

**The Impact of Multimodal Approaches on Language Acquisition and Academic
Performance for English Language Learners**

by

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Abstract

Multimodal approaches such as technology incorporation, interactive activities and visual aids have had substantial positive impact on English language learners, as well as other students in their academic performance and language acquisition. The problem is many teachers still heavily rely on traditional teaching methods in their classroom which does not meet the unique learning styles of language learners. Inadequate instruction traditional teaching methods present and the lack of engagement and motivation for the students. Multimodal approaches have positive effects on student language learning and academic success. My goal is to share my research and professional development to teachers to help guide them in changing their traditional teaching methods to a multimodal approach that will strengthen student's academic performance, language acquisition, engagement in materials and motivation to learn.

Keywords: Multimodal approaches, technology incorporation, instruction traditional teaching methods, English language learners, professional development.

Chapter 1: Introduction

Multimodal approaches foster modes of meaning through linguistics, audio, visual, spatial and gestural elements. These modes of meaning making are vital in the students' process of learning as they interact with language. When a variety of our senses are being used and engaged to create meaning making, it is easier to remember and understand the content. Many teachers heavily rely on traditional teaching methods such as lecturing, and pencil to paper note-taking, to teach language, which fails to meet diverse needs for English language learners. Sharma (2024) explains many traditional teaching styles have been criticized "for its inefficiency in the development of communicative competence for many years" (p. 23). This issue results in inadequate language acquisition and academic performance, as well as, decreased engagement and motivation. However, the real question is how do these multimodal approaches impact the language acquisition and academic performance of English language learners while being immersed in English language education?

Throughout my experience as a classroom teacher, I have worked with a wide variety of students. The past few years, I have specifically worked with special education students where the curriculum and materials are modified to fit the student's individual needs. As I have been studying and learning about how to teach English language learners, I have been thinking about some of the techniques I have used in my classroom. The incorporation of technology, visual aids, and interactive activities has impacted my student's learning abilities for the better. This has me wondering if the same techniques and strategies were incorporated into general education classes with English language learners or ENL pullout services, if it would have the same positive impact on their academic performance and language acquisition. Many teachers heavily rely on traditional teaching methods such as lecturing, and pencil to paper note-taking, to teach

language, which fails to meet diverse needs for English language learners. This issue results in inadequate language acquisition and academic performance, as well as decreased engagement and motivation.

When I first started teaching, I was a substitute teacher in various classes grades 3-6. I would see the struggles that English language learners would have when the instruction was filled with too many English words that they did not know. I would watch them sit in class, not understanding the lesson and quickly losing interest. Which would eventually lead to them falling too far behind in their academics and language performance. While thinking about a topic for my capstone project, these specific students stood out to me and had me thinking what if there were more visual components? Or what if they could use technology devices to help them understand the new lesson? Or what if the teacher incorporated more interactive activities that they would be excited to learn about? Through my research for this capstone project, I know I will find valid information that will show the positive impact that each of these techniques will have on English language learner's academic performance and language acquisition. I am looking forward to learning and being able to incorporate my findings into my own classroom.

Multimodal approaches have shown to have a great impact on a student's education. The most common multimodal approach in the 21st century is the positive incorporation of digital technology. We live in a world where technology can be incorporated in various ways throughout a lesson. Tour and Barnes (2022) explain, "digital technologies allow for the creation of multimodal texts that combine various modes of meaning-making such as language, images, sounds, gesture and space" (p. 243). The incorporation of digital components for multimodal purposes in the classroom for English language learners has become more prominent in the past few years. However, many teachers and educators are still reluctant to include it in their daily

lesson planning. With further research and professional development meetings, educators will be exposed to the significant impact it will have on all student's education.

Another multimodal approach that is significant to increasing student engagement and motivation is the incorporation of interactive activities and visual aids in the classroom. Lee (2014) discussed that many of our student's connect meaning through art, music, movement, and many other hands-on components (p. 55). As teachers, if we incorporate these elements into curriculum teaching, it will allow for deeper meaning-making through arts-integrated multimodal approaches. Gustad (2014) has also expressed that when students, especially ELLs, are engaged in stimulating activities, it will increase student motivation, and the overall learning process. The method of using visual aids is another multimodal support piece that will help ELLs and other learners, develop their language skills and enhance academic performance. In the context of ELLs, they rely heavily on visual components as they are developing their English language abilities. Alrajhi (2023) explains that multimodal compositions involve connections between language and visuals, along with other components, to create meaningful messages.

In Chapter 2, I explore these multimodal components and how they incorporated into the classroom while replacing traditional teaching methods. I also discuss how to help ELLs and other students increase their language acquisition, academic performance and motivation abilities. In Chapter 3, I describe a professional development aimed to help guide them in changing their traditional teaching methods to a multimodal approach that will strengthen student's academic performance, language acquisition, engagement in materials and motivation to learn. Chapter 4 concludes with implication for learning and teaching.

Chapter 2: Literature Review

This Chapter outlines learning theories and reviews the literature on multimodal approaches such as technology integration, visual aids and interactive activities, as well as the impact these approaches have on language acquisition and academic performance of English language learners (ELLs). As described in Chapter 1, multimodal approaches have become positive, interactive strategies used in the classroom to teach language acquisition and academic performance. Anggeraini (2018) explains, “Interactive teaching and technology put the emphasis on communication, interaction, and discussion between teachers and students as well as positivity of teachers and students in the teaching and learning process” (p. 1). Using a variety of different modes and teaching methods, such as technology, visual aids and interactive activities, has been proven to increase student performance, engagement literacy abilities and overall academic performance. The modes that we use play a part in the development of making meaning in different ways, and no one mode contributes to meaning making (Lee, 2014).

