme image generators that were not blocked by our school filter and then suggesting, "Hey, other kids might like this one. I've been finding my meme images this way."

Rachel: Just the mention of the word meme created excitement. Students saw "Theme Meme" on the whiteboard and said, "Wait, what? A meme? We get to do a meme?" They did not think memes were an English thing, so it was kind of fun just to mix it up a little bit more.

Memes are one visual way students communicate now. Because memes are familiar to them, students are going to be more engaged. Memes feel shorter than writing a summary and probably are more appealing. It seems like less work even though it might be different, harder work actually.

Each teacher participant shared their observations on the impact of memes in their classrooms. Seventh and eighth grade students, when given the opportunities in ELA, could not hide their enthusiasm and eagerness when memes were introduced. Student engagement and anticipation resulted in original and creative memes demonstrating critical thinking skills.

Knowledge gained through the shared observations of the six teacher participants offer insight into the positive impact of memes on student engagement and academic achievement.

A Researcher's Reflection

As a researcher who proudly identifies himself as a seventh and eighth grade English Language Arts teacher, the rare and opportunistic time came along aptly to examine and research the impact of memes on student engagement and academic achievement. Our modern and demanding culture is heavily imbedded in technology. Rather than place greater limitations and restrictions on its uses, a pro-active approach has been carefully planned to offer unique opportunities to create enduring outcomes in the classrooms. Developing and refining research questions, studying and analyzing academic literature, and interviews and discussions with teacher participants allowed the researcher to better understand and appreciate the purposes of the research. Through active listening to teacher participants' stories of enthusiasm, intrigue, challenges, barriers, and successes, the researcher was able to confirm memes possess the powerful capacity to not only engage student interest but to assess student learning.

As a digital immigrant in his forties, the researcher fully understood the awesome power of technology, but was reluctant to fully embrace its consumption and application. However, personal sentiments and biases were replaced after solemn and much needed moments of reflection. The researcher, in his role as a classroom educator, had consistently invited and requested students to be open-minded by listening to the perspectives of others first. Unfortunately, the researcher did not always model the same expectations of his students for himself with regards to technology. While technology can be disruptive and detrimental, technology can be equally compelling, innovative, and resourceful. The opportunity to incorporate memes into English Language Arts was conceived. COVID-19 played a contributing role in the immediate timing or scheduling of memes as an engagement strategy and assessment tool. During the pandemic, students in the researcher's classroom became more comfortable and reliant with technology, i.e., one-to-one devices and Google Classroom. It was the unit study of *The Martian* by Andy Weir that functioned as the pilot for the researcher in his eighth grade ELA classes. Students created memes to summarize their reading and comprehension of the text. In this process, students simultaneously practiced and exhibited their writing skills, all of which were graded using a teacher-made rubric based on the Common Core reading and writing standards. The researcher was pleasantly surprised at the on-time submission rate of the memes assignments, especially when compared to non-memes assignments. Students were completely engaged and wanted more. The researcher was further astonished by the extraordinary creativity of the students with their word choices and image selections while utilizing technology. Students are imaginative and talented; they just needed additional and distinctive opportunities to demonstrate their originality and brilliance.

Recommendations for Future Research

The qualitative research study was an investigation of the impact of memes on student engagement in 7th and 8th grade English Language Arts classes. The voices of six teacher participants presented their classroom experiences and observations on the immersion of memes within the units of study. While the investigation yielded distinguishing results, opportunities for future research will only enhance, reinforce and authorize the impact of memes on student engagement and academic achievement. Opportunities for future research include:

• Sharing experiences from the student point-of-view

- Quantitative investigation on the impact of memes on academic achievement in 7th and 8th grade English Language Arts
- Greater teacher participation / larger teacher sample
- Investigating the impact of memes on students engagement in 7th and 8th grade Math
- Investigating the impact of memes on student engagement in 7th and 8th grade Science
- Investigating the impact of memes on student engagement in 7th and 8th grade Social Studies.

It was the goal of this research study to investigate the impact of memes on student engagement in 7th and 8th grade English Language Arts. The findings were predominantly founded upon the experiences and observations from teacher participants. A tremendous future research opportunity exists by gathering narratives from the student point-of-view. At the epicenter of education are the students. Therefore, student voices should be heard and shared. Seventh and eighth grade thoughts need to be heard freely and honestly. Students must be given a chance to speak about their hands-on participation in their own words. Once their stories are gathered, then the discoveries can be analyzed alongside the teachers' perspectives to validate or negate the impact of memes on student engagement. The conclusions of both studies can determine if memes possess resounding merits for continued use in the classroom.

Another recommendation for future research is the enhanced concentration on the academic achievement using memes in 7th and 8th grade English Language Arts. This would require a quantitative investigation with much greater and conclusive sample size to accurately reflect the validity of the research study. A comprehensive assessment plan beginning with a diagnostic pre-test, formative evaluations, and culminating with a summative task would identify the level of influence of memes and academic achievement.

The impact of COVID-19 must be considered as a factor in the number of teachers willing to participant in this research study. Educators modified teaching approaches to safeguard student health in compliance with district, state, and federal guidelines. It was common for teachers to create three set of lessons to accommodate students who were present at school, learning at home, or through a hybrid system. This investigation was limited due to the smaller number of teacher participants. All five eighth grade teacher participants teach together at the same middle school in the Pacific Northwest. Having a variety of teachers from multiple schools would provide a greater sampling of responses. The diversity of physical locations would undoubtedly offer individually distinct yet collectively themed and coded data with regards to the overall experiences and observations. The seventh grade teacher was the lone ELA participant in this study. Future research would immensely benefit by having additional seventh grade ELA teacher participants. An equal number of seventh and eighth grade teacher participants would be ideal.

The propensity and ambition to integrate the impact of memes into other content areas or align vertically with lower and upper grade levels should be patiently tempered. Future research opportunity exists, but should proceed only after the aforementioned impending studies on student perspectives, comprehensive assessment plan to measure academic growth, and greater, more diverse teacher participants altogether. Future research can identify if the strategic investigation should be focused on cross-curricular integration with mathematics, science, and social studies at the seventh and eighth grade levels or dedicated to vertical English Language Arts alignment from elementary to junior high to high school and potentially higher education. **Implications for Professional Practice**

Research collected on the impact of memes on student engagement in 7th and 8th grade English Language Arts indicates educators including administrators, curriculum directors, and instructional coaches should explore the opportunities to integrate progressive cultural phenomenon in classrooms. During middle school, ELA becomes less engaging as more emphasis is placed on learning content rather than the developing creative communication skills (Ellerbrock et al., 2015; Guthrie & Klauda, 2014; Kelley & Decker, 2009; Woolley & Bowen, 2007). Middle school students routinely lose interest when academic expectations shift from reading and writing for enjoyment to reading and writing for information and argumentation (Guthrie & Klauda, 2014: Kelley & Decker, 2009; Woolley & Bowen, 2007). Instant proximity and convenience to technology, most notably, mobile devices and accessibility to internet and social media interfere with student ability to engage and stay connected while in class (Bippert, 2019; Graham et al., 2013; Howard et al, 2019). The educational system must exercise and demonstrate responsiveness to educate, train, and support teachers with professional development. Introductions to research-based best practices will encourage and enable teachers to implement refreshing instructional approaches. Teachers equipped with knowledge and confidence will be able to address foremost the ongoing and real competition to engage students. Once the students are engaged, teachers can shift their attention to the core instructional facets to ensure student learning.

Memes on the whole have been successful as part of this research investigation. Teacher participants shared the growing dilemma to consistently produce meaningful engagement strategies for students. It has become commonplace for teachers to generate new ideas just to initially engage students. And the ingenuity, ability, and time required to maintain student engagement has become strenuous. According to the teacher participants, student attention spans have diminished while student expectations to be stimulated and entertained have increased. Is it practical and feasible for teachers to produce various assessment tools for students? Are we as educators giving in to the compulsion to entertain students and their desires to be entertained?

Teacher participants communicated their intended use of memes as an alternative summarizing assignment in contrast to the traditional paragraph essay. When presented with choices, students repeatedly opted to complete the memes assignment. By allowing students to select their preferred method of understanding, they inherently take greater ownership of the learning and in turn, student engagement and academic achievement are also greater (Bagarukayo, 2018; Belderrain, 2006; Bosch, 2009; Cumming & Draper Rodriguez, 2013; Kuhlthau, 2010; Prensky, 2001).

