Pedagogy-Minded Use Of Web-Based Technology In The Classroom)

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PEDAGOGY-MINDED USE OF WEB-BASED TECHNOLOGY IN THE CLASSROOM

By

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A capstone submitted in partial fulfillment of the
Requirements for the degree of Masters of Arts in Teaching

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DEDICATION

To my wife for your continuous support and encouragement. Throughout this journey, you believed in my capabilities as a researcher, learner, and teacher. I am blessed to have you by my side. Thank you to my content reviewer for your advice and dedication to help me complete my Capstone. Lastly, thank you to my parents for supporting me throughout the years and instilling the value of education.
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CHAPTER ONE: INTRODUCTION

Background and Topic Interest

Growing up I would have never imagined addressing the question: How can teachers use web-based technology in the curriculum to increase student engagement and enrich learning? My circumstances made technology a distant thought, but one year everything changed.

Alone, progressing at 8-10 words per minute, I sat in the computer lab after school typing my paper. At the time, which was ninth grade, I preferred using the two-finger approach to typing, which limits you to only using your two index fingers. My inefficient typing skills were no fault of my own. Typing skills develop purely from practice, but fixing the problem was not that simple for me. A tour of my home would quickly reveal the absence of a computer. Without the tools for the job, the job cannot be satisfactorily learned. To my misfortune, the tools were handed to me at a late age, so I suffered painfully along at the slow grinding rate of 8-10 words per minute. It’s an easy equation to follow: Lack of practice equals lack of abilities.

The issue was that money was extremely tight; purchasing a computer would have brought financial stress on my parents. In fact, financial reasons served as a catalyst that transferred me from a private to public school. The transition would have been smooth if the private school implemented computers into the curriculum and assessments, but I was not that fortunate. Instead of using computers to write papers, everything was required to be handwritten in cursive — my cursive is spectacular by the way – which eliminated the need for a computer. Therefore, no urgency existed for my parents to buy a computer, but the situation’s urgency increased in the 9th grade when I switched over to the public school. At public school, papers required the use of Microsoft Office, a foreign product to me, and there were additional assignments where other technology could be used. I started typing lessons only two months
prior to starting, so I overwhelmingly thought: How can I use this technology effectively when I hardly know how to type?

As I sat in the computer lab after school, typing the first paper of my life, I struggled to adjust to the drastic change from handwriting to word processing my papers. After what seemed like hours of typing, the struggle magnified when the computer lab lost its power. I looked up to see that the janitor had unplugged the power, causing me to lose all the work I had done. I failed to save my work along the way, further highlighting my inexperience. My frustrations boiled over as I asked: How could the janitor do this to me? If it took me this long, how am I going to have time to redo that part and complete the rest of the paper in time? I was already running behind; the incident pushed me back further.

I have always felt like I have been running behind technology, desperately trying to catch up to it. Since technology changes rapidly, the task is exhausting. I sprint only to discover that I still have twenty-five out of the twenty-six miles of the marathon remaining. Other students easily handled the changes because they grew up with a solid technological foundation. On the contrary, my technological foundation was built on sinking sand. Every year the lack of exposure sucked me down like quicksand, placing me in a hole that required immense effort to escape. My introduction to technology was later than most; it was during the middle of the school year when my family first owned a computer. First, I needed to develop the basic skills. I couldn’t imagine, nor was I capable of understanding the advanced computer skills other students possessed. I felt lost and limited while others navigated technology with ease. Growing up, there were growing expectations to be “tech savvy” in school and the workplace. In both places, I consistently felt disadvantaged and inadequate, struggling to find a solid footing and to keep my head above ground. I struggled to meet the expectations. Through strong efforts, I pulled myself out of the
muck, but as someone who is catching up, I often still feel unsteadiness beneath me. For once, I want to be ahead of the trend instead of running behind it. I want my knowledge of technology and its usages to rise above not sink below, where I need to be.

Now, as I start my teaching career, the same disadvantaged and inadequate feelings rise to the surface in full force. During interviews I have been asked, “How have you incorporated technology into your teaching?” In my head, I rephrase the question to myself: “Have I ever incorporated technology effectively?” I provide the interviewer a nice sounding answer every time, but in truth, I realize that the answer lacks substance. I cannot confidently answer the question; every time my answers feel inadequate. It is an interview question I dread because I fear it disqualifies me from the position. Using technology in the classroom continues to be an area of improvement. I realize it’s an important area to address because employers continue to show increased interest in candidates who have the knowledge and experience.

In future interviews, I want to confidently answer the question: *How can teachers use web-based technology in the curriculum to increase student engagement and enrich learning?* As my knowledge increases in this area, I know that I will become more marketable for future employment opportunities. As I sharpen my craft, improving skills in areas like technology becomes important, so I see the applicable value in addressing the question. Also, when considering the “tech savvy” world in which we reside, I realize that developing my expertise in this area benefits the learning of the students who interact extensively with this technology-based world.

**Technology in Students’ Lives**

Today, many students differ from me: Technology is integrated into their lives at an early age. Knowing technology is an integral part of a student’s life, it is not surprising that
interviewers would be asking: “How have you incorporated technology into your teaching?” Whenever I am in public or at people’s homes, I commonly see young kids using technology, such as iPads, that I never experienced as a child. Furthermore, it seems like a majority of children, even elementary school age, own a smart phone, which allows them to access the Internet, download games, and communicate through social media. Sometimes it seems like a strange world to me. I wonder, “Where did the days of interacting face-to-face go?” Despite my legitimate ponderings over these human connections, I cannot deny that the ways we interact with others and the world are changing. Technology continues to be a driving force in these human interactions.

During a long-term sub position, I grasped the paramount significance of the relationship between students and their technology. From my observations, I felt that students’ lives revolved around cell phones and the social media accessed through the phones. Cell phones were out before, during, and after class. Students were texting their friends across the building, posting messages on Facebook, and taking pictures to post on Instagram. As I filled in for lunch duty, the trend continued. I saw groups of students sitting together, but their eyes were glued to their phones rather than focused on the person next to or across from them. From my perspective, I saw no form of communication. It appeared to be the opposite; students were disengaged from each other and the world around them. Part of my resistance is that I believe communication should not be distant or disconnected, but I began to wonder how the students would describe the same event. What would they say about themselves texting at the table? Why are they not resistant to that form of communication? I began to realize that there’s been a paradigm shift. Where I saw social disengagement, students saw a means of connecting with their peers. They
desperately want a social connection and vocal platform. The purpose is the same, but the channel towards achievement differs. There’s no doubt about it; communication has gone viral.

If students have a need for social connection, I feel my responsibility as a teacher is to find different means to fulfill their needs. My frustration over the high volume of cell phone usage prompted me to enforce strict rules, which was needed, but I failed to consider the non-disciplinary possibilities that opened up. Items like cell phones and social media are known as the bane of a teacher’s existence, but immense opportunities are revealed to those who are looking. Afterwards, I began to ask: Are their actions addressing needs? How can I incorporate technology to meet their social learning needs? After all, technology is how students interact and communicate with the world around them, and social learning is an important framework in many educational theories. Why not mash the two together? As a teacher, I feel it is my responsibility to connect with the students’ lives and their world, yet the most powerful tool at my disposal often sits in the shed collecting dust. During my short time teaching, I have witnessed an increased level of engagement when some form of technology is involved. Now it’s time to seek out and use the technology at my disposal.

**Research Question**

Sometimes teachers are subject to the technology that the school can afford. Whether it’s within a school or a student’s home, inequity exists in the world. This means some kids are like me in that they grow up without technology. In a world changing with technology, it is more important than ever to integrate the experience into the classroom, providing an opportunity for everyone. My passion is for students to be successful. In order for students to achieve success, I need to provide them skills and prepare them for the world ahead, which uses technology. I do
not want students transitioning into careers feeling the same inadequate and disadvantaged feelings that I often feel.

I questioned the steps I can take as a teacher. It’s easy to suggest incorporating technology into the classroom, but the implementation remains more difficult. What about the poor schools who can afford very little technology? Teachers do not have control over the financial status of the district they work in. Therefore, it begs the question: What technology do teachers have control over using? The Internet provides an endless supply of tools that can be used in learning. These web-based tools, often called Web 2.0 tools, are readily available online and free of charge. Web-based technology is known for its social media aspects, allowing students to interact and collaborate. These social aspects complement the goals of social learning that I value as a teacher. Therefore, in my Capstone, I hope to answer the following: How can teachers use web-based technology in the curriculum to increase student engagement and enrich learning? Through my research, I hope to identify how web-based tools can help teachers, as well as myself, become more successful in engaging students, transfusing information, and transitioning students into the “tech savvy” world.

Overview of Remaining Chapters

In chapter two, I discuss the current and past literature on the use of technology in education. The primarily focus is on web-based technology, sometimes referred to as Web 2.0 tools. The research focuses on and helps answer the question: How can teachers use web-based technology in the curriculum to increase student engagement and enrich learning? My literature review introduces specific web-based technologies and examines their impact on students’ personal and educational lives. From an educational standpoint, pedagogy, best practices, and teaching strategies that align with the technology are also highlighted. After reviewing web-
based technologies’ learning benefits, I discuss both students’ and teachers’ attitude towards the use of Web 2.0 tools in education. Specifically, I show the technological gap that exists in and between the two groups as well as the perceived educational effectiveness of web-based technology. Lastly, I share research that explores effective implementation of the technology.

In chapter three, I introduce my project and its curriculum framework. The curriculum framework is explained in extensive detail so readers understand the strategic reasons for my curriculum design. Afterwards, I describe my curriculum’s audience, project timeline, and details that preview the project portion. In chapter four, I draw conclusions from the project. In particular, I reflect on the learning experiences gained through the paper. Also, I review the literature to determine the most influential parts towards my Capstone as well as share the implications and limitations of my study. Lastly, I provide important recommendations based on my findings.
CHAPTER 2: LITERATURE REVIEW

Introduction

One of the most dominant principles at Hamline goes as follows: Know your students. From the first to the last class, teachers have repeated this phrase frequently. In this “tech savvy” world, we need to examine the student’s current relationship with technology. In what capacity are students already interacting with technology and Web 2.0 tools? Teaching pedagogy emphasizes the connection to real-world experiences. Moreover, students’ everyday experiences often revolve around the use of technology, which differs from many current teachers’ experiences in school. Today’s teachers are technological immigrants while today’s students are deeply entrenched in technology. Therefore, there is a pressing need for teachers, like myself, to bridge the technological gap.

As teachers we look to address the learning needs of our students. While considering the students’ learning needs, the following reflections come to mind: How do today’s students learn in comparison to previous students? Is there a more beneficial way for students to learn instead of the traditional approach? Technology plays a large role. Teachers risk alienating students with a fixed traditional mindset. In the literature review, it is important to address teacher and administrative resistance towards incorporating web-based technology. The research shows that a paradigm shift is greatly needed. Instead of remembering what worked for the teacher growing up, the teacher must determine what changes will help their current students. The Capstone addresses the question: How can teachers use web-based technology in the curriculum to increase student engagement and enrich learning?

In order to answer the question, the Capstone studies the benefits and strategies of incorporating web-based tools. This literature review shares Quantitative studies and Qualitative
surveys that measure students’ academic success and attitudes towards web-based technology. Additional sources also address teacher attitudes, which explain the slow progress towards incorporating Web-based technology. Special attention is given towards shifting teacher perceptions and matching pedagogical methods with usage of web-based technology.

**Students’ Relationship with Technology**

Students are immersed in technology. In contrast to previous generations of students, technology is a component of everyday life; students engage in continuous communication through texting, phone and email, and instant access to information online (Newland & Byles, 2013). The communication expands further into social networking sites. Social networking sites, such as Facebook, have allowed students to maintain a constant flow of communication as well as an opportunity to create images that speak to their identity. For American teens, participation on social networking sites “offers a sense of cultural resonance” (Clark, Logan, & Luckin, 2009, p.57). Not only are students navigating the web, they are navigating their social status and perception as well. From online, students can control and adjust the messages and images to fit how they want others to see them. They can also communicate shared interests and values.

Students are using web technology to greater extents than before. According to Fahser-Herro and Steinkuehler (2009), there has been significant expansion of video sharing sites, and the amount of people shooting and posting videos tripled from 2006 to 2007 alone (p.58). Despite the vast use of web technology, learners lack an understanding of how web technologies benefit and support their learning. Students are not using Web 2.0 technologies for creative purposes or higher levels of sophistication. Instead, students are passive viewers (Clark, Logan, & Luckin, 2009). Unfortunately, the relationship between students and technology has not translated into a meaningful learning experience.
Teachers have an opportunity to create a shift in perception and show students the critical and creative ways that students can apply the resources used in their everyday lives. Manca and Ranieri (2017) argue that technology such as social networking encapsulates adolescents’ values and experiences. Therefore, learning spaces must be created to intersect social networking and the classroom to build on student values and prior experiences. Through educators’ adaption of web-based technology, they are meeting the realities of their students while providing meaningful application.

**Learning Benefits in using Web Tools**

**Constructivism.** Web-based technologies, or Web 2.0 tools, are based on the pedagogical principles of constructivism, which asks a teacher to access a student’s prior and real-world knowledge (Paily, 2013). After using Web 2.0 tools in the classroom, Huang and Lin (2011) interviewed students to discover their perceptions. The results of the survey revealed several significant themes. One theme was that “blogs offered a meaning-focused writing exercise” (p.142). Furthermore, they concluded that, when blogging was used for supplemental writing, students were required to use conceptual knowledge and context in order to form meaning and compose grammatically accurate writings (Huang & Lin, 2011). The conceptual knowledge and context needed in constructivist learning fits perfectly with blogs; bloggers respond to real-world situations and interests based on their knowledge or perception of how the world works. Building around this framework has proved beneficial for students. For example, it has been found that teen bloggers possess prolific writing skills both on and offline because they have been given the opportunity to write creatively about topics relevant to their lives (Fahser-Herro & Steinkuehler, 2009). These findings suggest that students are more motivated to produce quality work when it relates to their own lives; Web 2.0 tools provide a powerful platform.
Wikis, which require students to post and edit each other’s work, provide additional benefits which fall under constructivism. According to Paily (2013), “Wiki caters to many of the principles of constructivism including multiple modes of representation, collaboration opportunities, experience with multiple perspectives, learner-centered, learner-relevant, and social negotiation” (p.45). The multiple perspectives can extend far beyond the classroom, as the “co-created interlinked pages provide a rich resource through which students in geographically dispersed locations can learn about each other and collaborate” (Merchant, 2009, p.115). As diverse perspectives are explored, students take center stage in creating goals, evaluating material, generating questions, and discussing ideas (VanDoorn & Ecklund, 2013). These principles are part of a teacher’s pedagogy and often incorporated into the classroom via face-to-face interactions.