In this Chapter, I will first examine and explain the theories of constructivism, Krashen’s (1985) input hypothesis, and Gardner’s (1983) multiple intelligences as they reflect both traditional teaching styles and modern day multimodal approaches. Next, I will discuss the research relating to inadequate language acquisition such as traditional teaching methods in the classroom. Along with this is the research proving that students, especially ELLs, need engaging and motivating materials to acquire adequate language acquisition and academic performance in the classroom. Lastly, I will discuss the importance of incorporating multimodal approaches such as technology-integration, visual aids and interactive activities in the classroom.

Theoretical Insights on ELL Instruction

By studying and transforming relevant theories, including Krashen's (1985) comprehensible input hypothesis and Gardner's (1983) multiple intelligences, teachers can create new strategies and concepts of teaching that will enhance student learning. These two theories can support the teaching method of incorporating technology, visual aids and interactive activities to enhance language acquisition and academic performance for ELLs.

Krashen (1985) Comprehension Input Hypothesis argues that learners can acquire language through understanding messages. This is done by understanding input that contains structures at our next stage. These are structures that are a little past our current level of understanding. As Krashen (1985) explains, "We move from i , our current level, to $i + 1$, the next level along the natural order, by understanding input containing $i + 1$ " (p. 2). This means we are able to understand language containing grammar we are not familiar with by using content knowledge, our knowledge of the world around us, and previously acquired language components. In a sense, through the process of incorporating multimodal approaches such as using visual aids and interactive activities, students can develop this comprehensible input in diverse and engaging ways (Bailey & Fahad, 2021).

Students can use visual aids to acquire new vocabulary and how to use them in the context of literacy reading writing. As well as, using interactive activities to help acquire new language through hands-on exposure. Interactive activities will allow students to stay engaged and motivated during language acquisition, which will help develop comprehensible input. In order for comprehension to occur, the students need to be engaged and motivated to learn. According to Krashen, many aspects of language include vocabulary and syntax learning are subconscious and happen automatically when the learner is attentive on meaning making.

Building on Krashen's (1985) theory, it is important to recognize that learners have different ways of processing and internalizing information. This understanding is what Gardner's (1983) multiple intelligences theory posits. To Gardner people have many different types of intelligences, including visual-spatial, linguistic-verbal, logical-mathematical, body-kinesthetic, musical, interpersonal, intrapersonal, and naturalistic. Relatedly, multimodal approaches can promote multiple intelligences, such as linguistic and kinesthetic intelligences, by incorporating technology, visual aids, and interactive activities. (Manic et al., 2017). Linguistic intelligence is the ability to use words effectively in the verbal or written form. Bodily-kinesthetic intelligence implies using the entire body or part of the body for problem-solving (Manic et al., 2017). For example, when students are engaged in interactive discussions or partner work they are channeling their linguistic abilities. As many students participate in interactive activities through hands-on experiences they are using their kinesthetic abilities. Through the incorporation of many different multimodal approaches, students will use their multiple intelligences to process and develop their new language abilities, as well as additional academic content areas.

Building on Krashen's (1985) theory and Gardner's (1983) multiple intelligences is Jean Piaget's (1964) Constructivism. Constructivism has been fabricated into many different forms with the changing of time throughout the past hundred years. Different types include Piagetian constructivism to radical constructivism, or from social constructivism to sociocultural approaches (Larochelle, 1998). According to Wang et al. (2024), constructivism is learning through meaningful interactions when the learner develops a structure of knowledge and perception of their own involvement (p. 903). This constitutes that as students are actively participating in the learning process they will acquire the knowledge of the given task or topic, as

well as, the new acquired language. Creating a learning environment with interactive activities, engaging digital components, and visual aids, will result in high-level processing.

Factors Influencing Inadequate Language Acquisition

Throughout the past few years, as the culturally and linguistically diverse population of the United States has continued to increase substantial, there have been challenges in identifying adequate teaching methods for instructing language and academics for ELLs (e.g., Brice et al., 2006; Sharma et al., 2024). Through these changing times, teachers have not been adequately trained to teach students that are learning English as their second or third language at a later age. Therefore, many teachers are still instructing using old-fashioned teaching methods. This has resulted in insufficient teaching and learning for ELLs and multilingual language learners, as well as the incorporation of a lack of engaging materials for students (e.g., Ntelioglou et al., 2014; Tour & Barnes, 2022).

Traditional Teaching Methods

Traditional teaching methods including grammar-translation method (GTM) also known as lecture-based instruction, are styles of teaching that have been used for many decades. GTM is used to teach English as a foreign language, this method is based on the goal of grammatical competence (Rahman, 2012). However, they do not adequately address the learning styles of new students and specifically English language learners. For example, GTM, which focuses on grammatical structures and translation of the first language to the new language, has been criticized by many linguists “for its inefficiency in the development of communicative competence for many years” (Sharma et al, 2024, p. 23). Focusing on the grammar aspect of language is difficult when the student is first being introduced to the new language.

In addition, the Direct Method is another traditional teaching method often incorporated in classrooms with English language learners (Gohil, 2018). This method, which mainly focuses on instruction in the target language is frequently seen in public school settings; however, most districts lack enough teachers who fluently speak the native language of these students. Therefore, all instruction is conducted in English, and the native language is usually frowned upon when using in the classroom. Another traditional teaching method of English is the Reading Method. This method also focuses on the incorporation of grammar as being the necessary component to reading comprehension. However, this method would not pay any attention to pronunciation or conversation skills, instead it would focus on understanding sentence construction through reading (Sharma et al, 2024, p. 23). With much research, it is now known that reading and observing the structure of sentences is not merely enough to acquire a new language.