Although memes have often been associated with humor, memes have the flexibility and range to explore and present complex and serious content. For example, one of the stories was *Passage to Freedom* by Ken Mochizuki. The book details a Japanese diplomat living in Europe during World War II. The protagonist Chiune Sugihara helps thousands of Jewish refugees escape the Holocaust by writing illegal visas. The heaviness of the novel organically led to questions. Mature discussions ensued about the appropriateness and respect of both the captions and images picked when creating a meme to summarize the reading. "The students had a legitimate concern and they handled the situation very well, with respect", said Cara. Similarly, Mary was proud of her student because "they were able to take something that is normally kind of lighthearted and funny, and sometime memes can be horrible and mean, and the students were able to use it to show understanding and compassion." Another student created a meme about Mr. Sugihara, who was internally conflicted about his decision to write the fake visas. The background image is occupied with people sitting around a board room table shouting out ideas.

One person says the wrong idea and then the next image shows that person being thrown out the window. This particular student used the visual to deliver his meme message. Mr. Sugihara was saying, "Should I write these visas?" and all the people around the table responded, "Yes, you should. Yes, you should!" And then the one guy comments, "Don't do it, you'll be a laborer for life", and then he was thrown out the window. "I thought this meme was pretty clever."

Another particular eighth grade student during homeroom proclaimed, "I really liked memes, but with *Passage to Freedom*, I was almost a little uncomfortable making my meme at first." This student comment led to a conversation about a meme used in a Social Studies class about the 3/5 Compromise. The specific meme showed how slaves were used at a level beyond their bodies. The meme had pointed at slaves, "Oh, so we count as people, we count as population now." The American Government meme replied, "Well yes, but actually no." Looking at the meme and analyzing the contents, even in social studies, students understood the accuracy of the caption and image. "That was a cool learning point for students to see that we can convey serious and important information with memes that are usually used for comedy."

"I really loved hearing from my colleagues in other classes that students were making memes for what they were learning in social studies, art, math classes. It was very rewarding to see students pull that thing (memes) that we were doing and use them in other areas." Above all, the entire eighth grade team is completely on board to feature memes next year. "Yes, we are definitely one hundred percent doing this again. It was awesome!"

Conclusion

The results of this research investigation indicate memes can be successfully integrated into the 7th and 8th grade English Language Arts curriculum to increase student engagement and academic achievement. Creating memes requires the use of higher order thinking skills to

analyze and synthesize ideas and concepts into a succinct image and caption. However, creating memes is a creative activity that allows students to collaborate and gain recognition when memes are shared. Memes should not replace oral reading, class discussion, and writing assignments. But memes provide opportunity to enhance the learning process thereby increasing student engagement and academic achievement.

References

Abbott, A. L. (2017). Fostering student interest development: An engagement intervention. *Middle School Journal*, 48(3), 34–45. https://doi.org/10.1080/00940771.2017.1297666

About the Standards. (2020). Retrieved from https://www.corestandards.org.

Akos, P. & Shields Kurz, M. (2016). Applying hope theory to support middle school transition.*Middle School Journal*, 47(1), 13-18. https://doi.org/10.1080/00940771.2016.1059724

Alexander, C. (2014). Student-created digital media and engagement in middle school history. *Computers in the Schools*, *31*(3), 154–172.

https://doi.org/10.1080/07380569.2014.932652

- Alley, K. (2018). Picturing school: Exploring middle school students' perceptions of what supports and hinders academic success. *Middle Grades Research Journal, 12*(1), 67-81.
- Allen-Lyall, B. & Davis, V. (2020). Empowering students to make their own reading choices: A teaching framework. *Alberta Journal or Educational Research*, *63*(2), 175-192.
- American Academy of Child & Psychiatry. (2016) The teen brain: Behavior, problem solving, and decision making. Volume 95. Retrieved from https://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-

Guide/The-Teen-Brain-Behavior-Problem-Solving-and-Decision-Making-095.aspx

American College Test, (2020). Retrieved from https://www.act.org/

Anfara Jr., V. & Beaumont Schmid, J. (2007). Defining the effectiveness of middle grades teachers. *Middle School Journal*, 38(5), 54-62. https://doi.org/10.1080/00940771.2007.11461604

Arendale, D. (2011). Then and now: The early years of developmental education. *Research & Teaching in Developmental Education*, 27(2), 58-76.

- Armstrong, T. (2006). The best schools: How human development research should inform educational practice. Alexandria, VA: ASCD, Association for Supervision and Curriculum Development.
- Aslan, S. & Reigeluth, C. (2013). Educational technologists: Leading change for a new paradigm of education. *TechTrends*, *57*(5), 18-24.

Aslan, S. & Reigeluth, C. (2016). Investigating "the coolest school in america": How technology is used in a learner-centered school. *Education Tech Research & Development*, 64(6), 1107-1133. https://doi.org/10.1007/s11423-016-9450-9

- Ask, K. & Abidin, C. (2018). My life is a mess: Self-deprecating relatability and collective identities in the memification of student issues. *Information, Communication, & Society,* 21(8), 1-17. https://doi.org/10.1080/1369118X.2018.1437204
- Assor, A., Kaplan, H., & Roth, G. (2002). Choice is good, but relevance is excellent: Autonomyenhancing and suppressing teacher behaviours predicting students' engagement in schoolwork. *British Journal of Educational Technology*, 72(2), 261-278. https://doi.org/dx.doi/10.1348/000709902158883
- Aubrey, K. & Riley, A. (2019). Understanding & using educational theories (2nd Edition). Los Angeles, CA: Sage.
- Avsec, S. & Kocijancic, S. (2016). A path model of effective technology-intensive inquiry-based learning. *Educational Technology & Society*, *19*(1), 308-320.
- Bagarukayo, E. (2018). Social media use to transfer knowledge into practice and aid interaction in higher education. *International Journal of Education and Development Using Information and Communication Technology*, 14(2), 211-232.

Barber, A.T., Buehl, M.M., Kidd, J.K., Sturtevant, E.G., Nuland, L.R., & Beck, J. (2015).

Reading engagement in social studies: Exploring the role of a social studies literacy intervention on reading comprehension, reading self-efficacy, and engagement in middle school students with different language backgrounds. *Reading Psychology*, *36*(1), 31-85. https://doi.org/10.1080/02702711.2013.815140

- Batchelor, K. & Bintz, W. (2013). Promoting creativity in the middle grades language arts classroom. *Middle School Journal*, 45(1), 3-11. https://doi.org/10.1080/00940771.2013.11461876
- Beck, J. S., Buehl, M. M., & Taboada Barber, A. (2015). Students' perceptions of reading and learning in social studies: A multimethod approach. *Middle Grades Research Journal*, 10(2), 1–16.
- Beldarrain, Y. (2006). Distance education trends: Integrating new technologies to foster student interaction and collaboration. *Distance Education*, 27(2), 139-153.
- Bell, M.A. (2013). What I really memes is... Anatomy of a happenin' thing. *Internet@Schools*, 20(2), 24-25.
- Bergsteiner, H., Avery, G., & Neumann. (2010). Kolb's experiential learning model: Critique form a modeling perspective. Studies in Continuing Education, 32(1), 29-46. https://doi.org/10.1080/01580370903534355.
- Biography.com Editors. (2014). Horace Mann Biography. Retrieved from https://www.biography.com/scholar/horace-mann
- Bippert, K. (2019). Perceptions of technology, curriculum, and reading strategies in one middle school intervention program. *Research in Middle Level Education, 42*(3), 1-22.
- Blackmore, S. (1998). Imitation and the definition of a meme. *Journal of Memetics Evolutionary Models of Information Transmission, 2*(2), 1-13.