Although collaboration in face-to-face interactions has proven beneficial, collaboration using Wikis has shown more favorable results. In a fourteen week study, Wichadee (2013) compared the Pearson correlation mean writing scores of students who were split into two groups: a Wiki group and a non Wiki group. Both groups were taught summarization skills through a “mind mapping” and given teacher feedback. Prior to this intervention, the Pearson correlation mean writing scores were 9.05 and 9.07. After students collaborated and agreed on a final product, it was submitted to the teacher. The final product’s results showed mean scores of 17.27 for the non Wiki group and 18.15 for the Wiki group (Wichadee, 2013). As the study shows, collaboration is effective for all students, but the mode of collaboration impacts success.

Web 2.0 technology’s success is built on a culture of participation and active learning, which differs from the more traditional educational setting. In the traditional classroom, it is estimated that the teacher provides 80% of the verbal exchange, but that number plummets to 10-
15% during computer-mediated verbal exchange (VanDoorn & Ecklund, 2013). The statistics highlight the passive learning environment that often results from a teacher-centered classroom as well as web-based technology’s ability to shift learning to be student-centered. In the teacher-centered environment, students are viewed as a sponge; Web 2.0 technology views students as contributors in the educational process (Paily, 2013). When students are viewed as contributors, there is the “opportunity for students to become the initiator of the communication” which helps them “take a more active approach to shaping how they participate socially and cognitively in classroom activities” (Rahimi, Berg, & Veen, 2015, p.789). When students are making these types of choices, their level of participation and engagement increases.

Several studies highlight web-based technology’s social and participatory nature. Rahimi, Berg, and Veen’s (2015) conclusions in the previous paragraph stemmed from their findings on the increased creativity and collective contribution through the use of Twitter and Facebook. In a survey of traditional to wiki-using writers, students using wikis responded more favorably. The survey participants who used wikis claimed they gained extensive knowledge and critical thinking skills in the process of expressing and sharing ideas. The Wiki participants also valued the equal distribution of work. Since work was posted online, the teacher could more accurately measure each student’s effort and hold everyone accountable for their work (Wichadee, 2013). Web 2.0 technologies’ transparency and communication requirements create a more interactive learning environment.

**Virtual worlds.** Virtual worlds are another interactive web-based technology that provides opportunities to develop collaboration and problem solving skills. One study focused on a role-playing game that taught 20 sixth graders about the food chain. Each student chose an individual avatar with specific abilities, so students had to work together to save the ecosystem
from destruction by combining the different avatar abilities. While playing the game, the teacher scaffolds by pausing the game in order to explain various concepts (Hew & Cheung, 2013). The study shows how scenario-based problem solving technology effectively brings cooperation, relevance, authenticity, and real-world connections. Furthermore, the positive impact resulted through the fusion of teaching best practices, scaffolding, and technology.

In a recent study, Yang and Chang (2017) also blended technology and scaffolding in teaching Geography. In their study, 77 junior high students were split between a control group, which learned through lecture, and an experimental group, which learned through lecture and a virtual game. The virtual game sent students on missions to real-life Geographic locations. During their missions, scaffolding was provided through hints that helped students complete their mission. When students reached the locations, learning materials appeared that reviewed the mission. At the end, every student received the same test, Yang and Chang used a t-test to measure the results. The score of the control group was 44.31 while the experimental group scored 56.69. The experimental group’s score was higher by 12.38 (Yang & Chang, 2017). The score of virtual game users was significantly higher. Therefore, the virtual game proved effective in addressing students’ learning needs as well as immersing students into the content. Both studies show that, through the blending of technology and scaffolding, students are engaged through active and real-world exploration.

The concepts of inquiry can be seen in other Web 2.0 tools such as Webquest. Through a scenario-based framework, this tool allows students to ask open-ended questions, synthesize knowledge, and draw their own conclusions. As they are exploring and creating their hypothesis, the tool provides connections to real-world situations as well as video and audio materials. The technology provides a fun, motivating, and student-centered environment (Hakverdi-Can &
Sonmez, 2012). When student-centered and relevant, students are engaged and immerse themselves into the world, explore possibilities, and make conclusions. These opportunities are abundantly present in virtual worlds, providing valuable learning experiences. According to Hew & Cheung (2013), “Virtual worlds make it easy for students to manipulate environmental conditions while keeping other variables consistent. Such a feature could help students generate and test their scientific hypothesis” (p.57). The virtual worlds can be described as a “hands on” approach, which is something many students need in order to make the appropriate connections.

The “hands on” feeling is a result of the authentic context that virtual worlds provide. According to Hsiao, Yu-Ju, Kao, and Li (2017), “Complex and perceptually rich environments in the virtual worlds can increase the student’s sense of immersion just as real environments do” (p.161). Virtual worlds allow students to role-play in a genuine, authentic way. For example, Levak and Son (2017) studied the effect of the virtual world Second Life on second language learners’ acquisition of language development. Second Life is a virtual environment where users are visually represented through an avatar and then communicate through speaking or texting. The environment reflected real-life situations such as shopping for groceries and ordering at a restaurant. In addition, language experts were also consulted to guarantee the conversations were genuine. When tested afterwards, all students showed improvement, especially in listening comprehension. Students reported that the real circumstances and visual context greatly aided their learning (Levak & Son, 2017). Clearly, virtual worlds expose students to a variety of situations that cannot be naturally duplicated in a book.

**Learning styles.** Students learn in many ways, and Web-based tools address the different learning styles. In Huang and Lin’s study, which was mentioned earlier, they found that using Vokis, an audio recording program, helped students improve the tone and pronunciation in their
speeches. The students were able to accomplish this because the online recordings allowed them to rehearse and self-monitor, as well as submit when they felt satisfied (2011). Vokis addressed the audio learners in the classroom and brought linguistic awareness. Students were able to hear the distinctions more clearly and take more time, obtaining greater confidence in the product they created. In a separate study, the use of podcasts in learning landscape architecture and design was examined. The study consisted of two groups. One group received a reading packet, brief written summary, and PowerPoint slide lectures. The second group received audio narratives. For both groups, the same material was covered but through a different format. The level of understanding was significantly higher for students who received the audio podcast narratives (Hew & Cheung, 2013).

Along with audio learners, web technologies effectively impact visual learners. Virtual worlds, with their visual rich context, provide the most obvious example, but additional web technologies have also been effective. When using Skype for purposes of language acquisition, second language learners reported the benefits of listening to a native speaker’s accents and sentence structures, but most importantly, the students valued access to the non-verbal visual cues (Levak & Son, 2017). Non-verbal cues, facial expression and gestures, were seen as the greatest advantage for beginning learners in order to develop understanding. In Ellis’s (2013) study, students were divided into a control group and treatment group. The control group learned about dimensional analysis through the traditional learning methods of textbook and worksheets. Meanwhile, the treatment group received the same traditional learning methods, but they were also given access to animated narrated videos. Using a t-test, the pretest and posttest results were as follows: pretest control 14.7, pretest treatment 15.9, posttest control 14.0, and posttest treatment 29.3 (Ellis, 2013). The results show that both groups started fairly even, but the
treatment group, who learned visually, showed drastic improvement over the control group. The more abstract the concept, the more web-based technologies’ visuals help support understanding (Kay, 2014). Since many students learn difficult concepts through visual stimuli, web-based technology offers an important element that traditional learning and textbooks often cannot.

**Differentiation.** As the educational benefits of Web 2.0 tools continue to be studied, evidence strongly suggests that web-based technology significantly impacts struggling students. For example, 89 at-risk, low-literacy level students, ranging from ages 12-14, participated in a literacy study where students completed a 3-part lesson plan that incorporated the following web-based technologies: wikis, blogs, mind-mapping, Corkboardit, Wordle, and Twitter. The post-test data collected showed that “87% of students achieved higher levels of literacy, most improving by one National Curriculum level, with 14% improving by two levels” (Boulton, 2017, p.78). In using web-based tools, students’ engagement is certainly increased, but it also addresses the learning needs of the specific learners. In the case of Wikis, students with lower proficiency levels have benefited the most because it gives everyone an opportunity to verbally clarify ideas and word usage (Huang & Lin, 2011). The connection between web-based technology and struggling students’ academic growth is also validated by additional studies. In Levak and Son’s study (2017), which was mentioned earlier, all students showed improvement when using Skype and Second Life, but it was the lower level learners who showed the most significant growth. For teachers who sincerely approach students with a growth mindset, technology is an important avenue that must be explored.

The benefits of web-based technology, which promotes learner-centered education, extend beyond struggling students; the results show improvement for students on all levels. Learner-centered education promotes independent learning, innovation, and flexibility;
these skills are beneficial to every student, but it is an environment particularly meaningful to
gifted students (Periathiruvadi & Rinn, 2012). For example, in a social studies classroom,
students created and authored books through the use of e-publishing. Although every student
showed improvement, the greatest improvement was witnessed in the gifted students
(Periathiruvadi & Rinn, 2012). Ways to differentiate student learning is a topic that is extensively
discussed in schools, and many teachers are feeling the heavy burden and looking for assistance.
Studies point towards Web 2.0 technology being an effective method of differentiation.

**Student Attitudes towards use of Web 2.0 Tools**

**Engagement.** Students also have strong perceptions and opinions about web-based
technology. Based on multiple student surveys, students have expressed an openness and desire
to use Web 2.0 technology that supports their learning (Clark, Logan, & Luckin, 2009). Their
openness to the technology stems from the dissatisfaction of traditional forms of learning.
According to VanDoorn and Ecklund (2013), “Students express a need for more varied forms of
communication and report being easily bored with traditional learning methods. Today’s students
flourish in interactive learning environments” (p.4). Web-based technology offers students the
type of learning that students demand; the technology’s features engage students through fun,
participation, interaction, and communication (Manca & Ranieri, 2017).

Survey data confirms favorable student perceptions of the technology. After switching
focus from traditional to web-based technology lessons, 82% of the at-risk, low literacy level
students commented that they enjoyed the lessons and 63% rated their engagement higher than
normal due to the collaborative and fun nature of the web-based technology used (Boulton,
2017). Similarly, Kilickaya and Krajka (2012) used web-based comic strips to replace traditional
teaching of grammar. Despite the students’ strong dislike for grammar, 96% of students enjoyed
the activity because they enjoyed sharing and communicating their comics with fellow students. While having fun, students also produced greater sentence variety and increased structural complexity (Kilickaya & Krajka, 2012). These surveys show that web-based technology meets the needs of both the learner and educator by blending enjoyment and learning growth.

**Motivation.** Web-based technology has given students motivation to succeed. Failure can be a strong deterrent in students, preventing many from accomplishing their goal. In Yang and Chang’s virtual Geography game, which was referenced earlier, they found that, although many failed to reach their mission, students stuck with the game, developing a positive attitude to succeed and an acceptance of the risk of failure (2017). The virtual game, Second Life, produced similar results. Since some students possessed lower level language abilities, they lacked prior knowledge, so their success depended on having extra time to prepare. Beginning at a deficit is discouraging, but the results showed that the lower ability students were motivated to make extra time prepare (Levak & Son, 2017). These studies show that, if students are engaged, they develop intrinsic motivation to succeed and work hard to achieve their goals. The web-based technology provided the extra motivation that the students needed, and in return, students found positive and rewarding learning experiences.

**Comfortability.** Students’ lack of communication and participation can also stem from other factors such classroom anxiety. Technology allows full interaction in a anxiety free setting. When reviewing past qualitative studies on web-based technology, Levak and Son (2017) found that learners reported feeling less stressful using web-based technology than face-to-face communication as well as increased motivation when anxiety was reduced. In a separate study created by Selkie and Benson (2011), five focus groups, each ranging from 4-7 students of various ages and backgrounds and sexual experiences, used texting as a question and answer
platform for a sex education class. They were surveyed afterwards about their feelings on the platform used. The survey found the following: 1) text messaging made the education easily accessible. Students felt search engines were inconvenient and time-consuming. 2) The information was offered in non-threatening way. Students are intimidated to ask adults about sexual education because they are scared about feeling judged. Conversely, text messaging provided the answers they needed while still talking to a credible adult and maintaining anonymity (Selkie & Benson, 2011). Students are interested in learning, but there can be other factors affecting their engagement. In this study, students were given a safe learning environment to foster their learning. Technologies, such as text messaging, encourage full participation because students can interact freely without fear of backlash.

**Disconnect.** Although students’ perceptions of technology-mediated school activities is favorable, there is still a widespread disconnect between the use of technology in and out of school. Students see the personal value in web-based technology, but they struggle to realize the educational potential (Luo, 2010). In a study conducted to explore students’ perceptions towards technology-mediated school activities, the students associated Web 2.0 technology sites with social and entertainment activities that occur outside the school. Students felt that in-school use of Web 2.0 tools pitted them against them against teachers and the administration (Clark, Logan, & Luckin, 2009). The students’ perceptions are accurate. Technology is often seen as the enemy in schools, making changes difficult to adapt.

**Teacher and Administration Resistance**

**Technology Gap.** Despite the researched benefits and student interest, there is a strong resistance to use web-based technologies in the classroom. For example, researchers found that 73% of students believed Facebook could be an effective learning tool; however, students said
only 27% of their teachers had incorporated Facebook into their teaching (Greenhow & Askari, 2017). A separate study revealed that 75.22% of teachers use wikis but only 32% had used them in their classroom. Also, when the National School Boards Association asked teachers to assign the education value of social networking sites, the teachers responded with uncertainty (Capo & Orellana, 2011). The uncertainty often is wrapped in fear of the potential outcome. Many teachers avoid using the technology because they see tensions that increase the difficulty of the job as well as potential negative impacts to learning. These perceived tensions were addressed in a survey conducted by Capo and Orellana (2011). In their survey, 800 teachers answered questions on the perceived advantages and comfort of using web tools. The questions were on a Likert scale (0-don’t know, 1-strongly agree, 5-strongly disagree). According to the results, more than 50% of the teachers had no desire to use technology in their classroom. The teachers stated it would require too much effort to police while other concerns involved resources and self-confidence (Capo & Orellana, 2011).