Due to the “increasing complexities and criticism” of the traditional methods, modern teaching methods have evolved (Sharma et al, 2024) to better address diverse learning styles and needs. Modern teaching methods including computer-based instruction and inquiry-based teaching, provide interactive activities that attract attention and motivate students (Cook, 2012). Although approaches have shifted the teaching and learning styles for our students, many teachers heavily rely on these traditional teaching methods and are reluctant to change their teaching styles. For example, lecture-based instruction and paper to pencil note-taking is still very commonly used in the classroom. These traditional teaching methods often fail to meet the diverse needs of English language learners and multilingual language learners because they frequently rely on materials that lack the engaging components that modern day students yearn

for in their learning. Which overall will lead to poor language acquisition and academic performance.

The Need for Engaging Materials

Lack of engaging materials can overall lead to reduced motivation which ultimately hinders language acquisition and academic performance. Students in today's world are always engrossed in digital components that have their brains moving at a million miles a second. They are used to having engaging and motivational pieces at their fingertips. If they are not receiving the same stimulating experiences in their school classroom, they will quickly become uninterested and fail to adapt the language and academics they are required to attain. Alrajhi (2023) explains, "DMC (Digital Multimodal Composition) can contribute to more engagement in L2 learning, providing authentic and enjoyable experiences" (p. 3).

Oshima (2024) also explains the effects digital components have had on students since the COVID-19 pandemic. Students were forced to learn and communicate with the outside world via technological devices. The widespread use of videos in online lessons since the pandemic has increased student interaction with technology (Oshima, 2024). Coates (2008) explains the challenges many teachers are facing trying to find engaging materials in the content area of mathematics to encourage students to participate and to help ELLs grasp the concepts. Coates (2008) states, "although many educators feel that mathematics is universal, the communication standard challenges us all to find a variety of ways to ensure that ELLs are participating at all levels in the mathematics classroom" (p. 4). One solution expressed is the incorporation of visual aids.

With the incorporation of multimodal approaches, such as engaging technology, interactive activities and visual aids, the lack of engaging classroom components would be gone.

Students are looking for the involvement of engagement and motivation components, this is what they need in order to learn efficiently. For example, Ntelioglou et al. (2014) described a research study involving an interactive writing project. Students first brainstorm their favorite place and draw a picture of it. Then the students use technology devices to take pictures of this place outside the classroom. Next, they write a vivid and passionate description of what this place means to them. The study concluded that students would become more engaged in the project if their parents and community were also involved (Ntelioglou, 2014). In addition, topics and activities that they are interested in and require them to participate outside of the classroom. With the incorporation of new and engaging activities of projects, students will increase their motivation for learning. When student engagement is increased, all aspects of learning will benefit (Alrajhi, 2023).

Multimodal Approaches

Multimodal approaches to teaching and learning can immerse students into an education that strengthens their language acquisition and academic performance. Multimodal approaches allow for the opportunity for students to use a variety of their senses and abilities to better comprehend all aspects of learning. Technology integration will not only enhance their motivation for learning but will also prepare them for a future in the digital world (Anggeraini, 2018; Cook, 2012; Tour & Barnes, 2022;). Interactive activities ensure that the students are active participants in the learning process (Anggeraini, 2018; Lee, 2014; Oshima, 2024). Similarly, visual teaching methods allow for a classroom environment that is entertaining, motivating and instructive (Kumar, 2021; Cook, 2012). ELLs would benefit greatly from a multimodal approach to learning as they rely heavily on visuals and hands-on interactions.

Technology Integration

Technology integration is defined as the incorporation of curriculum and technology where technology is used to help promote student learning in all areas of education contents (Shahbazi, 2020). Digital technologies allow for modes of meaning-making such as language, images, sounds, gesture and space (Tour & Barnes, 2022). The integration of technology also increases student engagement and motivation. Students are more interested in the topic when digital components are involved. Tour and Barnes (2022) explained that when students are exposed to multimodal digital components it will allow them to feel more comfortable with digital experiences both inside and outside the classroom (p. 254). Research explains that through technology integration students increase their language exposure, strengthen problem solving skills, enhance peer-collaboration skills, and develop creative thinking (Tour & Barnes, 2022). As well as, setting them up for future success as technology will only become more prominent in the future.

Student engagement and motivation can be increased when interactive technological components are incorporated into teaching. Research shows that students have positive attitudes toward different digital multimodal composition products (Alrajhi, 2023). Alrajhi's research composed beneficial outcomes to academic literacy, L2 writing, motivation and identity. Oshima (2024) also explains the positive views students have toward multimodal components. The students in the study show positive attitude changes and feelings towards learning. The study also resulted in positive effects of reading comprehension through the incorporation of video components.

Alexandra Gustad (2014) observed the differences in student motivation and engagement when technology devices were implemented into classroom lessons. Gustad explains,

“Integrating technology in literacy instruction has shown to be particularly effective in the motivation and engagement of ELLs because it provides these students with authentic purposes for reading and authentic audiences for whom to write” (p. 76). Students enjoy having authentic experiences through technology integration. Gustad’s research also concluded that when students were presented with paper-bound, print-based reading materials it was disengaging and restrictive to their learning process.

Many teachers are reluctant to incorporate technology components in the classroom for a variety of reasons. For example, the incorporation of traditional teaching methods such as GTM and the Direct Method (e.g. . et al, 2006; Sharma et al., 2024; Rahman, 2012). Many teachers choose traditional teaching methods over new innovative methods. However, some teachers lack the experience and training with digital devices (Tour and Barnes, 2022). New technological devices are being introduced into the classroom every day. However, if teachers do not receive proper training on how to utilize these devices, they will continue to only practice traditional teaching methods. Brice et al. (2006) explained the need for teachers appropriately trained in and equipped with the skills necessary for the changing times. Furthermore, “If progress is to be made to enhance the use of digital multimodal composing in linguistically and culturally diverse classrooms, greater consideration needs to be given to pre-service teacher readiness” (Tour & Barnes, 2022, p. 256). With proper training, teachers will be able to take their embedded knowledge of teaching strategies and develop strong practices through digital multimodal.