- Bloomberg, L.D. & Volpe, M. (2016). Completing your qualitative dissertation: A road map from beginning to end (3rd Edition). Los Angeles, CA: Sage.
- Boa Sorte, P. (2019). Internet memes: Classroom perspectives in the context of digital cultures. *Education and Vocational Training*, 4(12). https://doi.org.10.25053/redufor.v4i12.1385

Bolkan, S., & Goodboy, A. K. (2015). Exploratory theoretical tests of the instructor humor– Student learning link. *Communication Education*, 64(1), 45–64. https://doi.org/10.1080/03634523.2014.978793

- Bolkan, S., & Griffin, D. (2017). Students' use of cell phones in class for off-task behaviors: The indirect impact of instructors' teaching behaviors through boredom and students' attitudes. *Communication Education*, 66(3), 313–329. https://dx.doi.org/10.1080/03634523.2016.1241888
- Bohon, L.L., McKelvey, S., Rhodes, J.A., & Robnolt, V.J. (2017). Training for content teachers of English Language Learners: Using experiential learning to improve instruction.
 Teacher Development, 21(5), 609-634. https://doi.org/10.1080/13664530.2016.1277256
- Borman, G., Rozek, C., Pyne, J., & Hanselman, P. (2019). Reappraising academic and social adversity improves middle school students' academic achievement, behavior, and wellbeing. *PNAS*, *116*(33), 16286-16291. https://doi.org/10.1073/pnas.1820317116
- Bosch, T. (2009). Using online social networking for teaching and learning: Facebook use at the university of cape town. *Communicatio*, 35(2), 185-200. https:/doi.org/10.1080.02500160903250648
- Botha, A. & Herselman, M. (2015). A teacher tablet toolkit to meet the challenges posed by 21st century rural teaching and learning environments. *South African Journal of Education, 35*(4), 1-19. https://doi.org/10.15700/saje.v35n4a1218

- Boyce, C., Mishra, C., Halverson, K., & Thomas, A. (2014). Getting students outside: Using technology as a way to stimulate engagement. *Journal of Science Education & Technology 23*(6), 815-826. https://doi.org/10.1007/s10956-014-9514-8
- Bradley, B. (2016). Integrating the curriculum to engage and challenge children. *YC: Young Children*, *71*(3). 8-16.
- Brass, N. & Ryan, A. (2021). Changes in behavioral correlates of social status during early adolescence: Does school context matter? *Developmental Psychology*, 57(7), 1136-1148. https://doi.org/10.1037/dev0000957
- Britannica, The Editors of Encyclopedia. (n.d.). "Northwest Ordinances". *Encyclopedia Britannica*. Retrieved from https://www.britannica.com/event/Northwest-Ordinances
- Brubaker, P., Boyle, K., & Stephan, D. (2017). The shared cultural experience: A comparison of religious memes created by the church of Jesus Christ of Latter-Day Saints, religious media, and church members. *Journal of Media and Religion, 16*(2), 67-79. http://dx.doi.org/10.1018/15348423.2017.1311127
- Bruhn, A.L., Woods-Groves, S., Fernando, J., Choi, T., & Troughton, L. (2017). Evaluating technology-based self-monitoring as a tier 2 intervention across middle school settings. *Behavioral Disorders*, 42(3), 119-131. https://doi.org/10.1177/019874291769/1534
- Buhs, E. S., Koziol, N. A., Rudasill, K. M., & Crockett, L. J. (2018). Early temperament and middle school engagement: School social relationships as mediating processes. *Journal* of Educational Psychology, 110(3), 338–354. https://doi.org/10.1037/edu0000224
- Burman, J. (2012). The misunderstanding of memes: Biography of an unscientific object, 1976-1999. *Perspectives on Science, 20*(1), 75-104.

- Busby, R. S., Stork, T., & Smith, N. (2014). Proof in the pudding: A mix of integrative and interactive strategies in middle school literacy. *Journal of Social Studies Research*, 13–22.
- Cao, Roa. (2020). Crowding out memetic explanation. *Philosophy of Science*, 87(5), 1160-1171. https://doi.org/10.1086.710518
- Chen, G. (2021). A relevant history of public education in the united states. *Public School Review*. Retrieved from https://www.publicschoolreview.com/blog/a-relevant-history-of-public-education-in-the-united-states.
- Ciccone, M. (2019). Teaching adolescents to communicate (better) online: Best practices from a middle school classroom. *Journal of Media Literacy Education*, 11(2), 167-178. https://doi.org/10.23860/JMLE-2019-11-2-9
- Conner, J., & Pope, D. (2013). Not just robo-students: Why full engagement matters and how schools can promote it. *Journal of Youth & Adolescence*, 42(9), 1426–1442. https://doi.org/10.1007/s10964-013-9948-y
- Conti-Ramsden, G., Durkin, K., & Simkin, Z. (2010). Language and social factors in the use of cell phone technology by adolescents with and without specific language impairment (SLI). *Journal of Speech, Language & Hearing Research*, *53*(1), 196–208. https://doi.org/10.1044/1092-4388(2009/08-0241)
- Creswell, J.W., & Guetterman, T.C. (2019). Educational research: Planning, conducting, and evaluating quantitative and qualitative research. (6th ed.). Upper Saddle River, NJ:
 Pearson Education.
- Cumming, T. M., & Draper Rodriguez, C. (2013). Integrating the ipad into language arts instruction for students with disabilities: Engagement and perspectives. *Journal of*

Special Education Technology, *28*(4), 43–52. https://doi.org/10.1177/016264341302800404

- Dart, E. H., Radley, K. C., Battaglia, A. A., Dadakhodjaeva, K., Bates, K. E., & Wright, S. J. (2016). The classroom password: A class-wide intervention to increase academic engagement. *Psychology in the Schools*, *53*(4), 416–431. https://doi.org/10.1002/pits.21911
- Dawes, M., Farmer, T., Hamm, J., Lee, D., Norwalk, K., Sterrett, B., & Lambert, K. (2020).
 Creating supportive contexts for early adolescents during the first year of middle school: Impact of a developmentally responsive multi-component intervention. *Journal of Youth and Adolescence*, 49(7), 1447-1463. https://doi.org/10.1007/s10964-019-01156-2

Dawkins, R. (1976). The selfish gene. Oxford, UK: Oxford University Press.

- De La Paz, S. & Graham, S. (2002). Explicitly teaching strategies, skills, and knowledge:
 Writing instruction in middle school classrooms. *Journal of Educational Psychology*, 94(4), 687-698. https://doi.org/10.1037//0022-0663.94.4.687
- Downs, J., Bishop, P., Swallow, M., Olofson, M., & Hennessey, S. (2016). Collaborative action research for middle grades improvement. *Educational Action Research*, 24(2), 194-215. https://dx.doi.org/10.1080/09650792.2015.1058169
- Duffy, F. (2009). The need for systemic transformational change in school districts (Part 1). Retrieved from http://cnx.org/content/m19579/latest
- Eccles, J., Midgley, C., Wigfield, A., Buchanan, C., Reuman, D., Flanagan, C. & Mac Iver, D. (1993). Development during adolescence: The impact of stage/environment fix.
 American Psychologist, 48(2), 90-101. https://doi.org/10.1037/0003-066X.48.2.90

- Ellerbrock, C. R., Denmon, J., Owens, R., & Lindstrom, K. (2015). Fostering a developmentally responsive middle-to high school transition: The role of transition supports. *Middle Grades Research Journal*, *10*(1), 83–101.
- Engel, G., & Green, T. (2011). Cell phones in the classroom: Are we dialing up disaster? *TechTrends: Linking Research & Practice to Improve Learning*, 55(2), 39–45. https://doi.org/10.1007/s11528-011-0482-z
- Fite, P., Frazer, A., DiPierro, M., & Abel, M. (2018). Youth perceptions of what is helpful during the middle school transition and correlates of transition difficulty. *Children & Schools,* 41(1), 55-62. https://doi.org/10.1093/cs/cdy029
- Fredericks, J., Blumenfeld, P., & Paris, A. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, *74*(1), 59-109).
- Ford, C. (2019). The wonderful world of memes: Exploring the satirical commentary of memes in the digital age. *Lucerna*, *13*, 166-181.
- Froese, A., Carpenter, C., Inman, D., Schooley, J., Barnes, R., Brecht, P., & Chacon, J. (2012). Effects of classroom cell phone use on expected and actual learning. *College Student Journal*, 46(2), 323–332.
- Glover, I., Hellpestone, S., Parkin, H., Rodger, H., & Irwin, B. (2016). Pedagogy first: Realising technology enhanced learning by focusing on teaching practice. *British Journal of Educational Technology*, 47(5), 993-1002. https://doi.org/10.1111/bject.12425
- Goldenberg, L., Meade, T., Midouhas, E., & Cooperman, N. (2011). Impact of a technologyinfused middle school writing program on sixth-grade students' writing ability and engagement. *Middle Grades Research Journal*, *6*(2), 75-96.