As far as the potential learning impact, teachers have argued that the immediate access granted by technology causes students to reject delayed gratification. Feeding the expectation of obtaining immediate answers undermines independent investigation and promotes minimum work and concentration (VanDoorn & Ecklund, 2013). Therefore, the gap between student and teacher openness to use web-based technology tools often originates from the teachers’ concerns with the development of skills and use of pedagogy. Although the research shows that technology creates a link to the students’ real-world, many teachers, like students, have trouble seeing technology as something other than social and entertainment. It is perceived as a fancy toy in need of constant monitoring rather than an education tool with learning benefits (Luo, 2010). As a result, the appropriateness of Web 2.0 tools in education comes into question, and teachers
want additional time to evaluate and adapt in order to match with their pedagogy (Capo & Orellana, 2011).

**Blurred Lines.** The relationship between technology and education has created blurred lines. In a traditional setting, the teacher imparts knowledge onto the students, but technology shifts the teacher’s role to facilitator. For many teachers it’s an unfamiliar role that brings discomfort; they fear losing their perceptual status as classroom expert and authority figure (Newland & Byles, 2013). The formal and informal spaces are also blurred. Schools aspire to be a formal setting, which involves a set of rules. Despite school rules established against technology, students are bypassing the rules and creating spaces within the school walls to use the banned technology (Clark, Logan, & Luckin, 2009). The social aspects of the technology create a conflict between the schools’ and students’ goals.

**Attitude.** In order to create change, an attitude adjustment is needed. The negative attitude, which is caused by multiple factors, is prevalent in the educational world. According to Cakiroglu, Akkan, and Guven (2012), teachers’ negative ideas are the primarily barrier for technology integration. Many teachers are focused on the negative possibilities, but a positive switch and openness has proven important. Several studies have shown that, if a teacher believes web-based technology improves student performance and motivation, they are more willing to use the technology in their classroom (Drossel, Eickelmann, & Gerick, 2016). Furthermore, teachers’ knowledge of the technologies and frequency of use help teachers see the concrete benefits of these tools (Cakiroglu, Akkan, & Guven, 2012). In order for a paradigm shift to occur, the benefits and positive impacts to teachers need to be communicated effectively and personally experienced.
Numerous factors affect teachers’ attitudes and desires to implement technology into the classroom. The first factor is perceived usefulness, which is defined as the belief that using technology enhances his or her job productivity (Teo, Zhou, & Noyes, 2016). Overall, teachers have responded favorably to this factor. In a survey of 63 teachers, 70% believed the web-based technology was useful and contained the potential to improve their quality of teaching (Barak, 2017). For teachers with adequate experience using web-based technology, the level of perceived usefulness increases. For example, forty teachers who had over three years of experience using technology in the classroom were surveyed, and, unsurprisingly, 85% believed technology-based assessments were useful. Teachers stated the assessments provided a more detailed analysis, immediate feedback, and vivid animations that could be paired with questions (Chien, Hsu, & Wu, 2014). Despite the perceived usefulness of web-based technology, teachers have expressed concerns with using it the classroom. Many of these concerns relate to the remaining factors.

The second factor is the perceived ease of use, which refers to the tool’s compatibility and difficulty to implement. Studies show a great discrepancy between perceived usefulness and ease of use. Even though the majority, 85% of participants, showed favorable beliefs about perceived usefulness, almost half of the majority recognized serious difficulties in using the technology-based assessments. The assessments were too complicated for both teachers and students, requiring extra time and effort (Chien, Hsu & Wu, 2014). Since time is a commodity teachers often lack, many are discouraged to use certain technologies. Meanwhile, other complaints have arisen about technology’s perceived lack of compatibility with the curriculum teachers are providing (Drossel, Eickelmann, Gerick, 2016). Therefore, increased efforts are required to make the tool fit, although unnaturally, into their plans.
The third factor is self-efficacy which refers to teachers’ beliefs that they possess the skills and knowledge to use technology effectively. Teacher surveys have shown a lack of confidence in this area. In a survey of 63 teachers, less than 50% agreed that they possessed sufficient technical or pedagogical knowledge to use technology in their classroom (Barak, 2017). In a separate survey, teachers were asked if lack of skills played a substantial role in the integration of technology into their classrooms. The results found that 66% of the teachers agreed, placing it second behind insufficient amount of computers (Drossel, Eickelmann, & Gerick, 2016). These surveys show that teachers are not receiving adequate knowledge, resulting in self-doubt. The result is decreased use of technology in the classroom.

The final factor is the school environment. This refers to the administrative support, technical support, and school resources. Teachers have identified lack of management support, insufficient time given to plan, lack of access to technologies, and school firewalls as barriers (Boulton, 2017). In Chien, Hsu, and Wu’s (2014) survey, 30% of the teachers expressed concerns about administrative disapproval. Teachers who feel unsupported show an unwillingness to take technology risks. On the other hand, a supportive administration, specifically the principal, “who believes in technology and commits to implementation (money, time, conferences, specific training) as a means of support for teachers” creates a healthy environment that inspires teachers to integrate the technology (Drossel, Eickelmann, & Gerick, 2016, p.560). When a principal commits to implementing technology, teachers are provided additional resources in the form of materials, technical support, and training. Technological resources and support have been shown to reduce teachers’ stress levels, making them more willing to interact with the technology (Teo, Zhou, & Noyes, 2016). Some exceptions exist in terms of resources. Although studies have revealed teachers in resource-rich school are more
likely to integrate technology, experienced teachers’ personal perseverance has produced positive results. Some teachers actively look for resources to overcome the school’s environment (Chien, Hsu, & Wu, 2014).

Many times teachers are influenced not just by one but a combination of factors. For example, the factors affecting teachers’ use of computers in class were studied and compared throughout five countries: the Netherlands, Denmark, Australia, Poland, and Germany. The high frequency use countries were the Netherlands, Denmark, and Australia. The low frequency use countries were Poland and Germany. Researchers found that Germany and Poland consistently had the lowest perceived self-efficacy, technical support, lack of resources, and professional development of all five countries. In fact, the discrepancy between Australia and Germany’s professional development, which improves self-efficacy, was substantial. In Germany, only 17% of teachers received advanced training courses, while in Australia more than half received these courses (Drossel, Eickelmann, & Gerick, 2016). As you can see, teachers’ feelings about self-efficacy, administrative support, availability of resources, and technical support all strongly correlate with the teachers’ integration of technology into the classroom.

**Administration.** Since technology is pervasively used in the formal setting, educators are increasingly looking at ways to bridge the gap and persuade schools to incorporate more technology. One project, the eRas Project, strived to accomplish this goal. The project emphasized the pedagogical approaches and alignment of learning outcomes that should be considered when technology is used. During the project, two issues were identified: 1) Even academic personnel open to technology lacked knowledge and needed a high level of technical support to implement changes. 2) Academic personnel did not receive professional development opportunities. No scheduled training occurred prior to the start of the school year. Instead,
teachers attempted on-the-job training where little strategy was used to incorporate technology (Newland & Byles, 2013). Based on these findings, there often appears to be little effort by the administration to equip teachers with the skills to bring instructional change and understanding.

**Effective Implementation of Web Technology**

**Administration.** The positive culture of change, which values the process of improving teaching and creation of engaging learning environments, must be communicated by the school administration. Administration ownership of the issue is important in implementing change (Newland & Byles, 2013). Without administration encouragement, some teachers will continue to show reluctance because change is fear. Also, they will ask: Why change if I don’t want or have to change? Change often needs to start from the top because it communicates staff support. When teachers feel supported, they develop more positive feelings towards incorporating technology into their teaching (Teo, Zhou, & Noyes, 2016).

**Collaboration.** Although the administration directs the implementation, they need to be open to teacher and student input. In fact, without teacher input, there will continue to be resistance because teachers will feel that their needs are unmet. Teachers know their needs and weaknesses better than administrators, yet teachers have minimal input into how technology is implemented (Clark, Logan, & Luckin, 2009). If administrators develop professional development activities, it would be most appropriate to adapt to the teachers’ needs. Along with teachers, students should be involved in the planning and implementation. In the process, it benefits the students because it stresses the constructivist qualities that web-based technologies provide: student-centered, critical thinking, problem-solving, and collaboration (Okojie & Olinzock, 2006). These are the skills we want students to walk away with. Therefore,
opportunities for students to develop these skills should always be considered. Also, by collaborating with students, teachers are practicing what they teach.

All parties need to work together to “develop shared strategies and understanding around a participatory approach to technology use in schools” (Clark, Logan, & Luckin, 2009). Through shared strategies and an inclusive process, there is an invested interest from all parties. Cooperation between teachers and administration is a positive indicator that teachers will implement the suggested technologies (Drossel, Eickelmann, & Gerick, 2016). The collaborative effort, which mirrors the web technologies, benefits all parties included and creates an effective path towards implementation of web technologies in the classroom.

Professional development. In order to address the issues of self-efficacy and perceived ease of use, appropriate professional development needs to be offered to teachers. As a way to address the insufficient digital skills, a “hands-on” approach needs to be taken. Time for teachers to experiment with the web-based tools in concrete ways must be built into the training (Manca & Ranieri, 2017). This technical training would be beneficial to teachers, but the professional development also needs to incorporate a pedagogically-minded approach. Unfortunately, many teachers treat technology as a separate entity not part of their instruction. Research shows that 70% of teachers believe technology is an instructional tool, but they cannot articulate how it fits their pedagogy and improves their teaching (Okojie & Olinzock, 2006). Therefore, in order to be appropriate, the courses should cover yet extend beyond background knowledge and technical skills; teachers should focus on how the web technologies align with instructional strategies (Yalcin, 2011). Barak (2017) suggests that teachers should learn about the web-based technologies through an “integrative and collaborative approach, [and] social constructivism and
advanced technologies, woven together, should be a vital part of any teacher education program” (p.300).

**Pedagogy.** Technology should be implemented in partnership with pedagogy. Using technology for the sake of using technology will not produce results. In fact, technology enhances learning only when pedagogy and instructional strategy is being practiced simultaneously (Hew & Cheung, 2013). For example, 48 ninth-grade Biology students, 12 having IEPs, were provided an interactive, “hands-on” web-based lab activity without being given prior instruction and told to work independently. As students were being evaluated on its effectiveness, the researchers observed that many students were unable to stay focused on the task. Responding to these observations, the researchers decided to strategically pair the web-based technology with direct instruction and scaffolding techniques. The results showed that students’ on-task time increased from 42% when working independently to 88% when instructional strategies were used (Bodzin, Waller, Santoro, & Kale, 2007). Students require “appropriate pedagogical design in terms of scaffolding techniques and learning activities to learn how to use the provided choices to achieve, keep, and practice control over their learning” (Rahimi, Berg, & Veen, 2015, p.785). Without pedagogical design, students tend to use the web-based learning tools more superficially. Furthermore, studies have shown that students succeed when teachers provide clear instructions, purpose, effective design, and overarching big ideas and understandings while implementing technology (Kay, 2014).

Without careful consideration of pedagogy, some teachers may still use the technology in a teacher-centered way, so it’s important to adopt the technology in way that is learner-centered and encourages participation and collaboration (Tambouris & Panopoulou, 2012). According to Barak (2017), an authentic, interactive, and student-centered pedagogical framework includes
four principles in the adoption process. First, the technology must explore new venues that encourage students to gain new knowledge through means of investigation, experiences, discovery, and learning from mistakes. Students are actively involved in their learning while the teacher acts as a guide. Second, the technology increases engagement through interaction with peers as well as the outer communities from around the world. Third, the technology includes co-constructing content where students are producers instead of passive sponges. Students are expected to engage in conflicting ideas to reach a mutual goal. Fourth, technology supplies opportunities to provide and receive respectful and constructive feedback from peers (Barak, 2017). Above all, teachers must appropriately match the technology with the students’ learning objectives, students’ learning styles and needs, and assessment and evaluation strategies (Okojie & Olinzock, 2006). Everything in teaching, including technology use, should be purposeful.

**Teacher’s role.** Although the perception of a teacher as a facilitator is negative, the reality is that the teacher is critical to the effectiveness of technology. When assessing the impact of web-based tools, the Learning 2.0 Project states that “although Web 2.0 technology empowers students to play a more active part in the process, the role of the teacher remains vital” (Newland & Byles, 2013, p.318). Technology does not replace the teacher; the student is not isolated with technology. On the contrary, the teacher interacts with technology to supplement and increase its impact. Greenhow and Askari (2017) studied social media sites’ learning potential and found that the higher order thinking and digital literacy development was “mediated by the teacher’s presence in the technology” (p.635). Additionally, students using Wikis stressed the importance of teacher feedback posted in the Wikis. They stated the feedback was detrimental in helping them understand individual issues (Huang & Lin, 2011). Teachers have many important issues to
consider throughout their career. How to incorporate technology into the classroom is becoming a critical choice.

**Limitations of Research**

Technology is ever-changing and constantly being updated. Therefore, it is impossible for research to keep pace with the latest developments, resulting in some web-based technology being under researched. This is most evident in the research on social network sites. Studies on newer technologies, such as Snapchat and Instagram, appear to be nonexistent. Meanwhile, studies on well-established social networking sites Facebook and Twitter, which were established in 2004 and 2006, are fairly new. It has only been in the last three to four years that researchers have begun to evaluate the effectiveness of Facebook and Twitter, with the latter having the least research. With the social networking sites being established thirteen and eleven years ago, researchers are lagging behind the fast-changing pace of technology. Similarly, some K-12 schools are slow to implement changes. If schools are resistant to web-based technologies, research on technology used in the educational setting cannot stay up to date when educators are not using updated web-based technology.

Many web-based technologies are available to use in an educational setting. Because of reasons varying from the technology’s years of existence to sheer amount, it is impossible for researchers to evaluate each tool individually. Therefore, some web-based tools are researched to greater extents than others. For web-based tools that are under researched, teachers have no direct research to determine the web-based tools’ effectiveness. Instead, teachers must evaluate the general research to determine its transferability to the web-based tool they are considering.