Sara Shahbazi (2020) explored the interactive technology-based program iLitELL. This program is specifically designed to increase to increase literacy skills for English language learners. Shahbazi explains the research observed and concluded the effects on student language proficiency and language development. Teachers who utilized the program to its fullest capacity

observed an increase in student motivation and attitude towards learning. It was finalized that “quality instruction paired with the integration of technology deepens the language learning experiences through non-linguistic features and interactive elements” (Shahbazi, 2020, p. 6). With this being said, it is suggested that educators and curriculum developers include newly acquired materials such as technology incorporation, with relevant resources in regard to student interests that are meaningful and relatable.

Modern day technology components include teacher-designed presentations, animations, and educational games (Cook, 2012). Additionally, technology in the classroom can consist of digital storytelling, podcasts, electronic journals, blogs, and video conferencing (Anggeraini, 2018). Digital components have endless advantages in the classroom. Technology will empower students to be more enthusiastic and excited about his or her learning. Technology plays a positive and critical role in encouraging imagination and motivation inside and outside the school classroom.

Visual Aids

As English language learners are progressing through the process of learning a new language, they rely heavily on the incorporation of visual components. Visual aids include pictures, photographs, posters, diagrams, charts, and additional graphic organizers. These are all visual structures that are examples of non-linguistic representations that we can use to help students develop academic language and content area materials (Coates, 2008). Cook (2012) explains that visuals can display data and organize complex information that may be difficult to describe verbally (p. 65). This can allow for in-depth comprehension on language elements or on a given academic topic. Multimodal compositions involve connections between language and visuals, along with other components, to create messages (Alrajhi, 2023).

With familiar visuals incorporated into the classroom, the students will feel more comfortable and open to learning a new language. At this stage in the English learning process concepts should be highly visible. Edmonds (2009) states, “lessons should always begin with a visual aid that will assist ELLs with understanding the concept being taught” (p. 32). The visual aid could be a variety of artifacts such as photographs, diagrams, graphs, cartoons or even direct demonstrations. ELLs first rely on their visual aids to help in the learning process. Kumar (2021) explains, “visual teaching materials play an important role in foreign language teaching in order to make the student active, to ensure that the classroom environment is both entertaining and instructive, and perhaps most importantly, to create a natural environment” (p. 1088). Through the incorporation of pictures and posters, students can find a pleasure and interest towards learning.

Pang (2013) explains that when a student enters an English speaking classroom where they know very little about the English language, there is much hesitation in the learning process. Having bright and colorful visual aids such as pictures and posters displayed on the wall, the student will feel more comfortable. Furthermore, there can be cultural and diverse posters to allow the student to feel welcomed in their new classroom. Visual aids can also include vocabulary written in both the student’s native language and their new acquired language of English. These are just a few elements on how visual aids can be incorporated into the student’s new learning environment to enhance student participation and motivation in learning.

Yanhui Pang (2013) conducted extensive research in the positive impact visual strategies have on ELL reading comprehension. One conclusion of his research stated the incorporation of a bilingual book that will include both the student’s native language and English, along with the incorporation of many pictures. Pang (2013) states, “These activities help the ELLs deepen their

understanding of the book contents as well as practice their memory and summary skills” (p. 53). Pang also explains the extreme importance of including graphic organizers for visual stimulation. There are a variety of different graphic organizers that can be used to enhance student literacy learning. For example, graphic organizers to summarize a story from beginning, middle to end, and graphic organizers for problem - solution or cause and effect (Pang, 2013). “Other visual tools that enhance ELLs’ understanding of book contents include maps or globes to improve understanding of books about travel, world, or habitats” (Pang, 2013, p. 55). To sum up Pang’s research findings, teachers and educators can use visual aids in a variety of different contents to strengthen student language acquisition and all areas of academic learning.

Lee (2014) explored the positive impact art-integrated materials have on student literacy learning. The research specifically investigates Chinese-speaking students who generally rely on a more visual representation to learning. The research explains, “for disadvantaged, disengaged and disenfranchised students, arts particularly provide means to find a way back to learning” (Lee, 2014, p. 58). For students that have not had the same experiences, arts-integration will deepen and develop their understanding of their own experiences. Lee concludes that an arts-integrated multimodal approach was constructive in advancing ELL’s student learning, which concludes that teacher’s curriculum design also benefitted from this approach.

Coates (2008) explains about the incorporation of visual aids regarding student learning in the mathematics content area. Visual tools will assist students in creating a deep understanding about mathematics, “it provides opportunities or developing academic language, and increases brain activity and retention of information” (p. 4). When these visual components are implemented during teaching instruction, the student becomes engaged in the lesson which will overall result in greater academic performance. Through the incorporation of technology and

visual aids, comes the embodiment of interactive activities. Without each of these elements, student engagement and interactions would be minimal.

Interactive Activities

Many students connect meaning through art, music, movement, and many other art integrated components. As teachers, if we incorporate these interactive activities into curriculum teaching, it will allow for deeper meaning-making through arts-integrated multimodal approaches (Lee, 2014). Research has also stated that when students, especially ELLs, are engaged in stimulating activities, it will increase student motivation, and the overall learning process (Gustad, 2014).

Movement is a respectable interactive approach that many teachers use on a daily basis. Many teachers in the elementary grade levels use movement breaks for student motivation and engagement. For example, the program Go-Noodle is a platform where students can watch videos and copy the dance/movement activities. Teachers have incorporated Go-Noodle dances as movement breaks usually when transitioning from one subject to another. It allows for the students to get up and move around before sitting for another period of time. Students have expressed much joy towards this activity and are usually ready to continue with the next lesson after the movement break. Oshima (2024) describes the results of students using gestures and movement with communication (p. 3). When these components were included, student communication, motivation and engagement became more prominent.

