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EdTech Impact Paper:

Impact of Technology, Multimedia, and Multimodal

Engulfed Pedagogy in the Classroom

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During the pandemic the challenges of moving to a virtual learning environment abruptly was a shift that most educators were not prepared for. Specifically for English Language Learners, I feel that they were amongst the top percent of students that struggled and found this virtual shift difficult. As the resources started to arise, the eLearning space began to become more manageable and accessible. In addition, technology began to become the go to resource tool for maximizing engagement in the classroom. The world now operates in a 21st century technology world. Young people are now using technology as entertainment, a study tool, instructional engagement, tutoring, enrichment, etc. Students learning English as a second language should have technological resources that will be helpful to them inside and outside the classroom to equip them to adapt to the language and environment with ease. Society must address the way that students learn. This is the 21st century, we must think about what engages the students and how we can implement the teaching strategies into the classroom. Technology has taken off in many different fields. The classroom is one of the last places that technology has found its way into. The challenges that education and educators face in terms of technology and other instructional tools would be learning how to enhance the educator’s and student’s digital literacy. Once teachers become equipped in accessing and using technology, it would be easier to make the use of technology more engaging. Professional development is encouraged for educators to thrive in order to expose their students to new innovative ways to learn.

I am a teacher for students learning English as a second language. I believe that engagement is needed in the classroom to help students with retention of what they are learning and motivation to learn. The students learning English in this digital age would benefit from the addition of Multimedia technology. Incorporating the new 21st century teaching strategies that provide the use of mobile devices and applications that go along with them will be the tool that students need to engage them in their learning. This project is for educators that want to increase their digital literacy, which will increase the engagement while teaching English to students learning English as a second language. The capstone problem or rationale is that there is a need for digital literacy in the classrooms for both teachers and students. The reason for selecting this project is for my classroom to include multimedia so that the students can experience high level engagement using technology filled teaching strategies and multimedia connecting to chosen classroom pedagogy. The beneficiary of this project is teachers of ELL students struggling to engage the ELL students. Also, educators that would like to improve their digital literacy. The use of multimedia will enhance engagement in the classroom, thus having an easier time retaining information as students learn. The challenges the educators face in this education sector would be grabbing the attention of students. What makes a great teacher is their ability of storytelling and communication. The enthusiasm, excitement, and attention grabbing that telling a story brings are skills that educators must have in the classroom. The second reason is that the educator must provide a variety of teaching strategies catered to individual students' learning styles that incorporate their multiple intelligence types. Lastly, educators need to be provided the resources to give students the exposure to a variety of opportunities.

The first article I will discuss talks about the implementation of technology and how it increases English Language Learners overall writing ability. According to the author, English language competency can be significantly boosted by improving writing skills. The increased number of English language learners (ELLs) has brought attention to the use of educational technology as a support for the various ELL writing instruction methods. In this meta-analysis, looking at how well ELL adults' writing quality was affected by educational technology applications. The study's results showed that when compared to traditional instructional techniques, technological applications have a larger effect size (.93 and 1.28 for fixed effect model and random effect model, respectively). The article's study performed subgroup analyses using the following six methodological and substantive factors: technology type, writing genre, program length, program intensity, measures outcome, and research methodology. The study was based on the findings in terms of both educational and research implications (Xu et al., 2019). A few resources for ELL students would include Immersive reader, which is an application that students can use as an accommodation to read the English words aloud to have both visual and auditory perspectives to learning the English language. Google Translate is an application that would be helpful when the students and/or parents are struggling with the English language. Technology can also be used as a communication tool amongst students. Depending on the grade level, the older students can ask questions if they were too shy to ask in front of the class. There are so many additions that technology brings to the table.

This study analyzes digital literacy teaching methods for English as a second language and suggests a crucial multimodal structure to go along with the additional language struggles. The framework offers a perspective for teachers to process and examine the level to which their way to teach language helps students not only think critically, collaborate, create, and problem-solve in formulating and decoding meaning at core and extensive levels but also to increase their language proficiency, which enables them to participate in cultural, economic, and political transactions in the twenty-first century (Dzekoe, 2020). An example of multimodal learning would be a sing along video about a certain topic. This is not only musical, but also an engaging teaching strategy. It is both a visual and auditory learning activity that incorporates the use of technology. Another activity would be a five senses lesson where we touch, taste, see, etc. an apple. This can be multimodal because the students are doing something. To enhance the engagement of this activity, the teacher could include the use of technology such as simply providing a game-like activity that incorporates language learning components. The students can write their observations and draw a picture of their conclusions.