- Graham, S., Capizze, A., Harris, K., Hebert, M., & Morphy, P. (2013). Teaching writing to middle school students: A National survey. *Reading & Writing*, 27(6), 1015-1042. https://doi.org/10.1007/s11145-013-9495-7
- Graham, S., & Harris, K. (2015). Common core state standards and writing: Introduction to the special issue. *The Elementary School Journal*, *115*(4), 457-463.
- Graham, S., Hebert, M., & Harris, K. (2015). Formative assessment and writing: A metaanalysis. *The Elementary School Journal*, *115*(4), 523-547.
- Graham, A., Kerkhoff, S., & Spires, Hiller. (2017). Disciplinary literacy in the middle school: Exploring pedagogical tensions. *Middle Grades Research Journal*, 11(1), 63-83.
- Grolnick, W., Raftery-Helmer, J., Flamm, E., Marbell, K. & Cardemil, E. (2014). Parental provision of academic structure and the transition to middle school. *Journal of Research on Adolescence*, *25*(4), 668-684. https://doi.org/10.111/jora.12161
- Groves, M., Leflay, K., Smith, J., Bowd, B., & Barber., A. (2013). Encouraging the development of higher-level study skills using an experiential learning framework. *Teaching in Higher Education*, 18(5), 545-556. http://dx.doi.org/10.1080/13562517.2012.753052
- Grundlingh, L. (2018). Memes as speech acts. *Social Semiotics*, 28(2), 147-168. https://doi.org/10.1080/10350330.2017.1303020
- Guenther, L. (2017). "I have Shakespeare in my blood": Reading intervention with middle school boys. *Mid-Western Educational Researcher, 29*(1), 40-68.
- Gurrie, C., & Johnson, M. (2011). What are they doing on those cell phones? Bridging the gap to better understand student cell phone use and motivations in class. *Florida Communication Journal*, 39(2), 11–21.

- Guthrie, J. T., & Klauda, S. L. (2014). Effects of classroom practices on reading comprehension, engagement, and motivations for adolescents. *Reading Research Quarterly*, 49(4), 387–416. https://doi.org/10.1002/rrq.81
- Hafen, C., Allen, J., Mikamo, A., Gregory, A., Hamre, B., & Pianta, R. (2012). The pivotal role of adolescent autonomy in secondary school classrooms. *Journal of Youth and Adolescence*, 41(3), 245-255. https://dx.doi.org/10.1007/s10964-011-9739-2
- Harmon, J., Wood, K., & Stover, K. Four components to promote literacy engagement in subject matter disciplines. *Middle School Journal*, 44(2), 49-57. https://doi/org/10.1080/00940771.2012.11461847
- Hawkridge, D. (1990). Who needs computers in schools, and why? *Computers & Education*, 15(1-3), 1-6.
- Hayden, S., & Osborn, D. (2020). Using experiential learning theory to train career practitioners. Journal of Employment Counseling, 57(1), 2-13. https://doi.org/10.1002/joec.12134
- Hayes, J. & Olinghouse, N. (2015). Can cognitive writing models inform the design of the common core state standards? *The Elementary School Journal*, 115(4), 480-497. https://doi.org/10.1086/681909

Heinrich, W. & Green, P. (2020). Remixing approach to experiential learning, design, and assessment. *Journal of Experiential Education*, 43(2), 205-223. https://doi.org/10.1177/1053825920915608

- Hiatt, D. (1994). Parent involvement in american public schools: An historical perspective 1642-1994. *School Community Journal, 4*(2), 27-38.
- Hill, C., & Ericsson, P. (2014). The crystal ball project: Predicting the future of composition and the preparation of composition teachers. *Clearing House*, 87(4), 143-148.

https://www.doi.org/10.1080/00098655.2013.875883

- Holas, I. & Huston, A. (2012). Are middle schools harmful? The role of transition timing, classroom quality and school characteristics. *Journal of Youth & Adolescence, 41*(3, 333-345. https://doi.org/10.1007/s10964-011-9732-9
- Howard, S., Thompson, K., Yang, J., & Ma, J. (2019). Working the system: Development of a system model of technology integration to inform learning task design. *British Journal of Education Technology*, 50(1), 326-341. https://doi.org/10.1111/bjet.12560
- Hoy, W. & Adams, C. (2016). Quantitative research in education: A primer (2nd edition). Los Angeles, CA: Sage.
- Hunt-Barron, S., Tracy, K., Howell, E., & Kaminsky, R. (2015). Obstacles to enhancing professional development with digital tools in rural landscapes. *Journal of Research in Rural Education*, 30(2), 1-14.
- Ireland, S. (2018). Fake news alert: Teaching news literacy skills in a meme world. *The Reference Library, 59*(3), 122-128. https://doi.org/10.1080.02763877.2018.1463890
- Jack, C., & Higgins, S. (2019). Embedding educational technologies in early years education. *Research in Learning Technology*, 27, 1-17. http://dx.doi.org/10.25304/rlt.v27.2033
- Jeffery, J., & Wilcox, K. (2013). 'How do I do it if I don't like writing?': Adolescent' stances toward writing across disciplines. *Reading and Writing*, 27(6), 1095-1117. https://doi.org/10.1007/s11145-013-9493-9
- Jin, X-L., Tang, Z., & Zhou, Z. (2017). Influence of traits and emotions on boosting status sharing through microblogging. *Behaviour & Information Technology*, 36(5), 470-483. https://dx.doi.org/10.1080/0144929x.2016.1257067

Johann, M. & Bulow, L. (2019). One does not simply create a meme: Conditions for the

diffusion of internet memes. *International Journal of Communication*, *13*(2019), 1720-1742.

- Johnson, P. (1997). A history of the american people. New York, NY: HarperCollins Publishers, Inc.
- Jones, J. S., & Rice, M. L. (2017). Exploring classroom microblogs to improve writing of middle school students. *Journal of Interactive Online Learning*, *15*(1), 26–41.
- Kamenetz, A. (2019). It's a smartphone life: More than half of U.S. children now have one. NPR. Retrieved from https://www.npr.org/2019/10/31/774838891/its-a-smartphone-lifemore-than-half-of-u-s-children-now-have-one
- Kamhi, A. (2004). A meme's eye view of speech-pathology. *Language, Speech, and Hearing Services in Schools, 35*(2), 105-111. https://doi.org/10.1044/0161-1461(2004/012)
- Karatas, I., Tunc, M.P., Yilmaz, M., & Karaci, G. (2016). An investigation of technological pedagogical content knowledge, self-confidence, and perception of pre-service middle school mathematics teachers towards instructional technologies. *Journal of Educational Technology & Society, 20*(3), 122-132.
- Kelley, M., & Decker, E. (2009). The current state of motivation to read among middle school students. *Reading Psychology*, 30(5), 466-485. https://doi.org/10.1080/02702710902733535
- Kim, Y-S., Puranik, C., & Otaiba, S. (2015). Developing trajectories of writing skills in first grade: Examining the effects of SES and language and/or speech impairments. *The Elementary School Journal*, 115(4), 593-613.