Another interactive teaching component that has shifted is the focus of teaching from the teacher to the learner and the learning outcomes (Anggeraini, 2018). This follows the hands-on teaching approach, as well as students being in control of their learning experiences. When students are physically touching learning materials and engaging their kinesthetic intelligence,

they are able to comprehend the learning process more thoroughly. This is very different from traditional teaching methods where the teacher lectures or writes notes on the board that the students were to comprehend.

Anggeraini (2018) also explains that there is a variety of interactive teaching and learning activities that can be distributed into different groups (p. 2). Some involve problem-solving skills such as using mathematic manipulatives; Collaborative learning approaches such as working in a group or with peers; Role playing activities through readers theatre; and interactive assessments with science hands-on materials. These are just a few examples of interactive activities used in the classroom. One way these approaches can be incorporated into an elementary level classroom is through the incorporation of centers. Students can be engaged in a variety of multimodal approaches all within the same period of time. Edmonds (2009) suggests another technique to engage students in learning and confirm the student's understanding of a concept. Edmonds (2009) states, "another technique is to have students explain a concept first; the teacher then repeats the concept but models the scientific language and writes the new terms on the board" (p. 32). This ensures that the students are engaged in the lesson and understand the new academic language.

Jackson et al. (2011) explained the positive effects of incorporating an interactive word wall in the classroom, highlighting that "words are the foundation of knowledge" and "powerful tools used to express ideas, communicate with others, access prior knowledge, and learn new concepts" (p. 45). This being said, creating an interactive activity involving vocabulary words is extremely beneficial to student learning, especially for ELLs. Jackson et al. (2011) further emphasized that an excellent word wall should contain vocabulary related to learning content, student generated material, visual supports including pictures and actual items, as well as, being

able to be seen from a distance in the classroom. To conclude, interactive word walls can have a variety of positive effects on learning. It will increase student engagement and motivation, provide opportunities for students to understand connections, and increase student independence as students can find information when they need.

Each of these multimodal approaches can be intertwined and constructed in a variety of ways to increase student language development and academic performance, as well as student motivation and engagement. Visual aids, along with interactive pieces and technology components can all come together to promote a positive and enhancing student learning experience. In Chapter 3, I will present a professional development event at a local school where I discuss the literature review and specific examples of these multimodal components and how teachers can incorporate these tools into their classroom to enhance student learning.

Chapter 3: Description of the Product and Tools

Research in Chapter 2 has revealed the positive impact that technology, interactive activities and visual aids have on the impact of ELLs' language acquisition and academic performance (Ntelioglou et al., 2014; Oshima, 2024). It has also shown the reasons behind in-engaging materials and unsuccessful traditional teaching methods that are still present in schools today. These issues stem from the lack of training teachers receive on implementing and engaging teaching methods and strategies (e.g., Wang et al., 2024; Sharma, 2024). In this Chapter, I propose a professional development meeting for teachers in a local elementary school to learn about the positive impact that technology, interactive activities and visual aids have on student learning. During this professional development meeting, the teachers will engage in various activities and events to gain understanding on the affect these methods have on teaching and learning. Before I discuss the agenda of event below, I explain barriers to multimodal teaching including,

Overcome Barriers to Multimodal Teaching

As always, during professional development meetings we must be prepared for potential barriers. As discussed in Chapter 2, many teachers feel that multimodal components are not a reality in their classroom due to lack of resources, time, and training (e.g., Sharma, 2024; Tour et al., 2022). However, in this context, these issues have been addressed to allow for these advancements in the classroom. Recently, a new bond was passed in a district wide vote, resulting in the school equipping every classroom with new Benqboards. Benqboards are similar to the traditional digital SMARTBoard, but feature more advanced technology. In preparation for today's professional development event, the staff received basic training on the Benqboard devices the previous day.

Another concern by teachers is the lack of time they have to prepare such interactive activities (Wang et al., 2024; Tour & Barnes, 2022). This school year, the principal has incorporated two additional specials that the students will attend twice a week, STEAM class which incorporates science, technology, engineering, arts, and mathematics, and FLES program which incorporates different language and culture learning. Each of these special areas will also allow for stronger development in language acquisition, academic performances, as well as engagement and motivation for all students. With the incorporation of these new specials, teachers will have two additional preparation periods of 40 minutes each to specifically spend time on creating multimodal lessons that include technology activities and other hands-on interactive activities.

A barrier that I have personally seen often during professional development sessions is the lack of engagement and motivation from the teachers and staff in understanding the advancement and positivity these multimodal approaches will have for the students. Cook (2012) explains that these new approaches have shifted the teaching and learning styles for our students, many teachers heavily rely on traditional teaching methods and are reluctant to change their teaching styles. My goal is throughout this professional development to incorporate interactive approaches that will keep the teachers engaged and motivated to want to learn more about these multimodal approaches to enhance the overall learning of their students.

Agenda of Events

The professional development will be held on Superintendent conference day while the students are not in attendance. It will take place on September 3rd at Lincoln Elementary School. The school consists of grade levels Kindergarten through 5th grade. This event will be the day before the first day of school so that the teachers can learn innovative activities and strategies to

use throughout the entire school year. The event will take place in the library media center. This location was chosen for various reasons; it is large enough to sustain the staff, there are tables and chairs to complete the activities, and there is a new Benqboard (similar to a SMARTBoard, but allows for new technological advances) at the front of the room to display the slideshow and interactive activities. In attendance at the professional development event will be all grade level teachers, special area teachers, service area teachers including ENL teachers and reading teachers, and classroom teacher assistants. The principal of the school is also welcome to join. Even though this is specifically designed for the learning purposes of ELLs, it will greatly benefit all students; therefore, it is significant that all teachers are present.