The methods for facing the difficulties of learning English as a foreign language are examined in this next article. This study aims to identify the challenges based on instructors' experiences studying English as a foreign language and also presents broad methods for overcoming these challenges. The results demonstrate that in order to learn English as a foreign language, students must carry out their tasks effectively. However, the outcomes also demonstrate the importance of educators, effective teaching strategies, and realia in inspiring students to advance their linguistic and communicative skills. (Mohammed, 2018) Realia is important in the classroom. This provides the students a way to make connections because they can physically see and touch something tangible. Similar to what I stated about the Apple 5 senses lesson previously. This will build their communication skills because they must talk with one another about what they see, taste, feel. Smell, and hear. Incorporating technology would be great because we can show a variety of examples of what apples look like, sound like when you bite them, and more.

Technology use has grown to be a critical component of learning both within the classroom and outside of the classroom as well. Most language classes use technology of some kind. Bilingual education has benefited from and been enhanced using technology. Teachers can modify activities in the classroom thanks to technology, which improves language acquisition. Technology's significance as a tool to assist teachers in facilitating language learning for their students keeps growing. The use of modern technology in teaching English as a second or foreign language is the main topic of this study. It included several viewpoints that encourage English language learners to improve their technological literacy (Ahmadi & Reza, 2018). The study also defines the terms "technology" and "technology integration," discussed how technology is used in language classrooms, examined prior research on the use of technologies to enhance language learning abilities, and made some suggestions for how to use these technologies more effectively to help students develop their cognitive abilities. According to the literature study, efficient use of modern technologies enhances any language learners' abilities to acquire new languages (Ahmadi & Reza, 2018). Students go home and see technology everywhere they go. The 21st century technological ways have increased the consumption of technology for young children. This created an interest in constant use of technology. Therefore, I believe that it is a great idea to have a balance between multimedia technology use and multimodal engagement. English language learners benefit from the use of technology. Technology changed the game for translating languages. The challenge of teachers understanding students who speak another language is minimized slightly because teachers have a way to communicate with non-English speaking parents or caregivers.

Focusing on what the research indicates as to what makes a successful learning activity, the goal of this study is to discuss possibilities for language instruction and present chances for language development. In particular, the article focuses on how technology could support students’ engagement. Instead of serving as guidelines for task design across a range of English learning environments, the activities and technologies given are meant to serve as examples and inspiration. In order to achieve its goals, this paper first provides a succinct outline of the prerequisites for language learning before outlining the fundamentals of task engagement. Examples and practices of how technology can be used to support task engagement are provided. In order to create opportunities and enhance student learning, language teachers can benefit from looking into the engaging enhancers along with some of the ways they can be incorporated into language activities (Egbert, 2020). The use of technology can promote task engagement in several ways, including by offering materials and handouts for teachers, finished projects such as WebQuests, quizzes/questions, and other things that can be included in the engaging activity. The study listed some of the functions that technology can offer in language learning. Technology offers opportunities for multimodal, multi-dialect input and output, such as text, audio, speech, visuals, video, data. Technology provides peer support and social interaction that have a history of records; Technology can help students build confidence by enabling them to practice endlessly. Furthermore, it gives teachers resources, professional learning communities, opportunities, modeled exemplar lessons, and professional development. Technology can be used to handle almost every element that may be used as a language proficiency builder. Technology may enhance task engagement enablers in a variety of other ways as well. To assist them in integrating the engagement enhancers in ways that are most beneficial in their contexts, teachers are urged to learn about their students and local accessible technology (Egbert, 2020).

This study offers a systemic connection model that combines the online self-regulation of English language learners with their motivation. 293 Chinese university students were given 2 questionnaires: Online Language Learning Motivation and Online Self-regulated English Learning. The findings showed that virtual language learning motivation is composed of five elements: expectations from others, interest in culture, online language learning experience, self- efficacy, and motivation. Ambition , time management, environment organization, help-seeking, task approaches, and self-evaluation are the six components that make up OSEL (Zheng, 2018). According to the path analysis, students who have a favorable future perception of their language learning and who have an innate interest in English culture are more likely to be able to self-regulate in virtual learning environments. However, students who study English to improve their academic performance may be less motivated to engage in online self-regulated learning. The unfavorable correlation between English language learners' online self-regulatory activities and prior online learning experiences is also noteworthy. The self-regulatory learning process of learners who had favorable online learning experiences tended to be more adaptable and independent. It also covered how to increase learners' innate enthusiasm in studying English, create more useful online exercises, and inspire them to envision a successful future self. Learning a second or foreign language is a very difficult task (Zheng, 2018). In order to endure and ultimately succeed when faced with difficulty in learning a language effectively, learners must depend upon a variety of cognitive, emotional, and behavioral elements. A crucial predictor of learners' ongoing efforts and future learning successes is thought to be motivation. According to the findings in the article, language teachers have a difficult time inspiring language learner. He proposes focusing on students' ability to self-regulate in order to enhance the motivated impacts of language education. Learning that is self-regulated by students is neither simple nor automatic. It often needs a higher degree of engagement and demands more time and effort. In this sense, learners' motivating beliefs like self-productivity, motivation perspectives, or goal orientations might be particularly important in promoting their self-regulated learning. They found that there is a close relationship between English language learners' motivational self-system and their online self-regulatory mechanisms. The motives of learners should be considered while designing, implementing, and evaluating web-based English language learning for English speakers, according to researchers and education application developers (Zheng, 2018).