Kim, H., Schwartz, & Cappella, E. (2014). Navigating middle grades: Role of social contexts in

middle grade school climate. *American Journal of Community Psychology, 54*(1-2), 28-45. https://doi.org/10.1007/s10464-014-9659-s

- Klein, A. (2015). No child left behind: An overview. *Education Week*. Retrieved from https://www.edweek.org/ew/section/multimedia/no-child-left-behind-overviewdefinition-summary.html
- Kolb, A.Y., & Kolb, D.A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education*, 4(2), 193-212.
- Krahenbuhl, K. (2020). Student-centered education and constructivism: Challenges, concerns, and clarity for teachers. *The Clearing House*, 89(3), 97-105. https://doi.org/10.1080/00098655.2016.1191311
- Kuhlthau, C. (2007). Guided inquiry: School libraries in the 21st century. *School Libraries Worldwide*, *16*(1), 1-12.
- Kulkarni, A. (2017). Internet meme and political discourse: A study on the impact of internet meme as a tool in communicating political satire. *Journal of Content, 6*(3), 13-17.
- Lapan, R., Marcotte, A., Storey, R., Carbone, P., Loehr-Lapan, S., Guerin, D., Thomas, T., Cuffee-Grey, D., Coburn, A., Pfeiffer, T., Wilson, L., & Mahoney S. (2015). Infusing career development to strengthen middle school English language arts curricula. *The Career Development Quarterly*, 64(2), 126-139. https://doi.org/10.1002/cdq.12046
- Lapsley, D. (2014). The promise and peril of coming of age in the 21st century. *Journal of Character Education*, *10*(1), 13-22.
- Latchem, C. (2014). Musing on the memes of open and distance education. *Distance Education*, 35(3), 400-409. https://dx.doi.org/10.1080/01587919.2015.955266

- Lesaux, N. K., Kieffer, M. J., Faller, S. E., & Kelley, J. G. (2010). The effectiveness and ease of implementation of an academic vocabulary intervention for linguistically diverse students in urban middle schools. *Reading Research Quarterly*, 45(2), 196–228.
- Lesseig, K., Slavit, D., & Nelson, T.M. (2017). Jumping on the STEM bandwagon: How middle grades students and teachers can benefit from STEM experiences. *Middle School Journal*, 48(3), 15-24. https://doi.org/10.1080/00940771
- Lin, W. (2017). On the optimization of sentence imitation primary english teaching from the perspective of strong memes. *English Language Teaching*, 10(5), 11-15. https://doi.org/10.5539/elt.v10n5p11
- Lounsbury, J.H. (1960). How the junior high came to be. *Educational Leadership*, 18(3), 145-198.
- Luo, T. (2016). Enabling microblogging-based peer feedback in face-to-face classrooms. Innovations in Education and Teaching International, 53(2), 156-166. https://doi.org/10.1080/14703297.2014/995202
- Luo, T., Moore, D., & Franklin, T. (2019). Examining participation and engagement in a microblogging-support college-level hybrid course. *Innovations in Education and Teaching International, 56*(1), 14-24. https://doi.org/10.1080/14703297.2017.1386117
- MacMath, S., Sivia, A., Britton, V. (2017). Teacher perceptions of project based learning in the secondary classroom. *Alberta Journal or Educational Research*, *63*(2), 175-192.
- Maher, D., & Yoo, J. (2017). Project-based learning in the primary school classroom. *Journal of Education Research*, 11(1), 77-87)
- Marcut, M. (2014). Social inclusion and social frontiers in the digital age How can eu's digital agenda help? *Eurolimes*, *17*, 53-68.

- Marshall, C. & Rossman, G. (2016). Designing qualitative research (6th Edition). Los Angeles, CA: Sage.
- Maxwell, J. (2013). Qualitative research design: An interactive approach (3rd edition). Los Angeles, CA: Sage.
- Mazambani, G., Carlson, M., Reysen, S., & Hempelmann, C. (2015). Impact of status and meme content on the spread of memes in virtual communities. *An Interdisciplinary Journal on Humans in ICT Environments*, 11(2), 148-164.
- McConn, M. (2019). "It's not me, it's them!" Teacher candidates, the teaching of literature, and reflection as an antidote to perils of the conservative school cycle. *Research in the Schools, 26*(1), 64-78.

McGregor, S. (2014). The transdisciplinary meme. Integral Leadership Review, 14(2), 130-140.

- McNamara, S. & McNamara, A. (2019). Authentic simulated startups: Bring the real world into the classroom. *Journal of Education for Business*, 94(4), 209-216. https://doi.org/10.1080/08832323.2108.1496897
- McNeill, L. (2017). Lol and the world lols with you: Memes as modern folklore. *Phi Kappa Phi Forum*, 97(4), 18-21.
- McTigue, E. & Liew, J. (2011). Principles and practices for building academic self-efficacy in middle grades language arts classrooms. *The Clearing House*, 84(3), 114-118. https://doi.org/1080.00098655.2010.543191

Middle school. (n.d.). Retrieved from https://www.newworldencyclopedia.org/

Morison, S.E. (1965). The oxford history of the american people. New York, NY: Oxford University Press.

Mupinga, D. M. (2017). School-wide and classroom policies on the use of mobile technologies: an exploratory study. *Journal of Technology Studies*, 43(2), 70–79. https://doi.org/10.21061/jots.v43i2.a.2

Mustafaa, F. N., Lozada, F. T., Channey, J., Skoog-Hoffman, A., & Jagers, R. J. (2017).
Perceptions of teaching practices, teacher support, and school engagement among middle school students: An examination of the developmental designs approach. *Middle Grades Research Journal*, 11(2), 83–98.

- Nagle, J., & Taylor, D. (2017). Using a personal learning framework to transform middle grades teaching practice. *Middle Grades Research Journal*, *11*(1), 85–100.
- National Center for Education Statistics. (n.d.). *Digest of education statistics*. U.S. Department of Education.

National Center for Education Statistics. (2022). *Population characteristics and economic outcomes.* U.S. Department of Education. Retrieved from https://nces.ed.gov/programs/coe/indicator/cba

- Neem, J. (2017). Democracy's schools: The rise of public education in america. Baltimore, MD: Johns Hopkins University Press.
- Olson, C., Scarcella, R., & Matuchniak, T. (2015). English learners, writing, and the common core. *The Elementary School Journal*, 114(4), 570-592. https://www.doi.org/10.1086/681235
- Orthner, Dennis K., Jones-Sanpei, H., Akos, P., & Rose, Roderick A. (2013). Improving middle school student engagement through career-relevant instruction in the core curriculum. *Journal of Educational Research*, 106(1), 27–38.

Osborn, C.J., Daninhirsch, C.L., & Page, B.J. (2003). Experiential training in group counseling:
Humanistic processes in practice. *Journal of Humanistic Counseling, Education, and Development, 42*(1), 14-28.

- Outlaw, M., Clement, M., & Clement, F. (2007). Then and now: Developing highly qualified teachers. *Delta Kappa Gamma Bulletin*, *73*(4), 26-39.
- Patall, E. (2013). Constructing motivation through choice, interest, and interestingness. *Journal* of Educational Psychology, 105(2), 522. https://dx.doi.org/10.1037/a0030307
- Patall, E., Cooper, H., & Wynn, S. (2010). The effectiveness and relative importance of choice in the classroom. *Journal of Educational Psychology*, 102(4), 896. https://dx.doi.org/10.1037/a0019545
- Patel, Ronak (2013). First world problems: A fair use of analysis of internet memes. UCLA Entertainment Law Review, 20(2), 236-256. https://doi.org/10.5070/LR8202027169
- Pennington, S. (2017). Language arts classroom practices and early adolescents' needs: A comparison of student and teacher perceptions. *Middle Grades Research Journal*, 11(2), 117-127.
- Perry, J. (2008). School engagement among urban youth of color: Criterion pattern effects of vocational exportation and racial identity. *Journal of Career Development*, 34(4), 397-422. https://doi.org/10.1177/0894845308316293
- Peterson, K., DeCato, L., & Kolb, D.A. (2015). Moving and learning: Expanding style and increasing flexibility. *Journal of Experiential Education*, 38(3), 228-244. https://doi.org.10.1177/105382591450836
- Phillips, M. (2014). The challenges of adolescence (and how parents and educators can help). Retrieved from https://www.edutopia.org/blog/challenges-adolescence-parents-educatorsmark-phillips

Pickhardt, C. (2017). Social challenges of middle school. Psychology Today. Retrieved from https://www.psychologytoday.com/us/blog/surviving-your-childsadolescence/201701/social-challenges-middle-school

- Pierce, G. & Cleary, P. 2014. The k-12 educational technology value chain: Apps for kids, tools for teachers and levers for reform. *Education Information Technologies*, 21(4), 863-880. https://doi.org/10.1007/s10639-014-9357-1
- Pilgrim, J. & Pilgrim, J. (2016). The use of virtual reality tools in the reading-language arts classroom. *Texas Journal of Literacy Education*, *4*(2), 90-97).

Prensky, M. (2001). Digital natives, digital immigrants. On the Horizon, 9(5), 1-6.