The event will start at 9 o'clock in the morning. The presenter will be myself along with my colleague who is also an ENL teacher. The event will essentially be three different parts. The entire presentation will be presented in a slideshow form on the Benqboard at the front of the room. The first part that will be about an hour long and will consist of a slide discussing the importance of the professional development meeting, the research behind the problem, and the research supporting the need for these new innovative teaching materials. The next part will be the activities section that will be about another hour long. This part will consist of three centers that the staff will rotate between different activities consisting of technology components, interactive activities and visual elements. The final part will be a concluding part roughly 30 minutes. This will be the opportunity of teachers to share their feedback of the event and activities, as well as ask any additional questions they may have.

Professional Development Presentation

After explaining the agenda of events for today's professional development meeting, myself and my colleague will present the slideshow presentation. As noted, the slideshow will

explain the research of the negative impact traditional teaching methods have on language acquisition and academic performance, the significant need for engaging and motivating components in the classroom, and the research behind the positive incorporation of technology, interactive activities, and visual aids.

Explaining the Research

Before explaining the research development on the problem at hand, I want each member to think back to when they were in elementary school and think about what would have made them excited to learn and be motivated to participate in school activities. As adults, this is something many teachers often forget is that we are teaching young children, and need to think about what would be in the best interest for them.

After this I will begin the presentation by stating that the problem is that many educators are reluctant to use multimodal approaches in the classroom and choose to use traditional teaching methods. The research will explain the inefficient learning components that many traditional teaching methods. Next, I will present the research findings for the significant need of engaging materials for students. This will include the importance since the COVID-19 pandemic and how many students rely on digital multimodal components. This being said, teachers need to adapt their teaching styles to best meet the needs of our student's learning styles.

The next part of the presentation will be the research found on the positive incorporation of technological components in the classroom. In this section, I will also explain the reasons why many teachers are reluctant to use technology while citing research articles. After the technology integration, I will discuss the importance of interactive activities and visual support aids. The research will state the significance of each element, as well as many examples to support the findings.

I will end this part of the presentation by asking each member to now imagine if they were a young child who just moved to this country and could not communicate in English. What if there were no technology, interactive activities or visual aids to support your learning? I will ask the teachers, how would that make you feel and how would it diminish your education. I want the teachers to really get a feel for how important these components are in the teaching field. After the conclusion of the research, I will explain the activities rotation in detail.

Activities

After the slideshow presentation on the research of the overall problem and sought out solutions, the teachers and staff will be separated into three groups to complete engaging and innovative activities. I would like to separate them so that each group has a variety of different grade level teachers with special area and service area teachers. In this case, there will be a variety of different minds working together. In many cases, teachers that work in the same grade level or subject area like to stay together. This activity will allow them to work with different staff members that they may not have worked together with in the past.

The first rotation will be an activity using technology. This activity would be centered around a 5th grade science lesson about kinetic and potential energy. After various lessons and learning opportunities about the topic, students can engage in this technology activity. The activity will consist of three parts on three different slides of a slideshow presentation. The first slide will start with a video that the staff members will watch that reviews the difference between kinetic and potential energy. Next, they will need to work together to answer the fill in the blank questions. They will need to type their answer in the text boxes. The second slide will consist of a roller coaster diagram where the teachers will need to determine where kinetic and potential energy is taking place. They will drag and drop the roller carts into the proper location and

answer the two multiple choice questions at the bottom. The third slide will be a drag and drop activity with different scenarios and having to figure out which belongs in the kinetic or potential energy category. After the teachers have completed the activity, I would like them to discuss as a group which parts they enjoyed or how they would change the elements to reflect their teaching styles.

The second rotation will be an interactive activity also using a technology component. This activity would be centered around a 4th grade mathematics cumulative review session. After students have learned various operations and methods for solving different mathematic situations, they can engage in this interactive review activity. This activity will consist of four different parts separated on four different slides of a slideshow presentation. The first slide will be a drag and drop activity of two-dimensional shapes and having to match them to their corresponding name. The second slide will be a drag and drop activity having to place numbers in order from least to greatest. On the third slide, the teachers will need to determine if various numbers will rounded correctly and then drag and drop them to the true or false category. The fourth activity will be a drag and drop activity categorizing numbers into the prime or composite category. After the teachers have completed the activity, they will discuss their thoughts and ideas of the interactive components.

The third rotation will also be a hands-on activity that will rely heavily on using visual aids to support learning. This activity would be conducted in a 2nd grade classroom after the students have learned the steps of the scientific method. The activity will be a cutting and pasting activity where the teachers will need to put the steps to the scientific method in order. They will also need to place the definition or explanation and visual picture next to each step. Students that are just becoming familiar with the English language can rely on the visual pictures to help them

put the steps in order. After the teachers have concluded this activity, they will discuss the importance of having visual aids to support learning.

Closing

After the teachers have completed each of the three activity rotations, I will first give them an opportunity to mingle and discuss with other colleagues that were not in their group. They will have five minutes to walk around and talk with others. After the five minutes are finished, I will ask for teachers to share their thoughts and ideas about the research and activities. It is with hope that every teacher will be on board to change their traditional teaching methods into materials that incorporate a variety of technological components, interactive activities and visual support aids. I would also like teachers to share their ideas for making these methods more innovative. It is always great to hear others feedback as everyone has different ideas and methods. I would like to answer any questions that teachers and staff may have that could broaden their horizons.

I will conclude the professional development meeting with a statement explaining that as teachers we much change our teaching styles to match the changes of the world we live in. Expressing that our students deserve an education that is going to set them up for success in their future. By diminishing traditional teaching methods and instead incorporating technology, interactive activities and visual aids, our student's academic performance and language acquisition will increase drastically.