The strategy of learning through online gaming has grown, but research on the elements and results of using digital games to advance language learning are rare and far between. In terms of sample characteristics, methodological features, gaming characteristics, and a relationship between game access and gaming qualities, this scoping review examines existing practices of digital game-based language learning to assist English language learning. According to the article vocabulary is the most frequently used language skill, the large percentage of methods used were measurable with tests created by the researchers, commercial games contain the majority of the good game qualities, and the use of great gaming components is incongruent among digital games. There is still more to discover in terms of development on how gaming activities in mobile learning environments may enhance language-learning outcomes as educational technology continues to revolutionize language learning (Xu, 2020). The characteristics of a game are intriguing for students. There are badges, gifts, coins, and levels that would be awarded when a student reaches a certain number of points. The level increases and increases while the students are amazed at how far they have come. It is very rewarding for students to use game-like achievement programs to support their learning. Provided that the students play video games, they can find connections in how to participate in the games and be stellar players. For English language learners, the game like programs will have audio and visual components to the program to assist the students in their journey to obtaining a higher proficiency. Technology has become an encouragement for the students to learn the English language. They are able to do more than ever before. Finding new ways to process information is the goal. Gardner's theory of multiple Intelligences is what teachers should take in consideration when deciding how to use technology in the classroom.

According to the article on using technology to teach critical thinking skills, there are five ways that an individual can enhance their ability to critically think. They are as follows: Academic success can be enhanced by engaging students in interactive activities and games. Complex concepts and procedures are made clearer by using many depictions and models. Environments with lots of technology encourage independent learning. Practice with scaffolding aids in students' skill development. Students can apply their skills in real-world situations thanks to multimedia learning scenarios. (Marczak, 2019). Therefore, instructional tools will absolutely help our students with life skills because they are learning to become independent thinkers and learners. The author's research states that when crucial details and activities are presented to students in a variety of instructional methods and modalities (oral, visual, graphical, and symbolical), they are more likely to understand complicated subjects of any form. Student academic achievement and engagement can both be enhanced by including students in interactive, multimodal activities that encourage elaboration, questioning, and reasoning. Activating prior information, applying knowledge in novel contexts, testing hypotheses, exploring patterns, using logic and evidence to support claims, solving issues, and learning from mistakes can all be accomplished with the aid of simulations and gaming. Active learning encourages learners to take control of their education and increases knowledge retention. By giving students more opportunities to apply their knowledge and abilities, eLearning settings promote critical thought and improve material accessibility. Self-regulated learning, the ability to keep track of, assess, and manage one's thoughts while one completes new tasks, supports critical thinking and knowledge exchange. Technology gives students more possibilities to develop metacognitive abilities by offering substantial modeling, guiding, pacing, and problem-solving. Students have greater chances to innovate and put their knowledge and abilities into action in blended and virtual learning contexts. According to studies, giving students tasks with real-world scenarios that emphasize their grasp and implementation of topic material might boost accomplishment (Marczak, 2019). An example of interactive learning using technology would be the use of augmented reality resources. The educator could do virtual field trips, petting zoo simulation, and/or exploring virtual reality. As simple as using an iPad or mobile device, anyone can see the statue of Liberty through the use of augmented reality programs. The lesson then becomes interactive and multimedia engulfed. This is the goal of exposing educators to new technology and instructional tools to expand the student’s imagination. By doing an augmented reality petting zoo, the students would retain what they have learned on a greater level than just writing about what the animal is and does.

It was discovered that special online features enhanced task performance and engagement, promoting greater genuine and cross-cultural communication, improving motivation and confidence. Creating an empowering virtual identity for students is amongst the special features that virtual learning includes. A traditional English class became a fun online learning environment by incorporating a game element. (Chen & Kent, 2020). Planning lessons that are fun and memorable would be the first step to what makes an effective classroom. The course that I would be creating to equip educators would have to include their digital literacy skills so that they can know how to be creative in many ways. An example of games that this course would expose educators to would be the program Blooket. Blooket is primarily catered to the elementary and possibly the middle school audience. It is a Trivia game like questionnaire. The students would be too busy wanting to reach first place that they would not even realize how much they were learning. Similar to Kahoot with different topics and a variety of questions but with different modes of learning. These are just a few programs that I would introduce to the educators starting out. It is a step away from the traditional classroom that is paper, and pencil driven with a scantron as the format of assessment. Technology not only can be used in the classroom for instruction, but it can also be used as an assessment tool as well. For the educators, you can fill out data for students' achievement, and for students you can use the trivia game or another resource. Learning a new language is extremely hard, this is why the use of instructional tools would aid students in their learning to make connections.