- Prokopeak, M. (2019). The little things matter when making big changes. Retrieved from https://www.chieflearningofficer.com/2019/09/27/the-little-things-matter-when-makingbig-changes.
- Publication Manual of the American Psychological Association (7th Edition). (2020). American Psychological Association [www.apa.org]. ISBN-978-1-4338-3217-8
- Purnama, A. D. (2017). Incorporating memes and instagram to enhance student's participation. *LLT Journal: A Journal on Language and Language Teaching*, 20(1), 1–14. https://doi.org/10.24071/llt.2017.200101
- Race Forward. (2006). Historical timeline of public education in the us. Retrieved from https://www.raceforward.org/research/reports/historical-timeline-public-education-us

Rowland, Craig-Hare, J., Ault, M., Ellis, J., & Bulgren, J. (2017). Social media: How the next generation can practice argumentation. *Educational Media International*, 54(2), 99– 111. https://doi.org/10.1080/09523987.2017.1362818

Ravitch, S. & Riggan, M. (2017). Reason & rigor (2nd Edition). Los Angeles, CA: Sage.

Sacks, D. (2003). Age limits and adolescents. *Paediatrics & Child Health*, 8(9), 577. https://doi.org/10.1093/pch/8.9.577

Sagan, L. (2010). Students' choice: Recommendations for environmental and instructional changes in school. *The Clearing House*, 83(6), 217-222. https://doi.org/10.1080/00098650903505407

- Saldana, J. (2016). The coding manual for qualitative researchers (3rd Edition). Los Angeles, CA: Sage.
- Samuels-Peretz, D., Camiel, L., Teeley, K., & Banerjee, G. (2017). Digitally inspired thinking:
 Can social media lead to deep learning in higher education? *College Teaching*, 65(1),
 32–39. https://dx.doi.org/10.1080/87567555.2016.1225663
- Scardina, C. (2017). Through the lens of popular culture: Why memes and teaching are well suited. *Teacher Librarian*, *45*(2), 13–16.
- Schaefer, M.B., Malu, K., & Yoon, B. (2016). A historical overview of the middle school movement, 1963-2015. *Research in Middle School Level*, 39(5), 1-27. https://www.doi.org/10.1080/19404476.2016.1165036
- Schaefer, M.B., & Rivera, L.M. (2012). College and career readiness in the middle grades. *Middle Grades Research Journal*, 7(3), 51-66.
- Schaefer, M.B., & Rivera, L. M. (2014). Just chillin' on the quad: Middle grades students in college. *Middle Grades Research Journal*, 9(2), 91–108.
- Shanahan, T. (2015). Common core state standards: A new role for writing. *The Elementary School Journal, 115*(4), 464-479.

Shankar-Brown, R. & Brown, B. (2014). Today's vodcast: Sunny and clear, with an increased

chance of learning. Middle School Journal, *45*(3), 19-25. https://www.doi.org/ 10.1080/00940771.2014.11461888

- Sharma, H. (2018). Memes in digital culture and their role in marketing and communication: A study in India. *Interactions: Studies in Communication & Culture*, 9(3), 303-318. https://doi.org/10.1386/iscc.9.3.303_1
- Shell, M., Gazelle, H., & Faldowski, R. (2014). Anxious solitude and the middle school transition: A diathesis x stress model of peer exclusion and victimization trajectories.
 Developmental Psychology, 50(5), 1569-1583. https://doi.org/10.1037.a0035528
- Shifman, L. (2013). Memes in a digital world: Reconciling with a conceptual troublemaker. Journal of Computer-Mediated Communication, 18, 362-377. https://doi.org/10.1111/jcc4.12013
- Shifman, L., & Thelwall, M. (2009). Assessing global diffusion with web memetics: The spread and evolution of a popular joke. *Journal of the American Society for Information Science and Technology*, *60*(12), 2567-2576. http://doi.org/10.1002/asi
- Smith, M., Mann, M., Georgieva, G., Curtis, R., & Schimmel, C. (2016). What counts when it comes to school enjoyment and aspiration in the middle grades. *Research in Middle Level Education Online*, 39(8), 1-13. https://doi.org/10.1080/19404476.2016.1226100
- Sokal, L., & Katz, J. (2015). Effects of the three-block model of universal design for learning on early and late middle school students' engagement. *Middle Grades Research Journal*, 10(2), 65-82.

Stevens, M. (2011). Create! communicate! collaborate! Retrieved from chrome-

extension://gphandlahdpffmccakmbngmbjnjiiahp/https://cryrop.org/documents/Teacher-Resources/CTE%20Teach/Career%20Ready%20Classroom%20-%20Articles/21st%20Century%20Learner.pdf

- Stobierski, T. (2020). Average salary by education level: The value of a college degree. Retrieved from https://www.northeastern.edu/bachelors-completion/news/average-salaryby-education-level.
- Stokes-Eley, S. (2007). Using kolb's experiential learning cycle in chapter presentations. *Communication Teacher, 21*(1), 26-29. https://doi.org/10.1080/17404620701211584
- Su, Y. (2015). An investigation into the contents and aspects of students' reflective thoughts during field experiences. *Innovations in Education and Teaching International*, 52(2), 322-334. http://dx.doi.org/10.1080/14703297.2014.880364
- Tessier, J. (2014). Eliminating the textbook: Learning science with cell phones. *Journal of College Science Teaching*, *44*(2), 46–51.
- The National Commission on Writing. (2004). Writing: A ticket to work... Or a ticket out: A survey of business leaders. *CollegeBoard*, 1-44.
- The Nation's Report Card. National Assessment of Educational Progress. (2020). Retrieved March 20, 2020, from https://nces.ed.gov/
- Townsend, D. (2015). Who's using the language? Supporting middle school students with content area academic language. *Journal of Adolescent & Adult Literacy*, *58*(5), 376-387. http://doi.org/10.1002/jaal.374
- Veletsianos, G. (2013). Open practices and identity: Evidence from researchers and educators' social media participation. *British Journal of Educational Technology*, 44(4), 639–651. https://doi.org/10.1111/bjet.12052

- Vollet, J. W., Kindermann, T. A., & Skinner, E. A. (2017). In peer matters, teachers matter: Peer group influences on students' engagement depend on teacher involvement. *Journal of Educational Psychology*, 109(5), 635–652. <u>https://doi.org/10.1037/edu0000172</u>
- Vroman, M. (2020). Why research says adolescence is the right time to focus on social action. Retrieved from https://www.edsurge.com/news/2020-03-05-why-research-saysadolescence-is-the-right-time-to-focus-on-socialaction#:~:text=Emotions%20are%20more%20intense%20and,success%20in%20college %20and%20career.
- U.S. Census Bureau. (2019). U.S. and data census. U.S. Department of Commerce.
- U.S. Bureau of Labor Statistics. (2020). *Education pays*. Retrieved from https://www.bls.gov/emp/chart-unemployment-earnings-education.htm
- United States Department of Labor. (2022). *Education level and pay*. Retrieved from https://www.dol.gov/general/topic/wages/educational
- Wallace, T. L., & Sung, H. C. (2017). Student perceptions of autonomy-supportive instructional interactions in the middle grades. *Journal of Experimental Education*, 85(3), 425–449. https://doi.org/10.1080/00220973.2016.1182885
- Wang, J. & Wang, H. (2015). From a marketplace to a cultural space: Online meme as an operational unit of cultural transmission. *Journal of Technical Writing and Communication, 45*(3), 261-274. https://doi.org/10.1177/0047281615578847
- Wassenhove, E. (N.D.) Benjamin Rush. Retrieved from https://www3.nd.edu/~rbarger/www7/rush.html

Wellenreiter, B. (2018). Hallways paved with good intention: Analyzing rules and procedures in

non-classroom school spaces. *Middle School Journal, 49*(2), 10-15. https://doi.org/10.1080/00940771.2017.1413272

Webb, L.D. (2006). The history of American education: A great American experiment. Upper Saddle River, NJ: Pearson/Merrill/Prentice Hall.

Wells, D. (2018). You all made dank memes: Using internet memes to promote critical thinking. *Journal of Political Science Education*, 14(2), 240-248. https://doi:10.1080/15512169.2017.1406363

- Welsch, J., Jones Powell, J., & Robnolt, V. (2019). Getting to the core of close reading: What do we really know and what remains to be seen? *Reading Psychology*, 40(1), 95-116. https://doi.org/10.1080/02702711.2019.1571544
- Wiggins, B. & Bowers, G. (2014). Memes as genre: A structural analysis of the memescape. New Media & Society, 17(11), 1886-1906. https://doi.org/10.1177/1461444814535194
- Wilcox, G., McQuay, J., Blackstaffe, A., Perry, R., & Hawe, P. (2016). Twenty percent of the variance between students in academic engagement is explained by grade level, gender, family affluence, anxiety, and social support. *School Psychology Forum*, 10(4), 397–409.
- Wong, E., & Holyoak, K. (2021). Cognitive and motivational factors driving sharing of internet memes. *Memory & Cognition*, 49(5), 863-872. https://doi.org/10.3758/s13421-020-01134-1

Woodworth, A. (2018). Best practices for using memes on library social media. *Reference & User Services Quarterly*, 58(2), 87-90.