Students’ preferences and ideas on popularity also change frequently. For example, the most recent research is on Facebook, but younger teenagers are moving away from Facebook to
newer social networking sites like Snapchat. In teenagers’ eyes, Facebook is becoming less cool because it is becoming a place for older people. Interesting, the majority of research of social networking sites actually provides little guidance for K-12; most of the research is directed at college age students. Teachers must carefully and simultaneously examine the research and the web-based tools current relevance to their students.
CHAPTER 3: METHODOLOGY

My literature review provided research of the challenges, benefits, and pedagogy in implementing technology into the classroom. I am encouraged by the positive results in student engagement and achievement. This curriculum unit is designed to incorporate technology into a high school Language Arts classroom. Best practices and strong pedagogy are utilized to strategically place technology in the classroom to best serve the needs of students, providing dynamic learning opportunities. This research project was designed to address the following question: How can teachers use web-based technology in the curriculum to increase student engagement and enrich learning?

Overview of the Chapter

In this chapter, I describe the technology-infused curriculum that I created, the research framework that drives the curriculum, and the curriculum’s intended audience. For my curriculum design framework, I chose Understanding by Design by Wiggins and McTighe. This approach is “goal directed [and] aims for specific results” while avoiding “isolated activities that are merely engaging while disconnected from intellectual goals of learners” (Wiggins & McTighe, 2005, p. 56). I chose this deliberate approach to avoid the trap of isolation that snares many teachers. In an attempt to satisfy student’s technological desires, teachers often with the best intentions plan technology-based activities for students; however, technology functions as a time-filler as opposed to a goal-orientated learning tool. Understanding by Design does not view technology as an isolated vehicle; technology purposefully and strategically produces results that meet the students’ learning goals and produces enduring understanding. In Understanding by Design, no learning activity is viewed as a time filler. Everything needs to have purpose.
Along with explaining the curriculum framework, I provide a description of my project and how it avoids isolation, meets student learning goals, and produces desired understandings. The chapter also includes a description the project’s setting and audience as well as a timeline. The timeline provides incremental dates to measure progress and a final completion date.

**Curriculum Framework and Methods**

Understanding by Design, known also as backwards design, reverses the traditional approach to curriculum planning. Unlike traditional or activity-based design, which focuses first on the tasks and materials, Understanding by Design focuses on the results of the learning first and the activities last (Wiggins & McTighe, 2005). This backwards framework allows teachers to think purposefully about planning their curriculum. By determining the desired result first, teachers focus on deepening student understanding. Deep understanding is defined by the ability to transfer our knowledge through effective application, analysis, synthesis, and evaluation; it is not simply doing the assignment correctly (Wiggins & McTighe, 2005). In other words, students are using the concepts and big ideas to create meaningful, real-world connections in a variety of situations.

Understanding by Design is broken into three stages: identifying desired results, determining acceptable evidence, and planning learning experiences. The first stage, identifying desired results, asks the teacher to initially establish goals, desired understandings, and essential questions. The types of goals desired are state-content standards, district program goals, and departmental objectives; they need to be long-term priorities (Wiggins & McTighe, 2005). Once the long-term priorities are established, teachers examine the priorities and extract the big ideas, building a bridge of understanding for the learner. Teachers then carefully construct around these big ideas that are defined as broad and abstract, concise, universal, and timeless. For example,
some big ideas include good triumphs over evil, freedom must have limits, and nature versus nurture (Wiggins & McTighe, 2005). This approach provides teachers, who are bombarded with content to teach, a framework for prioritizing their instruction. Unconnected, isolated content can be minimized while other transferable content emphasized.

After establishing goals, teachers design essential questions to be explored. These questions are inquiry-based which help point students to the big ideas and dig deeper. The Understanding by Design framework believes “big ideas are at the ‘core’ of the subject; they need to be uncovered” (Wiggins & McTighe, 2005, p.67). By taking an inquiry approach of asking the essential questions, students are participating in self-discovery and meaning creation. They are finding the answers as opposed to being fed the answers. Through the process of digging, the students learn and understand the desired understandings.

The second stage of Understanding by Design is determining acceptable evidence. The assessment needs to target the determined learning goals. The ultimate goal of any assessment is to show a student’s ability to transfer knowledge. According to Wiggins and McTighe (2005), “the challenge is not to ‘plug in’ what was learned, from memory, but modify, adjust, and adapt the idea to the particulars of a situation” (p.41). In the Understanding by Design framework, Wiggins and McTighe identify six facets of understanding that show valid evidence of understanding (2005):

- **Explain**: Can students put the concepts in their own words and justify their answers?
- **Interpret**: Can students make sense of the information? Can they use analogies, stories, and images to show it?
- **Apply**: Can students effectively use and adapt knowledge to different situations?
· **Perspective**: Can students see the big picture and recognize different perspectives outside their own?

· **Empathy**: Can students be sensitive and walk in someone else’s shoes?

· **Self-knowledge**: Can students reflect on their learning and experiences?

The six facets of understanding guide teachers in constructing their assessments because these facets possess the transferable qualities that fulfill the desired results. Showing evidence in these six facets is a valid measurement of understanding where students perform an authentic task or problem. Instead of reciting information, students are digging at the core of the issue, solving problems, testing it in real-life situations, and reflecting on experiences.

The third stage is planning learning experiences. The learning experiences, like the assessments, are connected to the established learning goals in stage one. When completing this stage teachers should ask: What activities are best suited to accomplish the desired goals? Wiggins and McTighe believe these activities must be engaging and effective. By engaging, they mean activities that “pull [students] deeper into the subject” through their ability to be “thought provoking, fascinating, and energizing” (2005, p.195). Furthermore, Wiggins and McTighe state, “Learners should not merely enjoy the work; it should engage each of them in worthy intellectual effort, centered on big ideas and important performance challenges” (2005, p.195).

Wiggins and McTighe (2005) offer the acronym, WHERETO, as an instructional planning guide. The acronym highlights key considerations:

- **W**- Ensure that students understand WHERE the unit is headed and WHY

- **H**- HOOK students in the beginning and HOLD their attention throughout

- **E**- EQUIP students with necessary experiences, tools, knowledge, and know-how to meet performance goals.
**R-** Provide students with numerous opportunities to RETHINK big ideas, REFLECT on the progress, and REVISE their work.

**E-** Build opportunities for students to EVALUATE progress and self-assess.

**T-** Be TAILORED to reflect individual talents, interests, styles, and needs.

**O-** Be ORGANIZED to optimize deep understandings as opposed to superficial coverage

The where and why reminds teachers to clarify the goals and purpose to the learners. In directing learners’ attention to the goal, teachers serve to remind students of the unit’s academic expectations and importance (Wiggins & McTighe, 2005). Ultimately, the learning experiences prepare students to accomplish the desired results, so students need to practice applying their learning to new situations. Teachers start this practice immediately through Hook and Hold, which immerses students through interesting, provocative questions and situations. Next, teachers retain students’ interest when they EQUIP. Teachers equip students when they facilitate the learning through meaningful, concrete, and authentic experiences. (Wiggins & McTighe, 2005). As teachers facilitate learning and coach on how to use content effectively, they must also provide timely feedback to help students improve. This is what Wiggins and McTighe mean by RETHINK, REFLECT, and REVISE. Along with teacher feedback, the learner must also EVALUATE his or her own work. Teachers should “train students to evaluate” and to “think like assessors” (Wiggins & McTighe, 2005, p.216). When planning activities, teachers must also remember that every classroom is unique. Activities should be TAILORED to the students in the classroom. Lastly, teachers need to be ORGANIZED. This means that teachers need to sequence the activities in the “most powerful” way that “actually results is the most engaging and effective experience for students” (Wiggins & McTighe, 2005, p.220). By appropriately organizing the
activities, activities will build up and support each other, and students will be more naturally led to the deeper understandings desired.

**Setting and Audience**

This curriculum is designed to be implemented into a high school Language Arts classroom in a specific school district. Based on a typical district building, the demographics of the building are as follows: 50% Caucasian, 30% African American, 10% Hispanic, 4% Native American, and 6% other. Also, the percentage of students who have free or reduced lunch will range from 30-50%. With some students having free and reduced lunches, it is an unfair assumption that every student has reliable access to technology at home. Although some students lack technology, the school provides suitable access to technology, making this curriculum possible to implement for all students.

I chose this setting for self-motivated reasons. After working at a Middle School in the district this year, I was unfortunately cut. Therefore, I am currently job searching and my desired setting is high school. My first preference is my current district because I want to work towards tenure. If securing a job in the district, I wanted to design a curriculum that would be relevant to my instruction, but the curriculum is still transferable to new position. The district provides a skeleton curriculum to teachers, but many activities and assessments are at the teacher’s discretion. Therefore, a level of flexibility is afforded teachers. Unfortunately, more often than not, students are completing worksheets to assess their skills, provoking minimal intellectual interest. This curriculum aims to reduce the number of worksheets while adding variety to the activities and assessments, increasing the level of engagement for the tech-hungry students, and pushing students to think critically and respond creatively.
Another reason I chose this setting is to provide insight to my colleagues. Lessons are created through group planning, and this curriculum would allow me to add value to the planning process. This curriculum can also extend outside the CT group. Many teachers are not experts in technology and this curriculum provides them with a framework on using technology effectively to meet their academic goals. It appeals to pedagogy-minded teachers by showing them how technology partners with sound teaching principles.

Project Description

The curriculum is constructed following the Understanding by Design model. Therefore, all curriculum decisions are goal driven to avoid isolated technology use. Technology has been integrated purposefully and strategically to fulfill the desired results of the unit and help explore the essential questions. The unit is accompanied by goals, desired understandings, essential questions, and specific lesson plans where technology is incorporated. The lesson plans include descriptions and links to web tools being used. Using the web-based technologies, I created activities that serve as examples of a finished product that aligns with pedagogy. Also, many assessments utilize the web-based tools, and supplemental materials have been created. Multiple web tools are included to encourage instructors to choose and adapt the curriculum to fit their classroom.

In additional to these materials, scaffolding is provided for the web-based tools through five Web-based tool overviews. In these overviews, I include instructional videos on how to effectively use the web tools. The videos model best practices and aim to increase comfortability in teachers who feel inexperienced and unconfident with the technology. In addition to providing digital skill’s instruction on using the web-based tools, I provide guidance on how the technology partners with pedagogy. All the web-based tools are included in my curriculum, and I
provide links, directions, descriptions, components, and pedagogical uses for each. In one link, teachers apply the learned knowledge and practice using the web-based tools. My goal is to create a technology-infused curriculum that is well-researched and pedagogically sound, thereby appealing to teachers. I also hope it is engaging, as defined earlier in the chapter, to students.

**Timeline**

The curriculum project took place over the 2017 summer semester at Hamline University. After peer review, a revised copy of chapters 1-3 was submitted to the professor by June 25th for approval. The final draft, which included chapter 4 and project artifact, was submitted to the professor on August 8th. Through the guidance of the professor and class base group, the project was completed in August 2017. I will implement this curriculum into my 2017-2018 school year and share with colleagues during curriculum planning sessions.

**Conclusion**

In chapter 3, I described the Understanding by Design framework and how I used the framework to create a curriculum unit that heavily uses web-based technology in high school Language Arts assessments and lessons. The next chapter details the conclusions of my project, a unit plan, descriptions of the content and lessons, and web-based tools overviews. I also discuss the important implications of the project and reflect on my journey throughout the project.
CHAPTER 4: CONCLUSION

Research Question and Project Purpose

Through my research and project, I aim to answer the question: How can teachers use web-based technology in the curriculum to increase student engagement and enrich learning? It is an essential and highly relevant question that deserves every teacher’s attention, but it also conjures feelings of intimidation. Therefore, my project’s purpose is to create a technology-infused curriculum that is highly accessible to teachers, addressing the multiple barriers that prevent implementation. Additionally, I offer a project that is pedagogically sound and well-researched to increase the overall effectiveness of its implementation. I hope to show how web-based tools can help teachers, as well as myself, become more successful in engaging students, transfusing information, and transitioning students into the “tech savvy” world.

Literature Review Summary and Findings

The research strongly supports that web-based technology enhances effective teaching strategies and best practices. For example, Huang and Lin (2011) found the conceptual knowledge and context needed in constructivist learning fits perfectly with blogs; bloggers respond to real-world situations and interests based on their knowledge or perception of how the world works. Perspective sharing is an important characteristic of many web-based tools, creating an invaluable learning experience. As diverse perspectives are explored, students take center stage in creating goals, evaluating material, generating questions, and discussing ideas (VanDoorn & Ecklund, 2013). Having students in a central role is crucial for student-centered learning, which demands that students take ownership and control of their learning. Web 2.0 technology fits perfectly into student-centered learning because it views students as invested contributors, as opposed to sponges, that “take a more active approach to shaping how they
participate socially and cognitively in classroom activities” (Rahimi & Berg & Veen, 2015, p.789).

Along with creating an interactive experience, web-based technology is student-centered because it addresses the distinct learning needs of students. In terms of learning styles, virtual worlds provided a “hands on” approach as a result of their authentic context. According to Hsiao, Yu-Ju, Kao, and Li (2017), “Complex and perceptually rich environments in the virtual worlds can increase the student’s sense of immersion just as real environments do” (p.161). Visual and audio learners also benefit from web-based technologies. For example, in a study of two groups learning dimensional analysis, the control group learned through traditional learning methods while the treatment group learned through animated narrated videos. The results showed the treatment group, who learned visually, showed drastic improvement over the control group (Kay, 2014). Web-based technology is also a tool for differentiation. Wikis, blogs, Wordle, and Twitter were used in combination to teach literacy to low-level, at-risk students, and the post-test data showed that “87% of students achieved higher levels of literacy, most improving by one National Curriculum level, with 14% improving by two levels” (Boulton, 2017, p.78).

Web-based technology offers students the type of learning that students demand; the technology’s features engage students through fun, participation, interaction, and communication (Manca & Ranieri, 2017). Despite the students’ favorable attitudes towards web-based technology, there exists a disconnection between the uses of technology in and out of school. For example, researchers found that 73% of students believed Facebook could be an effective tool; however, students said that only 27% of teachers had incorporated Facebook into their teaching (Greenhow & Askari, 2017). Teachers’ resistance to use technology in the classroom stems from the following factors: fear of misuse, perceived usefulness, perceived ease of use, self-efficacy,
and school environment. Teachers often lack the time and understanding to use the web-based tool effectively. In a survey of 63 teachers, less than 50% agreed that they possessed sufficient technical or pedagogical knowledge to use technology in their classroom (Barak, 2017). Since there is a lack of teacher confidence, schools need to provide professional development that partners technical skills with pedagogy. Without pedagogy, technology is being used in isolation. Technology enhances learning only when pedagogy and instructional strategy are being practiced simultaneously (Hew & Chueng, 2013).