Chapter 4: Conclusion

The purpose of this research was to prove to teachers that traditional teaching methods do not adequately support the learning abilities of English language learners, as well as many other students in the changing 21st century (e.g. Sharma et al., 2024; Brice et al., 2006). This being said, the research has shown that a multimodal approach using technological devices (Tour et al., 2022; Alrajhi, 2023), interactive activities (Lee, 2014; Gustad, 2014) and visual support aids (Cook, 2012; Kumar, 2021) is greatly beneficial in increasing student academic performance, language acquisition, engagement and motivation for learning.

The question that has led this research: how do these multimodal approaches impact the language acquisition and academic performance of English language learners while being immersed in English language education? as well as the increasing problem that many teachers heavily rely on traditional teaching methods to teach language which fails to meet diverse needs of ELLs. As addressed in Chapter 2 and Chapter 3, multimodal approaches benefit the academic performance and language acquisition for ELLs and with the hope of additional professional development events, teachers will change their traditional teaching methods to a multimodal approach that will benefit their student education.

Implications for Student Learning

Students of all ages, including ELLs and other students, will greatly benefit from a shift in teaching styles. As the research has proven traditional teaching methods do not enhance student learning as it once did many decades ago. ELLs do not receive the proper language instruction needed from traditional teaching methods such as the direct method, pencil to paper note-taking and lecturing. As discussed in chapter 2, students need to be emerged in multimodal approaches such as technology integration, interactive activities, and visual support aids, to

enhance their learning experiences. Students in the 21st century are surrounded by digital exposures and engaging materials on a daily basis. Specifically, post COVID-19 pandemic, young children rely on technology to entertain and motivate themselves.

Implications for Teachers

As discussed in Chapter 3, a professional development seminar will help make teachers aware of the changing times and the need for a well-developed multimodal approach to teaching. As expressed in the powerpoint presentation, my goal was to fully immerse the teachers into the lives of our students. Having them close their eyes and imagine what it felt like to be a young child again and what they would have liked to spend their school day time doing. I also wanted the teachers to imagine if they were a young ELL students who just transferred to a school where they did not speak the language, did not understand the culture, and had no way to communicate with anyone. My hopes were that this allowed the teachers to realize how heavily these students must rely on technology, especially for the ability to translate languages in the early stages of language acquisition, interactive activities to engage in hands-on materials when the English language is still too complex, and visual aids to help them understand the learning content.

Recommendations for future research

Recommendations for future research would include additional multimodal approaches that will increase student performance in all education areas, as well as continue to increase student engagement and motivation. Teaching strategies and student interests are always changing. Therefore, as society continues to change and move towards a more advanced future, teaching styles and methods will also need to adapt to this change.

Additionally further research and instruction as professional development seminars need to be implemented in various school districts around the country and even around the world.

Teachers and educators need to be aware of the negative impact traditional teaching methods have on student academics and will hopefully decide to incorporate a multimodal approach to learning in their classrooms. Creating a multimodal experience in classrooms will strengthen student academic performance, language acquisition, and set them up for success in their future endeavors.

References

- Alrajhi, A. (2023). EFL learners' perceptions and attitudinal fluctuations toward digital multimodal composition: A longitudinal approach. *International Journal of Computer-Assisted Language Learning and Teaching*, 13(1).
- Anggeraini, Y. (2018). Interactive teaching: Activities and the use of technology in EFL classroom. *Language Circle: Journal of Language and Literature*, 13(1)
- Bailey, F., & Fahad, A. K. (2021). Krashen revisited: Case study of the role of input, motivation and identity in second language learning. *Arab World English Journal*, 12(2), 540–550.
- Brice, A. E., Miller, K. J., & Brice, R. G. (2006). Language in the English as a second language and general education classrooms: A tutorial. *Communication Disorders Quarterly*, 27(4), 240–247.
- Coates, G. D. (2008). A visual approach to teaching and learning mathematics. *Connect Magazine*, 22(1), 4–7.
- Cook, M. (2012). Teaching with visuals in the science classroom. *Science Scope*, 35(5), 64–67
- Edmonds, L. M. (2009). Challenges and solutions for ELLs. *Science Teacher*, 76(2), 30–33.
- Gardner, H. (1983). *Frames of mind: A theory of multiple intelligences*. Basic Books.
- Gohil, J. (2018). Effectiveness of direct method and traditional method of teaching English. *International Journal of Research and Analytical Reviews*. 5(2)
- Gustad, A. R. (2014). The impact of technology tools on literacy motivation on elementary school English language learners: Podcasting in a 4th grade EAL class. *International Schools Journal*, 34(1), 75–84.
- Jackson, J., Tripp, S., Cox, K. (2011). Interactive word walls. *Science Scope*, 35(3), 45–49.
- Krashen, S. (1985) *The input hypothesis: Issues and implications*. Longman Group

- Kumar, T. (2021). The impact of written visual materials in the development of speaking skills in English language among secondary level students. *Journal of Language and Linguistics Studies*, 17(2), 1086-1095.
- Larochelle, M., Bednarz, N., Garrison, J. (1998). Constructivism and education. *Cambridge University Press*.
- Lee, H. C. (2014). Using an arts-integrated multimodal approach to promote English learning: A case study of two Taiwanese junior college students. *English Teaching: Practice & Critique (University of Waikato)*, 13(2), 55–75.
- Manić, M., & Ranđelović, D. (2017). Level in which students prefer different types of Gardner's Multiple Intelligence. *Journal of Educational & Instructional Studies in the World*, 7(2), 55–64.
- Ntelioglou, B., Fannin, J., Montanera, M., Cummins, J. (2014). A multilingual and multimodal approach to literacy teaching and learning in urban education: A collaborative inquiry project in an inner city elementary school. *Frontiers in Psychology*, 5(533) 1-9
- Oshima, S. (2024). Effectiveness of a multimodal approach during online reading strategy instruction. *Reading in a Foreign Language*, 36(1), 1-20.
- Pang, Y. (2013). Graphic organizers and other visual strategies to improve young ELLs' reading comprehension. *New England Reading Association Journal*, 48(2), 52–58.
- Rahman, F. (2012). Grammar translation method. *University of Ahmad Dahlan*
- Shahbazi, S. (2020). Finding the right fit: Exploring ESL teachers and students' perceptions of iLit ELL, a technology-based literacy program's use with high school English language learners. *International Journal of E-Learning & Distance Education*, 35(1), 1–34.