Wood, K., Stover, K., & Kissel, B. (2013). Using digital voicethreads to promote 21st century learning. *Middle School Journal*, 44(4), 58-64.
 https://doi.org/10.1080/00940771.2013.11461865

- Woolley, M. & Bowen, G. (2007). In the context of risk: Supportive adults and the school engagement of middle school students. *Family Relations*, 56(1), 92-104. https://doi.org/10.1111/j.1741-3729.2007.00442.x
- Wrobel, D. (2008). A lesson from the past and some hope for the future: The history academy and the school, 1880-2007. *The History Teacher, 41*(2), 152-162.

Appendix A

Teacher Participant Interview Questions

- 1. How did you introduce memes in your classroom?
- 2. Why did you introduce memes in your classroom?
- 3. How did students respond initially to memes?
- 4. How did students respond when using memes?
- 5. How did students respond after using memes?
- 6. How have memes been used in your teaching?
- 7. What resources were needed when using memes in your classroom?
- 8. How frequently have memes been used in your classroom?
- 9. How have memes affected student engagement?
- 10. How have memes affected student learning?
- 11. What challenges or barriers have you encountered with the use of memes?
- 12. How would you continue using memes in your classroom?
- 13. How have you measured academic achievement using memes in your classroom?
- 14. What do you feel is the relationship between using memes and student engagement?
- 15. What do you feel is the relationship between using memes and student learning?
- 16. What successes did you experience with the use of memes?
- 17. Is there anything regarding memes, student engagement, and student learning you experienced and/or observed that would be beneficial?

Appendix B

Qualitative Informed Consent Form

A. PURPOSE AND BACKGROUND

Stephan Lynch, a doctoral student in the Department of Education at Northwest Nazarene University is conducting a qualitative research study related to the impact of memes on student engagement in 7th and 8th grade English Language Arts.

You are being asked to participate in this study because you are a healthy volunteer, under the age of 18.

B. PROCEDURES

If you agree to be in the study, the following will occur:

- 1. You will be asked to agree to an Informed Consent Form, volunteering to participate in the study.
- 2. You will be asked to complete two surveys online, one at the beginning of the unit and the other at the conclusion of the unit.

These procedures will be competed at a location mutually decided upon by the participant and principal investigator and will take a total time of approximately 15 minutes.

C. RISKS/DISCOMFORTS

- 1. Some of the discussion questions may make you uncomfortable or upset, but you are free to decline to answer any questions you do not wish to answer or to stop participation at any time.
- 2. For this research project, the researchers are requesting demographic information. Due to the make-up of your organization's population, the combined answers to these questions may make an individual person identifiable. The researchers will make every effort to protect your confidentiality. However, if you are uncomfortable answering any of these questions, you may leave them blank.
- 3. Confidentiality: Participation in research may involve a loss of privacy; however, your records will be handled as confidentially as possible. No individual identities will be used in any reports or publications that may result from this study. All data from notes, surveys, and spreadsheets will be kept on a password protected computer or in password protected files. In compliance with the Federal-wide Assurance Code, data from this study will be kept for three years, after which all data from the study will be destroyed (45 CFR 46.117).

4. Only the primary researcher and the research supervisor will be privy to data from this study. As researchers, both parties are bound to keep data as secure and confidential as possible.

D. BENEFITS

There will be no direct benefit to you from participating in this study. However, the information you provide may help educators to better understand the factors that enhance the environment to be a place of positive teacher-student interactions.

E. PAYMENTS

There are no payments for participating in this study.

F. QUESTIONS

If you have questions or concerns about participation in this study, you should first talk with the investigator. Stephan Lynch can be contacted via email at stlynch@nnu.edu, via telephone at (208) 602-1030. If for some reason you do not wish to do this you may contact Dr. Bethani Studebaker, Director of Doctoral Programs in Educational Leadership at Northwest Nazarene University, via email at bstudebaker@nnu.edu via telephone at (208) 467-8802 or by writing 623 S. University Blvd., Nampa, Idaho 83686.

G. CONSENT

You may print this consent at any time for your own records.

PARTICIPATION IN RESEARCH IS VOLUNTARY. You are free to decline to be in this study, or to withdraw from it at any point. Your decision as to whether or not to participate in this study will have no influence on your future status as a student at Northwest Nazarene University.

I give my consent to participate in this study:

Signature of Study Participant	Date
I give my consent for the interview to be audio taped	in this study:
Signature of Study Participant	Date
I give my consent for direct quotes to be used in this will be used in the report from this study:	study. No person identifying information
Signature of Study Participant	Date

Date

Signature of Person Obtaining Consent

Appendix C

Member Checking Email

A QUALITATIVE INVESTIGATION ON THE IMPACT OF MEMES ON STUDENT ENGAGEMENT IN 7th and 8th GRADE ENGLISH LANGUAGE ARTS

Date: February 21, 2022

Dear Participant:

Thank you for your participation in my study this school year. The purpose of this email is to share some of the themes that emerged as a result of our interviews (see below). Please review these statements and let me know if they accurately reflect our conversation. If you have any suggestions for modifications, or any questions, please let me know by March 1, 2022.

The research questions for this study were:

- What is the impact of the use of memes on student engagement in 7th and 8th grade English Language Arts, as articulated by teachers?
 - A. Excitement
 - B. Motivation
 - C. Familiarity
 - D. Anxiety/Reluctance
- 2. What instructional practices using memes lead to increased student engagement?
 - A. Previous Experience
 - B. Resources
 - C. Units/Lessons
 - D. Time Requirement

- 3. How can the use of memes be used as an assessment tool to measure academic achievement?
 - A. Grading
 - B. Barriers
 - C. Successes/Reflections

Many themes were evident from the interview and discussions. After reading and coding transcripts, results indicate that memes can be successfully integrated into the 7th and 8th Grade English Language Arts curriculum to increase student engagement and academic achievement. Creating memes requires the use of higher order thinking skills to analyze and synthesize ideas and concepts into a succinct image and caption.

Thank you again for your help and I look forward to working with you!

Stephan Lynch Doctoral Student Northwest Nazarene University <u>stlynch@nnu.edu</u> (208) 602-1030 Appendix D

Social Media Outreach Form

A QUALITATIVE INVESTIGATION ON THE IMPACT OF MEMES ON

STUDENT ENGAGEMENT IN 7th and 8th GRADE ENGLISH LANGUAGE ARTS

FOR A STUDY INVESTIGATING MEMES AND STUDENT ENGAGEMENT

TEACHER PARTICIPANTS NEEDED

A researcher (me!) is looking for Language Arts Teachers to participate in a research study using focus group interviews.

FALSE, PARTICIPANTS ONLY

COOKIES FOR EVERYONE

 Who do I need:
 Teacher participants who teach 7th and/or 8th grade English Language Arts.

 Have used memes in the classroom for a minimum of a year. WIN AN AMAZON OR STARBUCKS GIFT CARD!

ASSIGNMENT

akeameme.org

ME WHEN MY ELA CLASS MAKES ME MAKE MEMES FOR

Contact for information: stlynch@nnu.edu or DM Facebook:

I am currently looking for teacher participants to participate in a research study about the impact of memes on student engagement in 7th and 8th grade English Language Arts classrooms.

You'll will be the perfect participant if you currently teach 7th and/or 8th grade English Language Arts and have used memes in your classroom for a year.

You'll be asked to participate in a focus group interview online or in-person. A \$25 Amazon or Starbucks gift card will be raffled in each focus group interview. The focus group interviews will consist of four participants, giving you a 25% chance of winning a gift card.

If you're interested, please send me a DM or email me at <u>stlynch@nnu.edu</u>. Let me know if you have any questions.