**Project Description**

My project consists of two parts: a technology-infused curriculum and five web-based tool overviews. In my curriculum, I created a twenty-five day unit plan that adheres to the Understanding by Design model. Therefore, technology is integrated purposefully and strategically in order to connect to the unit’s desired results and understandings. The unit is accompanied by goals, desired understandings, essential questions, and specific lesson plans. Special attention is given to the use of web-based tools within the lessons. For example, web-based technologies have literally been highlighted to emphasize and direct teachers’ attention towards its use.

In addition, I included more than simply the name of the web-based tool and its website; I created products out of the web-based technology. The lesson plans include descriptions and links to the products I created using the web-based tools. The links and descriptions serve two important purposes. First, they serve as a resource that teachers can directly use and transfer into their classroom. Second, if teachers need to make adaptations, they serve as a model of how to use the web-based technology in the classroom. Teachers witness the instructional strategy in
action. The final piece of the curriculum is supplemental materials. Teacher handouts, overhead images, and other supplemental materials are placed at the end of the unit.

The second part of the project is the five web-based tool overviews, which serve as a scaffolding tool for teachers. In the web-based tool overviews, I identify the technology and provide a link to it. The use of technology in conjunction with pedagogy is strongly emphasized. Therefore, after providing the website’s link, I list and describe the pedagogical uses of the web-based tool in the classroom. Furthermore, I include instructional videos on how to effectively use the web-based tools. Along with technical instruction, the videos explain and model best practices and pedagogical use of the technology.

**Limitations of the Project**

The Understanding by Design model heavily influenced my final artifact. Even though technology is the focus of my project, the design dictated the focus initially away from technology, and instead, towards the project’s overarching goals. Everything must strategically connect with the desired goals and understandings. Without establishing the goals, a person cannot strategically approach the content, and the students reap the consequences of isolated, unconnected content. Therefore, my artifact embraced the Understanding by Design model by identifying desired results and understandings prior to identifying a single piece of technology that would be incorporated.

The design also helped establish a criterion for choosing web-based technology. When considering technology to use as assessments, the six facets of understandings were used as criteria because, according to Wiggins and McTighe (2005), they show valid evidence of understanding. These facets of understanding allow students to perform authentic, transferable tasks that help fulfil the desired results. Therefore, the technology underwent evaluation to
determine if it could be used in the way that allowed students to explain, interpret, apply, provide perspective, emphasize, or reflect on their learning. When considering activities, the Understanding by Design model also provided criteria in the form of guiding questions: What activities are best suited to accomplish desired goals? Are the activities thought provoking, fascinating, and energizing? Are the events sequenced effectively so that events build on and support each other? The questions address the strategic usage that leads away from isolation and, instead, towards understanding.

Despite my intentionality to avoid isolated use of technology, it remained a major challenge throughout the creation of my artifact. Since my project examines using technology in the classroom, a pressure existed to use web-based tools exclusively. The pressure to use technology anywhere and everywhere prompted the question: Is technology being used only for the sake of using technology? Therefore, I constantly employed critical examination to determine the web-based tools’ strategic and pedagogical usage. Another challenge of this project was my self-efficacy. I plunged into this experience with limited technical knowledge or knowledge of how the web-based technology connected with pedagogy. As I created the artifact, many doubts about its effectiveness crept into my head, making it difficult to push forward. I eventually acquired the confidence, but it occurred gradually as I gained familiarity with the technology. The slow, gradual movement emphasizes the time-consuming process of the project. In order to use the web-based technology strategically, I needed to first understand how the technology worked.

One challenge I foresee with the project’s implementation is others’ self-efficacy. Teachers must willingly step-out of out their comfort zone and invest time in the web-based technologies. Fear and uncertainty are barriers that need to be overcome in order for
implementation to happen. On the other hand, many teachers have shown willingness to adopt the technology, but potential challenges also exist for them. Even though my project uses web-based tools, which are freely accessible online, teachers must have access to computers to implement. Some schools have more limited access to computers. The final challenge of implementation involves the Understanding by Design model, which suggests that activities be tailored to each classroom. Since it is impossible to create an artifact that tailors to every different classroom, teachers may need to adapt aspects of the artifact to their classroom rather than implement it as it is.

Implications of the Project

For my project, I addressed the question: *How can teachers use web-based technology in the curriculum to increase student engagement and enrich learning?* In order to successfully address the question, it required more than simply knowing how to operate the technology; it required a pedagogical mindset. Therefore, my project extends beyond how the technology works to how the technology partners with pedagogy. The alignment of instructional strategies and web-based tools is crucial to student success (Yalcin, 2011). In fact, technology enhances learning only when pedagogy and instructional strategy are being practiced simultaneously (Hew & Cheung, 2013). My curriculum incorporates web-based tools with sound strategy and purpose in mind; I avoided plugging in web-based tools as a time-filler.

Although newer web-based technologies lack direct research, I purposefully incorporated current, up-to-date web-based tools. The lack of direct research on a specific web-based tool does not disqualify its use because the existing research provides multiple insights into the qualities of effective web-based tools and proper alignment of instructional strategies. Therefore, the inclusion of each web-based tool mirrored the same criteria of previously researched web-
based tools. I scrutinized each web-based tool’s pedagogical uses to determine its potential learning outcomes. Also, I sought advice from technical experts in the field of education about current, relevant web-based tools. I believe that, based on my approach, I developed a curriculum with well-chosen web-based tools poised to enrich the students’ learning.

The utilization of web-based tools plays a central role in my curriculum project, positively impacting both students and teachers. As a result of my project’s implementation, I foresee an increase in student achievement and engagement. Okojie and Olinzock (2006) stressed the need to match technology with students’ learning objectives, learning styles and needs, and evaluation strategies. Furthermore, Kay (2014) showed success implementing technology when teachers provided clear purpose, effective design, and overarching big ideas and understandings. My curriculum overview takes the research seriously by stating, prior to any decisions on web-based tools, the learning objectives, big ideas, and desired understandings that drove the purposeful implementation of the web-based tools. The day-to-day lesson plans in the curriculum also match the assessments and activities—many of which are web-based tools—with the goals and learning objectives to show purposeful design. I chose the web-based tools strategically to accomplish the learning outcomes.

My curriculum incorporates purposeful design in terms of instructional strategies and pedagogy. I wanted a student-centered curriculum where students discussed ideas, explored diverse perspectives, and generated questions. VanDoorn and Ecklund (2013) believed these characteristics are present in web-based tools and allow students to take center stage in their learning. By using the web-based tool, Flipgrid, I provide an avenue of communication where classroom share their perspectives. Students can also connect to other classrooms globally, thereby expanding the diverse perspectives received. In another lesson, I use Todays Meet so
students can generate questions, creating a student-orchestrated discussion. I provide an environment where students initiate communication and participation. I stress the importance because, when students initiate the communication, they “take a more active approach to shaping how they participate socially and cognitively in classroom activities” (Rahimi, Berg, & Veen, 2015). Therefore, I predict my project will motivate students to be actively engaged, which, in turn, will increase the students’ academic achievement.

Furthermore, my curriculum builds in scaffolding techniques. I understand that web-based tools need to be paired with instructional strategies. The evidence supports it. After given technology without prior instruction, researchers found that students were unable to stay focused on the task, so they decided to strategically pair the web-based technology with direct instruction and scaffolding techniques. The results were that students’ on-task time increased from 42% to 88% when instructional strategies were used (Bodzin, Waller, Santoro, & Kale, 2007). In my curriculum project, I use the web-based tools with clear scaffolding techniques. When using EdPuzzle, the video is paused to provide hints and direct students’ attention to important concepts. The same strategy was used in VideoNot.es. By placing notes that are time-stamped, I direct students’ attention towards the important learning targets. Additionally, I often check for understanding using web-based tools such as Todays Meet and EdPuzzle. With both tools, I post questions to check for understanding and to keep students accountable. I intentionally designed and used the web-based tools so students would be actively engaged in their learning.

I predict student achievement will also increase because my curriculum design focuses on different learning styles and levels. Many of the web-based tools offer a visual format for learning. In studying rhetoric devices, I realized that struggling readers cannot start by analyzing a difficult text; they need to build up to this point. Web-based tools, such as VideoNot.es and
EdPuzzle, allow students to visualize the concepts because they can see the emotional aspects, or pathos, of the speech based on body language. Additional visual tools also include the online comic strips, which visualizes the concept of author’s point of view, and Thinglink, where you can attach both articles and videos. Visual supports have proven to be effective. According to Kay (2014), the more abstract the concept, the more web-based visuals help support student understanding.

Additionally, EdPuzzle and VideoNot.es help audio learners. Audio learners analyze while they hear the tone of voice and language used. I also used Flipgrid as an aid for audio learners. Some students struggle to write an argument, but they can verbalize it. By using Flipgrid, I am allowing students to record and then listen to the structure, evidence, and wording of their argument. As a result of hearing themselves, students self-access and make the necessary improvements. This mirrors a successful study of Vokis, an audio recording program, which helped students improve their speeches. The improvement resulted because students could audibly self-monitor their work (Huang & Lin, 2011).

My project’s technical and pedagogical instruction will positively impact teachers’ self-efficacy, which is needed to successfully address the research question. If teachers lack the confidence to use the technology appropriately, the technology holds no power to enhance learning because it remains isolated. A teacher’s role in mediating the web-based technology remains vital to the student’s success (Newland & Byles, 2013). It is not enough to “hand out” a web-based tool; a teacher must interact with the web-based tools, which requires more in-depth understanding of the technical and the pedagogical uses. Therefore, my project empowers teachers to immerse themselves in the web-based tools while acquiring knowledge. It provides training that is sorely missing in the schools.
In my project, I cover two important aspects of self-efficacy: digital skills and alignment of pedagogy. Research shows the lack of technical skills play a substantial role in the integration of technology into the classroom. In a survey, 66% of teachers agreed with this assertion, placing it second only behind insufficient amount of computers (Drossel, Eickelmann & Gerick, 2016). Since many teachers struggle in this area, I understood the importance of creating a project that addresses their needs, so I created an overview of five web-based tools. The web-based tool overview contains a list of its components and their uses. Also, it includes a screencast video that outlines and models step-by-step instructions in implementing or creating a product with the web-based technology. Once teachers finish the screencast video, a link allows teachers to practice using the web-based technology. The research supports essential, “hands-on” training to address insufficient digital skills. Time to experiment with the web-based tool offers a concrete way to learn (Manca & Ranieri, 2017).

Along with digital skills, pedagogical knowledge needs to be addressed. Research shows that 70% of teachers believe technology is an instructional tool, but they cannot articulate how it fits their pedagogy and improves their teaching (Okojie & Olinkzock, 2006). Much of this dilemma originates from minimum professional development. Instead of scheduled training prior to the start of the school year, many teachers attempt on-the-job training where little strategy is used (Newland & Byles, 2013). My project helps teachers articulate the pedagogy and learning benefits by presenting each web-based tool’s various pedagogical uses in the tool overview. Furthermore, my curriculum explains instructional strategies in conjunction with the web-based tools used. Through the use of curriculum and video modeling, I provide instructional training on using the web-based tools efficiently and strategically. Appropriate training directly affects self-efficacy. When comparing the self-efficacy between Germany and Australia, Australia far
exceeded Germany in positive self-efficacy, and they found that only 17% of Germans received advanced training, while in Australia more than half received these courses (Drossel, Eickelmann & Gerick, 2016). My project provides a comprehensive look that emphasizes pedagogy. My project helps teachers confidently handle the web-based tools with purposeful intent.

Author’s Reflection

When I began my Capstone, I felt confident as a researcher because I possessed the ability to synthesize information and evaluate sources. This confidence never changed, but I believe that I became a more reflective researcher. Once the information was synthesized, I was challenged to reflect on what it personally meant to me and how it was applicable to my career. I now see numerous possibilities of using web-based tools in the classroom. As a teacher, I feel significant growth through the acquisition of this knowledge because I feel better equipped to support students with diverse needs. I possess new tools and instructional strategies to help me be more effective.

When I began this journey, I possessed limited knowledge of web-based technologies, which made this a growing experience. I choose this topic because I desired growth in an area of weakness. As an educator, this attitude and willingness reveals my desire to gravitate towards opportunities that hone my abilities. The reality is that, as teaching adapts, there will always be areas of improvement, and teachers play a dual role as an educator and a student. This project reaffirmed my perception of myself as a life-long learner, a term synonymous with an effective teacher. In order to be an effective teacher, I must continue to research and grow in my knowledge and skills. In the future, I plan to continue pursuing additional avenues of research that benefit my career, and I am strongly considering obtaining an additional Reading license.
The amount of knowledge I gained was matched only by my growth of self-efficacy. The doubts consumed my thoughts not only before but during the project. In fact, my self-efficacy occasionally ceased production on my project; I remained frozen and questioned my capacity to create something meaningful out of the web-based tools. Despite the challenges, I pushed through and discovered that I was a more capable learner and teacher than I gave myself credit. The struggle helped me realize that growth is challenging because it requires immense effort to push yourself beyond your perceived limits. As a teacher, it also provided insight into how and why students get stuck as well as the encouragement and guidance needed to get them unstuck. My inner voice discouraged me at times, but luckily, I stored up enough perseverance to overcome my struggles. Not every student possesses the same perseverance which makes my belief in a student’s ability to grow matter.

Through my improvement of self-efficacy, I learned a valuable lesson as a teacher and learner. Teachers show a growth mindset towards students, but they must look at themselves with the same growth mindset. Teachers are learners like their students. Like many teachers, my self-efficacy blocked me from incorporating web-based technology into the classroom, but now I fully understand its value and feel greater confidence. Completion of my project shows evidence of a growth mindset in action. With drastically increased digital skills and pedagogical strategies, I optimistically move forward with plans to incorporate web-based tools more frequently into the classroom.

Conclusion

My Capstone project promotes equity in schools and society. A student’s success relies on education, and technology continues to play a greater role in education. Since technology is currently shaping education, I wanted to figure out a way to include technology into a curriculum
without excluding students of less fortunate backgrounds. I know an unfortunate reality exists: technology often reveals the economic division between students. Therefore, I offer a project that is accessible and inclusive. Web-based tools are free, online resources, so students and schools with less resources remain included and greatly benefit.