As an educator I want to make sure that students get individualized learning. Especially for English language learners. They require individualized learning because they will all be at different points of background knowledge starting out. Instead of using only one or two teaching tactics, teachers perform best when they use a variety of approaches. Having a variety of approaches guarantees that students never get bored or over stimulated with the same content. Additionally, it guarantees that students will probably be exposed to techniques that fit their desired, unique learning style. With a range of instructional techniques, students will enjoy learning and are likely to be more engaged. In the end, a teacher should match their instructional tactics to the pupils they are working with and the subject matter they are covering. Teachers must learn to evaluate which educational method will be the best match because not every situation will call for a particular strategy. Gardner's multiple intelligence theory is one tool that educators should refer to in order to see what types of teaching strategies to implement in the classroom that caters to the students learning style and intelligence. Some students may not be the reading and writing type of intelligence. They possibly are interpersonal, kinesthetic, musical, etc. Personally, I am kinesthetic and musical intelligence for the most part. For example, I was able to make connections to material I learned in class because the teacher sang a song for memorization.

Student engagement and learner positions are becoming incredibly common in digital language learning in order to expose students to a better understanding of their progress on their learning performance and issues involved in the digital language lessons during the at-home curriculum in the COVID-19 era. This paper makes an effort to investigate how students view their participation in the eLearning process. It also looks into the roles that well-known students play in the online environment of learning and any elements that might have an impact on their motivation or engagement. The findings demonstrate that the vast majority of learners expressed satisfaction with their digital learning. Therefore, to increase the students' active participation in the online course, course designers or teachers should think twice before utilizing suitable and efficient eLearning activities and virtual learning objects. (Sari, 2020) Resources such as Lexia core 5, Blooket, Kahoot, Leapfrog, etc. are great for students to use at home. Because students are competitive natured and love achievement or leveling up, the students would continue to access the resources while at home. English language learners will grow their ability to comprehend English at a faster rate. There are programs that help with pronunciation if the students are at a more advanced school level, a pronunciation application would be a great tool for inside and outside of the classroom. As educators, learning teaching strategies for non-native English speakers is vital in order to provide students with engaging and accurate instruction. Therefore, the quality of the instructional tools needs to be high.

In conclusion, a solution to this problem of teachers losing the attention of the students is to have teachers enroll in professional development courses. I have created a framework prototype for teachers to solve this problem. The project's goal or objectives are for the classroom to include multimedia so that the students can experience high level engagement using technology filled teaching strategies and multimedia connecting to chosen classroom pedagogy. There are 3 objectives that teachers enrolled in this course will acquire. Enhance their ability to teach English Language learners using technology such as mobile devices. Build skills in engaging students using multimodal and multimedia engulfed pedagogy. Discover and use different forms of technology increasing their digital literacy. The setting is the environment I am going to complete my project in the MNPS community of EL teachers. This will be beneficial for all ELL teachers struggling to engage their students and will teach them how to use different forms of Technology. The professional development course would include techniques of storytelling, exposure to multimedia technology activities and resources, and strategies to improve social emotional learning and communication amongst the students and teachers. My plan for evaluation is to assess this project through a level system of obtaining digital literacy badges by doing assignments, research, creating techniques about All things English. It will be a 5 level process to show that one has completed the steps to become successful in this project. The project schedule will be a 3-day course project that will prepare ELL teachers. This training session will include the completion of a multimedia engulfed lesson plan. Most of which is learned the first two days of the training. This will improve the issues in education. There is still so much to unpack about technology use in the classroom. Starting with increasing one’s multimedia technology, multimodal engagement, and learning style engulfed pedagogy techniques and teaching strategies. This will be the steppingstone to then starting to focus on creating equity of opportunity for all students. The English Language Learners would be shown equity of opportunity if the students around them helped the ELL students adapt to the new environment and eventually knew the other similarities and differences. There is a difference between equity and equality. Having an equitable classroom is making sure every student's needs are met on an individual level. Instructional tools are used to enhance the students' communication, collaboration, critical thinking, decision making, assertiveness, self-awareness, and resilience. The use of technology, multimedia, and multimodal engulfed pedagogy the teaching strategies will provide a framework for students to become independent thinkers. Students can use individual tablets and gather knowledge from research and gamification activities will enhance their inquiry abilities and spark their interests to dive deeper in their learning. Therefore, having a system of learning that encourages independence with the incorporation of collaborative group activities is the way to motivate the students to learn at a higher level and increases the students' self-efficacy through self-regulation.

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