Thank you,

Steve Lynch

Appendix E

Ethics Certification



Appendix F

Institutional Review Board Approval

From: irb@nnu.edu (Jennifer Hill) To: Stephan Lynch Subject: Status update from Northwest Nazarene University Dear Stephan,

The IRB has reviewed your protocol: 0291 A QUALITATIVE INVESTIGATION ON THE IMPACT OF MEMES ON STUDENT ENGAGEMENT IN 7th and 8th GRADE ENGLISH LANGUAGE ARTS. You received "Full Approval". Congratulations, you may begin your research. If you have any questions, let me know.

Northwest Nazarene University Jennifer Hill IRB Member 623 S University Blvd Nampa, ID 83686

Appendix G

Assessment Rubrics

Grading:

RICE+G Paragraph Structure			
R stands for	Restate and Answer the Question (Topic Sentence/Thesis)		
I stands for	Insert Background Information (Bridge)		
C stands for	Cite Evidence from the Source (Support)		
E stands for	Sentence 1: Explain the Evidence from the Source Sentence 2: Reflection/Extra Explanation		
+G stands for	Grammar Check (capitalization, usage, spelling, & punctuation)		

Directions: For this assignment, you will be writing a graded RICE+G paragraph and creating a graded meme. Read both of the following prompts, then complete each piece of the assignment.

Writing Prompt #1: The narrator of the story claims that he is not "mad." What are some examples of his choices that prove he is or is not mad?

Step 1--Rough Draft:

Choose a support table below to help you complete the rough draft for your paragraph.

RIC	RICE+G (Proficient)			
R				
Ι				
С				
	Sentence 1:			

+G Edit for missing capitalizations, accurate usage of words, important punctuation, and spelling mistakes.

Extra Help RICE+G Note: All sentence starters must be transferred into the right-hand column.

R		
Ι	Another example of the narrator making a choice that shows he is/is not mad is	
С	In the text it states,	
E	Sentence 1: This quote shows	
	Sentence 2: This is important because	
+G	Edit for missing capitalizations, accurate usage of words, important punctuation, and spelling mistakes.	

Step Two: Revise and Edit

On the rubric below, highlight the boxes to show the scores you believe you deserve on each component of RICE+G. **Revise and edit your draft based on this rubric** to achieve the highest score possible.

	Level 4 - Advanced (10 pts)	Level 3 - Proficient (8.5 pts)	Level 2 - Basic (7.5 pts)	Level 1 - Below Basic (6.5 pts)
R	Correctly restates and answers the question AND provides extra elaboration/detail to your response.	Restates the question with a complete sentence.	Your sentence does not restate the question, but is relevant to the overall question.	Your sentence does not restate the question AND/OR is off-topic or doesn't make sense.
I	Your sentence gives additional detailed information to help the reader gain background knowledge about the paragraph's topic.	Your sentence gives basic information to help the reader gain background knowledge about the topic.	Your sentence attempted to provide more information, but it did NOT help the reader gain	Your sentence is missing OR is off- topic.

			background knowledge.	
С	Your quote fully relates to the main question, has a lead-in, and is cited correctly (Quotation marks, parentheses, source #, page #).	Your quote relates to the main question, has a lead-in, AND all citation elements are present BUT has a <i>minor</i> citation format error.	Your quote relates to the question but is missing a lead-in AND/OR has an incomplete citation.	The quote is not cited at all OR the quote doesn't relate to the topic OR your quote is missing.
E	The explanation has 2+ sentences correctly explaining the quote AND includes a strong inference that adds depth and connects back to the overall question.	You have 2 sentences explaining what the quote shows, but the explanation is basic. Inference is present, but may be weak.	You have 1 sentence explaining what the quote shows OR your explanation is not tied to the overall question.	Your explanation is missing, off topic, OR does not explain what the quote means.
+ G	Effective and consistent use of punctuation, capitalization, and spelling with no noticeable mistakes. The response is easy to read and understand.	Consistent use of punctuation, capitalization, and spelling with a few noticeable mistakes. The response is easy to read and understand.	Inconsistent use of punctuation, capitalization, and spelling with several noticeable mistakes. Mistakes cause some difficulty for the reader.	Errors are frequent and severe, and meaning is often lost. The many mistakes make the response very difficult to read and understand.

Step 3--Final Draft:

Copy and paste your rough draft down into the final draft box below. Your finished product should look like a formal paragraph. Only your final draft will be scored.



Writing Prompt #2: Why did the narrator tell the police officers where the body was at the end of the story? What emotion drove him to make this choice?

Step 1--Rough Draft:

Choose a support table below to help you complete the rough draft for your paragraph.

RIC	E+G (Proficient)	
R		
Ι		
С		
E	Sentence 1:	
	Sentence 2:	
+G	Edit for missing capitalizations, accurate usage of words, important punct and spelling mistakes.	uation,

Extra Help RICE+G <mark>Note: All sentence starters must be transferred into the right-hand column.</mark>			
R			
Ι	He did this because he was feeling		
С	In the text it states,		
E	Sentence 1: This quote shows		
	Sentence 2: This is important because		
+G	Edit for missing capitalizations, accurate usage of words, important punctuation, and spelling mistakes.		

Step Two: Revise and Edit

On the rubric below, highlight the boxes to show the scores you believe you deserve on each component of RICE+G. **Revise and edit your draft based on this rubric** to achieve the highest score possible.

	Level 4 - Advanced (10 pts)	Level 3 - Proficient (8.5 pts)	Level 2 - Basic (7.5 pts)	Level 1 - Below Basic (6.5 pts)
R	Correctly restates and answers the question AND provides extra elaboration/detail to your response.	Restates the question with a complete sentence.	Your sentence does not restate the question, but is relevant to the overall question.	Your sentence does not restate the question AND/OR is off-topic or doesn't make sense.
I	Your sentence gives additional detailed information to help the reader gain background knowledge about the paragraph's topic.Your sentence gives basic information to help the reader gain background knowledge about the the topic.Your sentence at information to help the reader gain background knowledge about the the topic.		Your sentence attempted to provide more information, but it did NOT help the reader gain background knowledge.	Your sentence is missing OR is off- topic.
С	Your quote fully relates to the main question, has a lead-in, and is cited correctly (Quotation marks, parentheses, source #, page #).	Your quote relates to the main question, has a lead-in, AND all citation elements are present BUT has a <i>minor</i> citation format error.	Your quote relates to the question but is missing a lead-in AND/OR has an incomplete citation.	The quote is not cited at all OR the quote doesn't relate to the topic OR your quote is missing.
E	The explanation has 2+ sentences correctly explaining the quote AND includes a strong inference that adds depth and connects back to the overall question.	You have 2 sentences explaining what the quote shows, but the explanation is basic. Inference is present, but may be weak.	You have 1 sentence explaining what the quote shows OR your explanation is not tied to the overall question.	Your explanation is missing, off topic, OR does not explain what the quote means.
+ G	Effective and consistent use of punctuation,	Consistent use of punctuation, capitalization, and	Inconsistent use of punctuation, capitalization, and	Errors are frequent and severe, and meaning is often

	capitalization, and spelling with no noticeable mistakes. The response is easy to read and understand.	spelling with a few noticeable mistakes. The response is easy to read and understand.	spelling with several noticeable mistakes. Mistakes cause some difficulty for the reader.	lost. The many mistakes make the response very difficult to read and understand.
--	--	--	--	--

Step 3--Final Draft:

Copy and paste your rough draft down into the final draft box below. Your finished product should look like a formal paragraph. Only your final draft will be scored.

FINAL DRAFT for Scoring

Step 4--Meme it Up!

Using Google Drawings, create a meme that visually represents your answer to one of the two prompts. Go to Insert \rightarrow Drawing \rightarrow +New.

	Advanced (10)	Proficient (8.5)	Basic (7.5)	Below Basic (6.5)
Meme Image	Image is clearly relevant and directly connects to the main idea of the RICE paragraph.	Image is mostly relevant and connects to the RICE paragraph.	Image is semi- relevant but may need more than visual explanation to understand connection.	Image does not show an understandable relationship to the reading.
Meme Caption (Connection to RICE Paragraph)	Words are directly connected to the main idea of the RICE paragraph. The connection is easy for the viewer to understand,	Words are connected to the main idea of the RICE paragraph. The connection is relatively easy for viewers to understand.	Words show a relationship to the story but do not clearly relate to the RICE paragraph. The connection is not easy to understand.	There are no words or the words do not clearly relate to the story. There is no connection to the RICE response.