Along with economic equity, my project utilizes the social backgrounds of students. Students desire ways to socialize in the classroom, but some experience anxiety when participating. I incorporated web-based tools that allow students to participate and engage socially without the anxiety of standing in front of an entire class. Everyone has the chance to engage and not only students who answer the quickest and feel the most comfortable. Many students need change; they need social learning that supports and invites them into a caring community. I incorporated web-based tools because they allow the students to be the initiators of the social learning, making them more invested in the learning. Ultimately, the web-based tools effectively switch the classroom from a teacher-centered to a student-centered classroom.

By inserting web-based tools into my instruction, I offer students a variety of ways to learn that appeal to their different learning styles. Many students struggle with traditional forms of learning, so by using the web-based tools, I desired to be an agent of change for these students. The web-based tools offer ways to differentiate the learning. Also, they offer creative, engaging ways to attract struggling learners and to create a more active learning environment. I realized that, in order for these positive outcomes to occur, the implementation of the web-based tools must be strategic. Throughout the creation of my project, I carefully considered best practices and constructivist theory when incorporating the web-based tools. Much of the research concurs that technology only works when paired simultaneously with pedagogy. Therefore,
when creating my project, I purposefully transferred the theoretical, foundational, and pedagogical knowledge to my project in order to obtain the greatest outcome.

This project provided an opportunity to reflect on my teaching. Through the research of web-based tools, I participated in an in-depth study that expanded my knowledge and formed connections between theory and practice. I developed my ability to apply educational theory in very concrete ways. I cherish this experience and know my teaching will improve as a result.
UNIT PLAN OVERVIEW

Goals/Content Standards

High Priority – Students must know:

- **11.5.5.5**: Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.
- **11.7.1.1**: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
  a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.
  b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience’s knowledge level, concerns, values, and possible biases.
  c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.
  d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
  e. Provide a concluding statement or section that follows from and supports the argument presented.
- **11.9.3.3**: Evaluate a speaker’s point of view, reasoning, intended audience, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.
- **11.9.4.4**: While respecting intellectual property, present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks (e.g., persuasion, argumentation, debate).
- **11.5.6.6**: Determine an author’s point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text.
- **11.7.4.4**: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Essential Questions

- How do I make an argument clear to the audience?
- How do I determine which information is relevant to my argument?
- How do I persuade people effectively?
- How do I change my wording, appeals, and examples to match my audience?
- How much power do my words have over influencing others?
- How much responsibility do I have in the words I use?

Enduring Understandings

- Analyzing the craft of a text – from the overall structure to word choice – allows the reader to see how an author’s individual choices affect the overall text and ultimately impact the reader.
- Writers must consider the purpose, audience, and type of text when making choices about organization, development, transitions, word choice, and tone – as these choices determine the effectiveness of the writing for that specific situation.
Speakers must consider the purpose and audience when making choices about organization, development, style, and presentation – as these choices determine the overall effectiveness in that specific situation.

<table>
<thead>
<tr>
<th>Formative Assessments</th>
<th>SWBAT…</th>
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<tbody>
<tr>
<td>• Create a digital comic strip</td>
<td>• Analyze an author’s point of view, style, evidence and rhetoric used.</td>
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<tr>
<td>• Discussion and reflection</td>
<td>• Analyze the rhetoric, specific word choices, and structure that a speaker uses.</td>
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<tr>
<td>• Write a speech review</td>
<td>• Evaluate the logic of a speaker’s reasoning and premises.</td>
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<tr>
<td>• Write mimicking structure and style</td>
<td>• Analyze a written argument for its effectiveness.</td>
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<tr>
<td>• Crime scene report</td>
<td>• Write a logical argument with supporting claims.</td>
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<tr>
<td>• Retweet in objective tone</td>
<td>• Write in an objective tone when making claims and addressing other side.</td>
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<tr>
<td>• Graphic organizer</td>
<td>• Evaluate the reliability and trustworthiness of evidence.</td>
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<tr>
<td>• Create a digital poster</td>
<td>• Evaluate and assess the speaker’s stance on an issue.</td>
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<tr>
<td>• Paragraph puzzle</td>
<td>• Create fair and objective counterclaims.</td>
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<tr>
<td>• Create a Facebook page for opposing side of an argument.</td>
<td>• Logically order a paragraph using appropriate transitions.</td>
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<tr>
<td>• Construct a verbal argument</td>
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<thead>
<tr>
<th>Summative Assessments</th>
<th>SWBAT…</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Create a commercial/presentation: Use Pawtoons to create a commercial that supports your topic. Use at least 3 rhetoric appeals to persuade audience.</td>
<td>• Use rhetorical devices to persuade an intended audience.</td>
</tr>
<tr>
<td>• Argument/persuasive paper: Write a 2-3 page paper arguing your topic.</td>
<td>• Write an effective logical argument using supporting claims, reliable evidence, counterclaim, and objective tone.</td>
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## Day-to-Day Unit Plans/Lessons

### Web-based tools

### Week 1

<table>
<thead>
<tr>
<th>Day</th>
<th>Standards:</th>
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| **Day 1** | 11.9.3.3: Evaluate a speaker’s point of view, reasoning, intended audience, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.  
11.5.6.6: Determine an author’s point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text.  
SWBAT analyze an author’s point of view, style, evidence and rhetoric used. |

**Hook:**
- On overhead show students 3–4 comic strips that poke fun of cell phone use and pose following questions for students to discuss on Padlet:
  - What are some ridiculous habits people have with cell phones?  
  - Have you been guilty of doing these habits? Explain.

**Activity:**
- Introduce or review following terms/concepts: point of view, premises, intended audience, and claim.  
- Inner Outer Circle Discussion about the comic strips. Half the students form the outer circle which surrounds the inner circle. In other words, the inner circle is inside the outer circle. Both circles are facing each other, and the person you are facing is your discussion partner. Students will be asked a question and then discuss with their partner. After the first question, either the inner or outer circle will rotate a certain number of spots to the right or left and then face a new person who becomes their partner for the next question. The question is asked and then the new partners discuss. This is repeated until all questions are asked. Questions asked are below:
  - Who is the likely audience?  
  - What does the author assume to be true about cell phones or people using cell phones? (premise)  
  - What bigger point is the author trying to make? What in the picture tells you this?  
  - What helps make the author’s message effective? Explain why.

**Assessment:**
- Create your own comic which satires a current issue using the web-based tool [www.makebeliefscomix.com](http://www.makebeliefscomix.com). Write one paragraph explaining of your comic strip choices, and then share via email with assigned classmates.

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<th>Day</th>
<th>Standards:</th>
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<tr>
<td><strong>Day 2</strong></td>
<td>11.5.5.5: Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.</td>
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</tbody>
</table>
### Standards:

- **11.5.5.5:** Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.
- **11.7.4.4:** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- **11.9.3.3:** Evaluate a speaker’s point of view, reasoning, intended audience, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.

SWBAT analyze the rhetoric, specific word choices, and structure that a speaker uses.

### Activities:

- **Teach-Go discussion.** Students will pair up and take turns explaining the concepts shared in the video to each other and come up with additional examples.
- Students evaluate each other’s comic strips from yesterday. Group members (3-4 per group) should answer the following:
  1. What’s the student’s point of view and main argument on the topic?
  2. What assumptions of what’s true do you see?
  3. What was effective about the student’s comic? Did it use any of the rhetoric devices?
- **Watch video of speaker using rhetoric devices effectively.** Students will use web-based tool called VideoNot.es to take notes on the rhetoric devices and structure being used. Notes and question prompts are time stamped so students’ attention can be drawn to ideas while happening and take appropriate notes. Plus, the video can be paused and rewined for students to complete at their own pace. (VideoNot.es activity: [https://drive.google.com/file/d/0B95unfHhg0kQNNFLYXB2dINoUdEU/view?usp=sharing](https://drive.google.com/file/d/0B95unfHhg0kQNNFLYXB2dINoUdEU/view?usp=sharing) —I believe you need to log into your Google account to see this.)
- **Assessment:** Using Padlet, reflect on video of speaker by answering: What rhetoric devices stood out the most to you? Why did you find them very effective? (You can find Padlet at [https://padlet.com/mrmcgie/kxg00gyh7s7c](https://padlet.com/mrmcgie/kxg00gyh7s7c) and password is *speech*). Respond to at least one other student.

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### Standards:

- **11.5.6.6:** Determine an author’s point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text.

SWBAT identify speaker’s point of view and rhetoric devices being used.

### Opener:

**Pawtoons’ video introduction on Rhetoric Devices**

[https://www.powtoon.com/c/dVuS6kXmXIE/1/m](https://www.powtoon.com/c/dVuS6kXmXIE/1/m)

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**Day 3**

- **11.9.3.3:** Evaluate a speaker’s point of view, reasoning, intended audience, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.
**Opener:** In students’ journal, they will answer following questions:

1. What are some phrases politicians often use when discussing the big issues like taxes, healthcare, gun laws, and so on?
2. How does the word choice differ between Republicans, Democrats, and Independents?
3. How does this have a rhetorical effect?

**Activities:**

- **Think-Pair-Share:** Turn to a neighbor and share some of the thoughts you wrote down for the opener.
- After students share in pairs, ask for people to share with whole group and discuss together.
- **Analyze presidential speech using Edpuzzle** – Students will watch a video from a presidential speech. Edpuzzle will allow teacher to pause the video at chosen spots to provide important cues and ask questions to guide the student’s thinking and prepare for the assessment. ([https://edpuzzle.com/media/596921aaf1c76220dffba473](https://edpuzzle.com/media/596921aaf1c76220dffba473))

**Assessment:**

- **Write a speech review at end of Edpuzzle** - At the end, students will write a review/critique telling me how effectively they felt the speaker used the various rhetorical devices, word choice, structure, and supported his or her ideas with evidence. Explain answers logically while referencing evidence from speech.

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**Standards:**

11.9.3.3: Evaluate a speaker’s point of view, reasoning, intended audience, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.

SWBAT evaluate the logic of a speaker’s reasoning and premises.

**Opener:** Using Padlet, students will share their initial thoughts, feelings, and questions after watching an ad posted on the wall. (Padlet can be found at [https://padlet.com/mrmcgie/v8c29gy7f4c5](https://padlet.com/mrmcgie/v8c29gy7f4c5) and password is twilight.) Respond to at least one other student.

**Activities:**

- Hand out common fallacies handout and briefly explain.
- Pull up the Padlet board, look through student reactions, and then have students go back into Padlet. Using the handout, they will write a message about what fallacies from the handout are being used in ad. Students will respond to one other person to agree or disagree while providing reason to support their ideas. After students have posted, we will discuss as a whole group to determine fallacies.
- **Quiz-Quiz-Trade** – Each student is given a note card. On the note card, there will be a written statement. Some of the statements will be argument fallacies while some will be logical arguments. Students will stand up and find a partner. Each person will read the original card, and then each person will say why they think the statement is either logical and fair or illogical and unfair. Once each person has discussed, cards will be
exchanged, and both students will find a new partner and repeat.

- **Jigsaw activity using Flipgrid**: Students will be divided into groups of 4 to evaluate the logical reasoning, premises, and tone of commercials. Groups will be assigned different commercials to watch. The commercials will be the following:
  - [https://www.youtube.com/watch?v=kIv3m2gMgUU](https://www.youtube.com/watch?v=kIv3m2gMgUU)
  - [https://www.youtube.com/watch?v=Fzcp-tbQfKs](https://www.youtube.com/watch?v=Fzcp-tbQfKs)
  - [https://www.youtube.com/watch?v=tbVPbLOmBqk](https://www.youtube.com/watch?v=tbVPbLOmBqk)
  - [https://www.youtube.com/watch?v=hPM8e_DauUw](https://www.youtube.com/watch?v=hPM8e_DauUw)

- Once students have watched commercials, they initially discuss with their small group.
- **To try to keep each student accountable, Flipgrid will be used.** To receive credit for participating, student needs to go into Flipgrid and record a response to show he or she listened and thought about the content.
- After small group discussion and students have posted responses on Flipgrid, they will be paired with a group that watched a different commercial. Students will watch other group’s video and then, through Flipgrid, respond to other group by replying in agreement or disagreement while giving specific reasoning.

**Assessment:**

- Individual answers on Flipgrid.
- Write a small group report that identifies the fallacy and tone used in commercial. Report also explains in more detail the reasons that group believes the reasoning is faulty.

**Day 5 Standards:**

- **11.5.5.5**: Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.
- **11.9.3.3**: Evaluate a speaker’s point of view, reasoning, intended audience, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.
- **11.5.6.6**: Determine an author’s point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text.

SWBAT analyze a written argument for its effectiveness.

**Opener**: Journal

**Activities:**

- Read as whole class Jonathan Edwards “from Sinners in the Hands of an Angry God”, but break down into smaller pieces to analyze together. Begin modeling by summarizing the sections’ meaning, identifying rhetorical devices and how to interpret their use, identifying emotional or persuasive word choice, and analyzing the speech’s structure.
- After modeling, do this together as a class. At different points in class, I will stop and check for understanding using Today’s Meet. There will be mini-discussions. Also, I will ask a question or ask them to write down their understanding. On the count of 3, everyone will click on “say” to post to its board. As I’m explaining in my modeling or when class is doing together, this will help me see if students understand and I can address or re-explain what’s needed. Also, it helps to create full participation in lesson.
- Last 2 smaller sections have students attempt to analyze on their own. They have option to work in pairs. Students will annotate the paper, marking where they see rhetorically devices and structural techniques (repetition and parallelism) and labeling them. Also, they will write notes in margins to show their interpretations of metaphors and thoughts about the rhetorical devices’ effectiveness.
- Student will write a 1-2 page addition to “from Sinners in the Hands of an Angry God”, creating a similar structure and including 2-3 original extended metaphors that support Edward’s existing argument.

**Assessment:**
- Student will write a 1-2 page addition to “from Sinners in the Hands of an Angry God”, creating a similar structure and rhetoric that includes 2-3 original extended metaphors.

<table>
<thead>
<tr>
<th>Week 2</th>
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<tbody>
<tr>
<td><strong>Day 6</strong></td>
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<tr>
<td><strong>Standards:</strong></td>
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<tr>
<td>• <strong>11.5.5.5:</strong> Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.</td>
</tr>
<tr>
<td>• <strong>11.9.3.3:</strong> Evaluate a speaker’s point of view, reasoning, intended audience, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.</td>
</tr>
<tr>
<td>• <strong>11.5.6.6:</strong> Determine an author’s point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text.</td>
</tr>
</tbody>
</table>

SWBAT analyze a written argument for its effectiveness.