- Sharma, N., N., P. M., & Joshi, H. (2024). Traditional vs modern English language teaching methods: Study based on a survey. *MIER Journal of Educational Studies, Trends & Practices*, 14(1), 21–36. <https://doi-org.brockport.idm.oclc.org/10.52634/mier/2024/v14/i1/2465>
- Tour, E., & Barnes, M. (2022). Engaging English language learners in digital multimodal composing: Pre-service teachers' perspectives and experiences. *Language and Education*, 36(3), 243–258. <https://doi.org/10.1080/09500782.2021.1912083>
- Wang, Q., Ge, S., Yahya, A. N., Khalid, N. M., & Li, J. (2024). Exploring eengagement and efficacy in secondary English education in China: A Problem-Based Social Constructivism Approach. *Journal of Language Teaching & Research*, 15(3), 902–910.

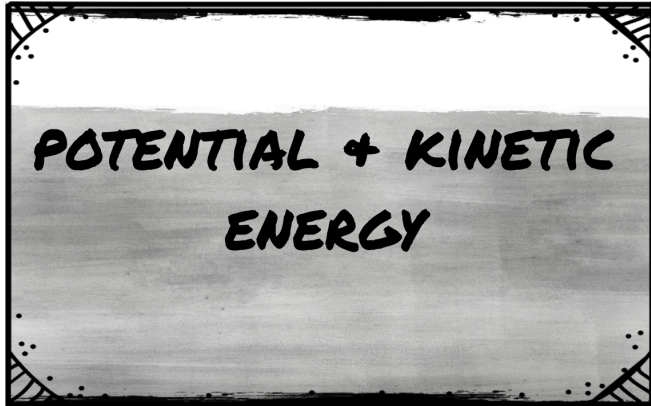
Appendix A

Professional Development Presentation with Voiceover

<https://voicethread.com/myvoice/thread/28567163>

Appendix B

Activity #1 - Technology integration. Kinetic and Potential Energy



ENERGY

Energy is the ability to do work.
It is how things change or move.

Energy takes many different forms. Two of these forms are **potential** and **kinetic** energy

ANSWER THE QUESTIONS AFTER WATCHING THE VIDEO

1. [Click to add text](#) energy is energy in motion.
2. [Click to add text](#) energy is stored energy, depends on position.
3. What adds more kinetic energy: mass, speed, or length? [Click to add text](#)

PRACTICE

Place the carts on the roller coaster to show where they would have potential and kinetic energy.

Which cart has the **most potential** energy?
 cart A cart C
 cart B cart D

Which cart has the **most kinetic** energy?
 cart A cart C
 cart B cart D

SORT THE EXAMPLES

Drag the tiles to correspond to the type of energy they have




Kinetic Energy	Potential Energy
<input type="checkbox"/> A ball thrown in the air <input type="checkbox"/> A roller coaster going down a hill <input type="checkbox"/> A person falling down <input type="checkbox"/> A ball rolling downhill	<input type="checkbox"/> A glass sitting on the edge of a counter <input type="checkbox"/> A ball sitting on the top of a hill <input type="checkbox"/> A roller coaster at the top of a hill <input type="checkbox"/> A stretched rubber band <input type="checkbox"/> A baseball sitting on a tee <input type="checkbox"/> Skateboarding downhill

Appendix C

Activity #2 - Interactive Activity. Mathematics




Matching 2D Shapes




Drag the puzzle pieces to match the shapes with the names.

rectangle	triangle	
pentagon	oval	
octagon	rhombus	

Ordering Numbers

Order each set of numbers from least to greatest by dragging the cupcakes onto the lines.



True/False Rounding

Drag the number tiles to the proper boxes based on whether they have been correctly rounded to the place of the underlined digit.

True	False	486,541 → 490,000
		326,846 → 327,000
		904,372 → 900,000
		31,23 <u>9</u> → 31,300
		837,4 <u>5</u> 6 → 837,000
		62,872 → 60,000
		553,792 → 554,000
		730,4 <u>2</u> 8 → 730,500
		6 <u>9</u> 4,832 → 700,000

Prime/Composite Sort

Drag the coins to the proper boxes based on whether they are prime or composite.

		2	3	5
		6	7	9
		10	11	13
		17	19	27
		32	41	46
		64	71	77
		78	86	97

Appendix D


Activity #3 - Visual Aids. Scientific Method - Cutting and Pasting Activity

Name: _____

Scientific Method

Directions: Cut out the pieces below. Paste the steps of the Scientific Method in the correct order. Match each step to the appropriate explanation and picture.

STEPS:	EXPLANATION:	PICTURE:
1.		
2.		
3.		
4.		
5.		
6.		

An educated guess	Ask a question			Test your hypothesis	Share your results
	Tell others about your findings	Gather information from books and the internet	Research		Ask a testable question about an observation
Make a hypothesis		Collect measurements and interpret the information	Analyze data and draw conclusions		Design an experiment