**Opener:** On Padlet, post any questions or confusions you still have from our reading of “from Sinners in the Hands of an Angry God” last week or the written assignment.

**Activities:**
- On Padlet, students will look at other student questions and see if they have the same questions. Also, they will be given time to reply and offer suggestions. Afterwards, as a class, we will address any remaining student questions or confusions.
- Work day for assessment assigned on Friday.

**Assessment:**
- Student will write a 1-2 page addition to “from Sinners in the Hands of an Angry God”, creating a similar structure and rhetoric that includes 2-3 original extended
| Day 7 | **Standards:**  
|-------|--------------------------------------------------|
|       | • **11.9.3.3:** Evaluate a speaker’s point of view, reasoning, intended audience, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.  
|       | • **11.9.4.4:** While respecting intellectual property, present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks (e.g., persuasion, argumentation, debate).  
|       | SWBAT identify and evaluate speaker’s use of rhetoric and reasoning.  
|       | **Opener:** Journal. What current events are of interest to you and why? What do you know?  
|       | **Activities:**  
|       | • **Link to video on a recent event will be posted in Today’s Meet.** After reading the article, students will create a discussion question that prompts critical thought on the issue. They will post in Todays Meet and class will have discussion around student created questions.  
|       | • **Quizizz.com:** Used as a check for understanding on rhetoric devices, intended audience, logical reasoning, and so on from the first week. This web-based tool allows students to go back and check their wrong answers. For student who struggled, remediation will take place. For students who did very well, an enrichment opportunity will be available.  
|       | **Assessment:**  
|       | • **Remediation:** Students will watch video on either Edpuzzle/VideoNot.es that will be narrated by teacher and will ask questions to guide student’s learning.  
|       | • **Enrichment:** Play virtual game called Argument Wars. Game involves close reading and making choices on making and addressing claims.  
| Day 8 | **Standards:**  
|       | • **11.5.5.5:** Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.  
|       | • **11.9.3.3:** Evaluate a speaker’s point of view, reasoning, intended audience, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.  
|       | • **11.5.6.6:** Determine an author’s point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text.  
|       | SWBAT analyze a written argument for its effectiveness.  
|       | **Opener:** Journal  
|       | **Activity:**  
|       | • Read Gandhi’s “from On Nonviolent Resistance” and annotate the text by identifying claims, identifying rhetorical devices and interpreting their use, identifying emotional
<table>
<thead>
<tr>
<th>Day 9</th>
<th>Standards:</th>
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</table>
| • 11.7.1.1: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.  
  a) Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.  
• 11.7.4.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. | |

**Assessment:**
- Complete graphic organizer that compares and contrasts the word choice, style, and types of rhetoric appeals made between Jonathan Edward’s “from Sinners in the Hands of an Angry God” and Gandhi’s “from On Nonviolent Resistance”

**SWBAT** write a logical argument with supporting claims

**Opener:** Journal response. Pick the best argument from choices and explain why it’s best.

**Activities:**
- As a whole class, construct a logical argument with supporting claims regarding an agreed-upon class topic that students have background knowledge. We will use a graphic organizer first, and when filled out, write it together in paragraph form. As writing, things like claims, logical reasoning, relevant evidence, and organization can be discussed.
  - **While teacher is discussing the subject, students can submit suggestions and ideas through Today’s Meet. Teacher will check in on Today’s Meet while discussing.**
- Live crime scene investigation. A live crime scene will be set up in the class. Students must investigate and search for evidence. Using the evidence they find, students must construct a logical argument about who did the crime from a list of suspects with descriptions.

**Assessment:**
- With a partner, write a crime report that lists a suspect and the logical reasoning the suspect is guilty. Use Wikis to collaborate on writing.

<table>
<thead>
<tr>
<th>Day 10</th>
<th>Standards:</th>
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</table>
| • 11.7.1.1: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.  
  a) Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.  
• 11.7.4.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. | |

**SWBAT** will be able to write a logical argument with supporting claims

**Opener:** Journal
### Activities:
- Using smartboard or promethean board, write down evidence students have collected and logical warrants that lead to possible conclusions. Ask class to evaluate evidence and reasoning.
- Students do final investigating and write report. Write and edit together in Wikis.

### Assessment:
- Write a crime report that lists a suspect and the logical reasoning the suspect is guilty.

## Week 3

<table>
<thead>
<tr>
<th>Day 11</th>
<th>Standards:</th>
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</thead>
<tbody>
<tr>
<td></td>
<td><strong>11.9.4.4:</strong> While respecting intellectual property, present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks (e.g., persuasion, argumentation, debate).</td>
</tr>
<tr>
<td></td>
<td><strong>11.7.1.1:</strong> Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</td>
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<tr>
<td></td>
<td>d) Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.</td>
</tr>
</tbody>
</table>

SWBAT write in an objective tone when making claims and addressing other side.

**Opener:** Post a Twitter feed on the board that shows an online argument. Students will journal what they notice about the language, tone, and logic used.

**Activity:**
- Many arguments take place now more on social media than in person, so as a class, we will be examining arguments on Twitter for fallacies and objectivity. Students given sentence stems that will help them state claims and counterclaims in a more objective and distinguishing way.
- **Student will explore teacher-created Thinglink page about a class-chosen topic.** (Students were given a choice between 4-5 topics yesterday). The page will include articles and videos about both sides of an issue.

**Assessment:**
- Retweet a Twitter feed to make the language more objective.

<table>
<thead>
<tr>
<th>Day 12</th>
<th>Standards:</th>
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<tbody>
<tr>
<td></td>
<td><strong>11.9.4.4:</strong> While respecting intellectual property, present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks (e.g., persuasion, argumentation, debate).</td>
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SWBAT create an effective argument using evidence.
**Opener:** Journal

**Activity:**
- Continue from yesterday: **Student will explore teacher-created Thinglink page about a class-chosen topic.** The page will include articles and videos about both sides of an issue.

**Assessment:**
- **On Flipgrid respond to question:** What side of the argument are you on? State your reasons and evidence from the sources on Thinglink to support your ideas. Use rhetoric devices in your response as well.

---

### Day 13

**Standards:**
- **11.9.4.4:** While respecting intellectual property, present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks (e.g., persuasion, argumentation, debate).

SWBAT construct an argument using evidence and valid reasoning

**Opener:** Journal

**Activity:**
- **Student will explore teacher-created Thinglink page about a class-chosen topic.** The page will include articles and videos about both sides of an issue.

**Assessment:**
- **On Flipgrid respond to question:** What side of the argument are you on? State your reasons and evidence from the sources on Thinglink to support your ideas. Use rhetoric devices in your response as well.
- Watch your Flipgrid video and then write a self-reflection on your use of structure and rhetoric.

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### Day 14

**Standards:**
- **11.7.1.1:** Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
- **11.9.3.3:** Evaluate a speaker’s point of view, reasoning, intended audience, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.

SWBAT evaluate the reliability and trustworthiness of evidence
SWBAT evaluate and assess the speaker’s stance on an issue

**Opener:** Show picture of Bat Boy from National Inquirer. Ask class how much they would trust this source for other things after seeing this?

**Activities:**
- Presentation on criteria for reliable sources
- **Write around:** Students will rank sources from least to most reliable and trustworthy,
and then write an explanation of their rankings. Students were put into groups. When a student completes the rankings and explanation, he or she will pass the paper to the next person in the circle, and the next person will write a response. This will continue until the paper gets back to the original student. Students will then discuss as a group.

- Begin researching topic for their argumentation final paper and project.

**Assessment:**
- Complete graphic organizer that evaluates the first 3-4 sources they find for their final argument project.

### Day 15

**Standards:**

- **11.7.1.1:** Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

SWBAT evaluate the reliability and trustworthiness of evidence
SWBAT evaluate and assess the speaker’s stance on an issue

**Activity:**
- Students take notes on bias using Videnot.es
- Continue researching topic

**Assessment:**
- Edpuzzle assessment on source reliability and bias.

### Week 4

#### Day 16

**Standards:**

- **11.7.1.1:** Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

SWBAT evaluate the reliability and trustworthiness of evidence

**Activity:**
- Continue researching topic
- Graphic organizer for claims, evidence, logic reasoning, counterclaims, transitions, and so on.

**Assessment:**
- Students create a Thinglink page that links relevant, credible articles about the topic to page. Student writes one paragraph per source explaining why they linked that resource to page.
### Day 17

**Standards:**
- **11.7.1.1:** Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

SWBAT evaluate the reliability and trustworthiness of evidence

**Activity:**
- Continue researching topic

**Assessment:**
- Students create a Thinglink page that links relevant, credible articles about the topic to page. Student writes one paragraph per source explaining why they linked that resource to page.

### Day 18

**Standards:**
- **11.7.1.1:** Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
  - b) Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience’s knowledge level, concerns, values, and possible biases.

SWBAT create fair and objective counterclaims.

**Activity:**
- Create a Facebook page that supports the side you are arguing against.

**Assessment:**
- Create a Facebook page that supports the side you are arguing against.

### Day 19

**Standards:**
- **11.7.1.1:** Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
  - c) Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.

SWBAT write an effective argument

SWBAT logically order a paragraph using appropriate transitions.

**Activity:**
- **Paragraph puzzle** – Students will be given puzzle pieces, which comprise different paragraphs of an argument essay, and they will need to put in fluent, logical order. Students will initially work in small groups of 3-4, then complete last puzzle individually
- Begin writing paper or working on **Pawtoons presentation**.

**Assessment:**
- **Paragraph puzzle** – Students will be given puzzle pieces, which comprise different paragraphs of an essay, and they will need to put in fluent, logical order. Students will initially work in small groups of 3-4, then complete last puzzle individually
| Day 20 | **Standards:**  
|---|---|
| • 11.7.1.1: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. | **SWBAT** write an effective argument  
| **Activity:** Work day on argument project | **Assessment:**  
| • Argument paper rough draft. |

### Week 5

| Day 21 | **Standards:**  
|---|---|
| • 11.7.1.1: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. | **SWBAT** write an effective argument  
| **Activity:** Work day on argument project. | **Assessment:**  
| • Submit rough draft of argument paper to Wikis for group peer editing and teacher comments. |

| Day 22 | **Standards:**  
|---|---|
| • 11.7.1.1: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. | **SWBAT** write an effective argument  
| **Activity:**  
| • Look at peer editing and continue working on argument project. | **Assessment:**  
| • Final argument paper and Pawtoons presentation. |

| Day 23 | **Standards:**  
|---|---|
| • 11.7.1.1: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. | **SWBAT** write an effective argument  
| **Activity:**  
| • **Writer’s workshop:** Teacher will meet with students to review comments he or she made in Wikis and check for clarification needs. | **Assessment:**  
| |
| Day 24 | Standards:  
|        | • 11.7.1.1: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.  
|        | SWBAT write an effective argument  
|        | Activity:  
|        | • Writer’s workshop: Teacher will meet with students to review comments he or she made in Wikis and check for clarification needs.  
|        | Assessment:  
|        | • Final argument paper and Pawtoons presentation.  
| Day 25 | Standards:  
|        | • 11.7.1.1: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.  
|        | SWBAT write an effective argument  
|        | Activity:  
|        | • Writer’s workshop: Teacher will meet with students to review comments he or she made in Wikis and check for clarification needs.  
|        | Assessment:  
|        | • Moving to another unit next week, but the final argument paper and Pawtoons presentation will be due by next week Wednesday.
SUPPLEMENTAL MATERIALS

LESSON ONE HOOK:

ZITS

BY JERRY SCOTT AND JIM BORGMAN

YOU STILL HAVEN'T COMPLETED YOUR ONLINE TRAFFIC SCHOOL ???

I HAVE UNTIL THE 3RD.

TODAY IS THE 3RD, JEREMY!

OH.

WELL, I HAVE UNTIL MIDNIGHT.

IT'S 10:45 NOW!!

DON'T WORRY, MOM, I'LL GET IT DONE.

SEE??

JUST MY LUCK!

MY WEATHER APP SAYS IT'S RAINING.

CAN YOU COUNT ON THAT THING?
DAY 4 FALLACIES HANDOUT:

Common Fallacies and Booby traps

<table>
<thead>
<tr>
<th>Fallacies</th>
<th>Booby Traps</th>
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<tbody>
<tr>
<td><strong>Genetic Fallacy:</strong> Rejecting an argument based on its origins rather than on its own merits. A related form accepts or rejects arguments based on others who endorse or reject those same arguments.</td>
<td><strong>Vagueness:</strong> A lack of clarity or precision in language. Words or groups of words are vague when their meanings are inexact or when it is unclear to which things the word or words apply.</td>
</tr>
<tr>
<td>EXAMPLE: You think labor unions are good? You know who else liked labor unions? Karl Marx, that’s who.</td>
<td>EXAMPLE: Your horoscope today: Small talk sometimes makes the world go ‘round. A casual conversation at work or at a dinner party can spark something much greater than the sum of its parts. Go ahead and talk to multiple people about many things</td>
</tr>
<tr>
<td>ANALYSIS: The argument rejects labor unions on the grounds that Marx liked unions without making any reference to any of the present arguments for or against labor unions.</td>
<td>ANALYSIS: What does it mean for a conversation to “spark something much greater than the sum of its parts”? It could mean just about anything, making the prediction true, but rather empty.</td>
</tr>
<tr>
<td><strong>Red Herring:</strong> An argument that pretends to establish a particular conclusion but that really argues for something else entirely. The origin of the term derives from foxhunting, where a smoked herring (which the smoking process renders red) would be dragged across the trail of the fox to throw off the hounds.</td>
<td><strong>Equivocation:</strong> A subcategory of vagueness that consists of using a term or expression in an argument in one sense in one place and in another sense in another.</td>
</tr>
<tr>
<td>EXAMPLE: You say that Coach Smith pressured teachers to give his students passing grades. But don’t you agree that athletics are important to schools? Don’t they build character?</td>
<td>EXAMPLE: Any law can be repealed by the proper legal authority. The law of gravity is a law. Therefore, the law of gravity can be repealed by the proper legal authority.</td>
</tr>
<tr>
<td>ANALYSIS: The speaker shifts the subject from Coach Smith’s actions to the importance of athletics</td>
<td>ANALYSIS: The word “law” is being used in two different senses.</td>
</tr>
<tr>
<td><strong>Straw Man:</strong> A subcategory of red herring that involves misrepresenting an opponent’s position to make it easier to attack. The origin of the phrase derives from soldiers who learn to use bladed weapons by attacking straw-filled dummies – a much easier target than live people who are attempting to stab back.</td>
<td><strong>.Suppressed Evidence:</strong> A failure to mention or otherwise acknowledge important, relevant evidence. Suppressing evidence is not always a fallacy (for instance, defense lawyers are professionally obligated to ignore evidence of their client’s guilt), but ignoring relevant facts is often a sign of an attempt to mislead.</td>
</tr>
<tr>
<td>EXAMPLE: Feminism is part of “a socialist, anti-family political movement that encourages women to leave their husbands, kill their</td>
<td>EXAMPLE: Capital gains taxes keep people locked into their investments rather than moving to more productive investments. Someone who has to pay</td>
</tr>
</tbody>
</table>
**False Cause:** Labeling one thing as the cause of another thing on insufficient or unrepresentative evidence or using evidence that conflicts with established higher-level truths or theories.

**EXAMPLE:** Dan White ate a lot of Twinkies and then killed the Mayor of San Francisco. If I were a mayor, I’d ban Twinkies so no one would kill me.

**ANALYSIS:** The argument assumes that eating Twinkies somehow causes mayors to be assassinated when no such causal connection has been demonstrated. (Note that White’s actual murder trial did invoke Twinkies as part of a diminished capacity argument, leading to what is now known as “the Twinkie defense.” Contrary to legend, however, the defense did not really argue that Twinkies caused White to commit murder.

**Appeal to Authority:** Accepting the word of authorities when we lack good reasons for thinking that they have the information we need or when we think that they might be biased, or when we ought to figure the matter out for ourselves, or when the authority in question is not really an expert in the relevant area.

**EXAMPLE:** Hi, I’m Troy McClure. You might remember me from such films as The Day the Peacock Died. After filming scenes with feathered co-stars all day, there’s nothing I enjoy more than a bucket of Buster’s Chicken. It’s chickentastic!

**ANALYSIS:** While Troy might be an expert on making bad films, he has no particular expertise on fast food. Thus the fact that Troy McClure enjoys a particular sort of food is not a good reason for thinking that I ought to buy some.

| **Undistributed Middle:** An argument in which the middle term is undistributed, meaning that not all the instances of things that are C are also instances of things that are A or of B. In other words, the first premise tells us that everything that is an A is also a C. It doesn’t tell us anything about whether things that are C are also things that are A. Similarly, in the second premise, we are told that everything that is a B is also a C. But again, we know nothing about things that are C.
| **Questionable Use of Statistics:** Employing statistics that are questionable without further support. There are several subcategories here. Hasty Conclusion: Accepting an argument on the basis of too little evidence. Small Sample: Drawing conclusions on the basis of a sample that is too small to be reliable. Unrepresentative Sample: Reasoning from a sample that is not representative of the general population.
| **EXAMPLE:** Women shouldn’t be concerned with wandering around in back alleys at night, since studies indicate that half of the rape committed takes place in the victim’s own home, while only one-twelfth happens in alleys.
| **ANALYSIS:** The argument uses statistics poorly; the

| children, practice witchcraft, destroy capitalism and become lesbians.” (Statement from Pat Robertson)

**ANALYSIS:** Well certainly we’d have good reason to oppose a political movement of that sort; fortunately, though, feminism does not hold any of those things.

| a large tax on her gains may be less inclined to sell stock, leaving her with less money to invest in new ventures.

**ANALYSIS:** The problem, of course, is that selling a stock requires a purchaser for that stock. So if the holder of shares doesn’t sell them, it’s true that she has less money to reinvest, but it ignores the fact that the person who would have bought her shares now has whatever money he would have paid her to invest elsewhere. |
Therefore A is a B.
In this argument, we know something about A (namely, that every instance of A is also an instance of C). And we also know something about C (namely, every instance of C is also an instance of B). Since the C is distributed in the second premise, we can correctly link A with B.

EXAMPLE: Most Arabs are Muslims and all the 9/11 hijackers were also Muslims. Therefore most Arabs are hijackers.

ANALYSIS: The conclusion doesn’t follow from the premises. To show this, substitute the following argument: My 5-year-old enjoys watching television, and teenagers also enjoy watching television. Therefore my 5-year-old is a teenager.

argument is really about the likelihood of being raped in a back alley. Since women are in their homes far more frequently than they are in back alleys, it stands to reason that the sheer number of rapes will be higher in a victim’s home. But that tells us nothing at all about how likely it is that a woman wandering around a back alley will be raped.

DAY 14 HOOK IMAGE:
DAY 11 HOOK and ACTIVITY:

Jack Posobiec
@JackPosobiec

There’s never been a terrorist attack at a Nascar race. Nascar fans are all armed. Draw your own conclusions
1:36 PM - 4 Jun 2017 - Dover International Speedway

Duh right? What possible hole could one find in this argument? Let’s see...

2. Just Send Harry Styles Everywhere!

Ashley Feinberg
@ashleyfeinberg

There has never been a terrorist attack at a One Direction concert. One Direction fans are all carrying lipgloss. Draw your own conclusions. twitter.com/JackPosobiec/s...
7:39 PM - 4 Jun 2017

Donald J. Trump
@realDonaldTrump

45th President of the United States of America
Washington, DC
Joined March 2009

Kelly Scanlon
@KellyScanlon - Feb 1

Replying to @realDonaldTrump
All Muslims are bad. That’s why you banned them. Got it.

Glad your not Islamophobic though.

Tweet unavailable

Kelly Scanlon
@KellyScanlon - Feb 1

Replying to @Spanishlonnie @realDonaldTrump
Actions speak louder than words.

Reed Reynolds - Feb 1
i question your Texas citizenship. You sure you didn’t take a wrong turn and get mislabeled a “journalist”?

Kelly Scanlon
@KellyScanlon - Feb 1
I’m in the Austin area.

1 more reply

Tristan Willey
@TristanWilley - Feb 1
Replying to @realDonaldTrump
@realDonaldTrump no. It is a direct denial of aid we are capable of giving to other humans beings in need you spineless coward.
Web-based Tool Overview
Capstone Project

**Digital Tool:** Flipgrid
https://info.flipgrid.com/

**Description of Tool:** Flipgrid is a web-based tool that allows participants to respond to questions and videos that are posted on the digital grid. It is easy to share the link with students and allows students to easily discuss any topic. You can sign up for a free account.

**Pedagogical Uses for the Classroom:**

1. **Social learning:** After listening to posted questions and videos, students record their response and post their response video to the grid. Students can watch each other’s videos and create response videos to have a full class discussion online.
2. **Open-ended questions/Exploratory:** Posing open-ended questions allows students to explore the issue and dig deeper. Students can also respond in their video by posing additional questions that classmates need to answer.
3. **Prior and real world knowledge:** Students can record a response based on prior knowledge in the subject you are studying. This way you can pull out prior knowledge from every student not only a few that participate.
4. **Learning styles:** Helps audio learners. For students that struggle with writing, they can organize their thoughts verbally and play it back while writing.
5. **Student self-reflection:** Before posting, students are able to listen to their recording. Even after posting, it is still a great tool for self-reflection. From listening and watching themselves, students can self-evaluate their performance, content, organization, and so on. This would be a great tool for students practicing a speech or verbally organizing thoughts for a paper.

**Components of the Tool:**

- **Dashboard:** Your dashboard holds all the different discussions and tracks overall activity of students.
- **Create a Grid:** This is where you create a classroom discussion. You can give your discussion grid a title, ask a question, and import a video.
- **Grid Cover:** Choose a background picture for your discussion.
- **People and Privacy:** Allows you to decide if anyone can access the grid or if people need the link or password to access the grid.
- **Share/Export/Embed:** Makes it easy to share your discussion grid with the class.
- **Connections:** Allow you to connect globally with other educator’s grids. Available in upgrade version which costs a yearly fee.

**How does it work?**
[Link to Screencast Instructions](#)

**Your turn:**
[Practice](#)
Web-based Tool Overview
Capstone Project

**Digital Tool:** VideoNot.es  

**Description of Tool:** VideoNot.es is a web-based tool that allows participants to read or take notes on the video they are watching. Notes are saved and then stored in participants Google Drive. You can sign up for free.

**Pedagogical Uses for the Classroom:**

1. **Active learning:** Students cannot passively watch a video if this tool is used effectively. Teachers can create notes that ask students to read along, fill-in-the-blank, and answer questions. A student’s notes are saved in their Google Drive so teachers can request students to turn in their notes.
2. **Learning styles:** For students who learn better visually, this tool allows students to follow along with a video as opposed to a lecture.
3. **Differentiation:** The video can be stopped and re-winded whenever the student chooses. Therefore, students can complete at a pace that is comfortable to each student.
4. **Scaffolding:** Teacher’s notes and questions are time-stamped. Therefore, students are directed where and when to look for the important information. If a student misses something, they can click on the time-stamped notes to find the information needed.

**Components of the Tool:**

- **Video:** On the main page, videos can be attached on the left hand side.
- **Notes:** On the right hand side of the main page, students can take notes on the video they are watching.
- **People and Privacy:** Students’ video and notes can be accessed if link is shared with them.
- **Share:** Makes it easy to share your video and notes with class.

**How does it work?**

[Link to Screencast Instructions](http://www.videonot.es/)

**Your turn:**

[Practice](http://www.videonot.es/)

Web-based Tool Overview
Capstone Project

Digital Tool: Edpuzzle
https://edpuzzle.com/

Description of Tool: Edpuzzle is a web-based tool that allows participants to watch videos about a specific content while answering questions and receiving teacher instructions at strategic points. It is very simple very students to use. You can sign up for a free account.

Pedagogical Uses for the Classroom:
1. **Active Learning**: Video can be paused to ask questions about what they are watch. Student must be actively watching and thinking about the content to answer the questions.
2. **Prior and real-world knowledge**: Teachers can pose a variety of questions about the video. Teachers can ask students to respond to something they see in the video with personal experiences that relate.
3. **Open-ended questions**: As well as prior knowledge questions, teachers can pose open-ended questions that relate to the content students are watching.
4. **Learning styles**: Offers a more visual learning experience.
5. **Scaffolding**: Teachers can create strategic pauses during the video and play a vocal recording that provides cues to direct students’ attention to important concepts or provide additional explanation. Teachers can also add notes during the pauses as well.
6. **Check for understanding**: By stopping the video to ask questions, we are checking students understanding throughout the video. It can be used as a formative assessment because teachers can track progress and assign grades.

Components of the Tool:
- **Search**: Allows teachers to search through a database of previous created assignments that teachers can use for their class.
- **My Content**: A collection of the assignments that you have created for your classroom.
- **My Classes**: Teachers can create classes and post assignments to them.
- **Gradebook**: Allows teachers to store student grades for assignments. Available in upgrade version.
- **Share**: Makes it easy to share your assignments with the class.

How does it work?
[Link to Screencast Instructions]

Your turn:
[Practice]
Web-based Tool Overview
Capstone Project

Digital Tool: Thinglink
https://www.thinglink.com/edu

Description of Tool: Thinglink is a web-based tool that allows participants to explore or create multi-media, interactive content poster. You can create a page for any topic. It is intuitive for students and easy to share a link. You can sign up for a free account.

Pedagogical Uses for the Classroom:
1. Learning Styles: This is a visually rich tool that would appeal to the visual learners, especially since you have the option of tagging videos or articles with diagrams or other visually interesting pieces.
2. Exploration: The multi-media poster is created with multiple “tags” that students click on to read articles and watch videos on the subject. Students navigate through the tags located on the poster to learn about various subject. Teachers can also tag various articles that relate to the unit’s big questions and have students search through to discover an answer.
3. Differentiation: Teachers have choices on what articles they tag. Knowing reading levels vary throughout their classes, teachers can create multiple pages with articles that cover different reading levels and assign these articles according to student needs.
4. Active Learning: Students are actively engaged in searching, reading articles, and watching content videos. If students are creating a page, you can add an aspect where students have to write an explanation as to why they tagged the articles and videos that they did.
5. Choice: When students are exploring the topic, they have choice in the order of searching through the content. When creating their own page, students have creative choice in the visual background and choice in the content added to their multi-media presentation.

Components of the Tool:
- My Media Dashboard: This holds the different multi-media posters you have created.
- Make a Thinglink Page: This is how you create a Thinglink multimedia poster. You can add media as well as write comments within the page.
- Explore: Allows you to search previously created Thinglink posters from other authors and use them for your class.
- Share/Export/Embed: Makes it easy to share your specific Thinglink poster with class

How does it work?
Link to Screencast Instructions

Your turn:
Practice
Web-based Tool Overview
Capstone Project

**Digital Tool:** Todays Meet
https://todaysmeet.com/

**Description of Tool:** Todays Meet is a web-based tool that allows participants to discuss various topics in a chat room style format. It is very intuitive and easy for students to use. Students receive a link to join the discussion. You can sign up for a free account.

**Pedagogical Uses for the Classroom:**
1. **Social Learning:** Todays Meet is structured like a chat room, so students can have online discussions about a variety of topics.
2. **Active Learning:** While a teacher is lecturing or students are discussing a topic, students can be actively engaged by asking questions, discussing the ideas being talked about, making suggestions, and adding their thoughts.
3. **Prior and Real-world Knowledge:** Teachers can post links to articles and videos about current events. Students can discuss what is happening currently in the real-world that is applicable to their lives.
4. **Open-ended Questions:** Teachers can ask open-ended questions and have students discuss. Students can create their own open-ended questions and post them in the chat board for more student-centered discussion.
5. **Check for Understanding:** Students can ask clarifying questions while the lesson is happening. Also, a teacher can pause during a lecture and ask all students to simultaneously respond to a question on Todays Meet that checks for understanding.

**Components of the Tool:**
- **Dashboard:** This is a list of all the chat rooms you have created.
- **Make a new room:** This is how you create a Todays Meet discussion. You can give your chat room a name and ask a question.
- **People and Privacy:** Allows you to decide if you want people to join in through the link or if people need to use a password.
- **Share/Export/Embed:** Makes it easy to share your specific chat room with a class.

**How does it work?**
[Link to Screencast Instructions](#)

**Your turn:**
[Practice](#)
WORKS CITED


