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Strategies and Resources for Integrating
Technology into the Secondary Education
World Language Classroom

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A Project Submitted to
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Chapter One: Introduction

Problem Statement

One of the most prominent barriers to the integration of technology into school curriculum is lack of preparedness of teachers with instructional technology resources (Kelly, 2015). The increasing advancement of technological innovations has been challenging conventional approaches to the teaching of second languages. Methodologies of language teaching and learning that were once considered traditional are now being rivaled and replaced by more innovative approaches (Yu, 2022). With the assistance of digital technologies, teachers now have the ability to more easily facilitate self-directed learning, as well as access endless resources beyond the classroom and globally (Bećirović, S. et al., 2021). The wealth of resources available to teachers and students increases every day, but the integration of technology in the teaching and learning of languages is a departure from conventional language teaching methods. Hence, the use of technology in the teaching and learning of languages has been met with mixed attitudes (Stockwell & Wang, 2023). The advent of new technologies in education has created a seemingly endless supply of pedagogical tools for teachers to use, but the expanse of the Internet can leave teachers feeling overwhelmed and under-trained (Kelly, 2015). There is an innumerable amount of ideas for what the ideal modern language classroom should look like. Access to technology and implementation of strategies that integrate technologies into curriculum can greatly affect the perception of the ideal classroom environment. Advantages of technology integration into curriculum could be optimized with ongoing teacher education and training (Johnson et al., 2016).

Importance and Rationale of the Project

As resources on the Internet grow exponentially, and technologies such as laptops, smartphones, virtual reality, and artificial intelligence advance by the day. Despite that exponential growth there is still a considerable disparity between those people and institutions who can afford access to some of these resources and those who cannot (NCES, 2023). The gap is particularly apparent in education. While there is a growing number of school districts across the country that have access to more innovative technological tools, many do not because of lack of funding for them (Johnson et al., 2016). In today's deeply technology oriented society, some level of proficiency with the Internet and other technologies is imperative. Therefore, teaching real-world applicable skills in schools, regardless of the subject area, should include some level of technology use (UNESCO, 2023). Fortunately, most schools in the United States have recognized the benefits and importance of technology integration and proficiency. While most school districts in the United States are well equipped with technological tools and have access to the Internet, teacher preparedness to engage in electronic pedagogical practices remains a major obstacle influenced by their perceptions, beliefs, and attitudes.

Technology integration requires a great amount of time, effort, support and resources to be implemented (Kelly, 2015). In order to feel it is worth the tremendous amount of time that is required to bring technology-based resources into the classroom, teachers must believe that they are useful and will add to the experiences and knowledge base of their students in their subject areas. According to the 2023 UNESCO Global Education Monitoring Report, while many teachers recognize the importance of the use of technology in education and believe that it can enhance their teaching, some are still hesitant or lack the confidence to use it. Contributing factors to their hesitations include lack of confidence with proficiency, feelings of being overwhelmed by the time and energy it takes to implement tech strategies, and procure resources,

and the sheer volume of possible uses of technology. Attitudes also vary among teachers depending on subject and grade level (UNESCO, 2023). World languages tend to be a subject area where teachers can be hesitant to integrate technology into curriculum due to beliefs about the inherent interactive nature of human beings and language acquisition (Bećirović et al., 2021).

Research shows that these barriers are both global and national. In 2023, only 43% of OECD teachers reported that they felt well- or very well-prepared for integrating technology into their everyday lessons. Lack of adequate professional development and ongoing support for teachers in the ever-changing landscape of technology is also perceived as one of the major barriers to technology integration into curriculum. On the national level, according to studies conducted by Durff and Carter (2019), first-order barriers to technology integration have been lowered significantly in the United States over the last decade. First-order barriers include factors extrinsic to the educator, such as sufficient bandwidth, access to the Internet, and access to technology tools and hardware. However, while first-order barriers have been lowered, second-order barriers continue to persist as obstacles to technology integration in the classroom in K-12 schools in the United States. Second-order barriers include attitudes, beliefs, practices and competency with technology. While access to technological tools have increased, 40% of U.S. educators in K–12 schools have failed to integrate technology tools into their classroom teaching. Durff and Carter concluded that by identifying how teachers can overcome second-order barriers, administrators in schools can be better equipped to encourage and assist teachers in overcoming barriers to technology integration.

There is a wealth of research identifying inadequate training and ongoing support as a major barrier to the successful integration of technologies into school curriculum in schools with a ratio of one computer per student. Without addressing this issue, implementation of real-world

applicable, technology-integrated curriculum will continue to be disjointed within schools and subject areas, continuing and widening gaps in quality education that prepares students for the future (Akram, 2022).

Background of the Project

Due to the exceptionally rapid evolution of the Internet and the advancement of technological tools, access to global information is now in our back pockets and at our fingertips. The landscape of every facet of society, including education, is being impacted and changed with each passing day, and there are many changes, both beneficial and harmful, that are predicted to take shape over the next decade (Anderson and Rainie, 2023). In order to keep up with these changes, it seems logical that education will have to evolve and progress with the times. In the 1990s, when computer access in schools began to rise, Ertmer (1999) identified two types of barriers to technology integration in education: first and second order barriers. First-order barriers deal with mainly the factors that are extrinsic to the educator, such as access. Second-order barriers include more intrinsic factors such as attitudes, beliefs, pedagogical practices and competency. In the 1990s, computers in classrooms were relatively new, so most of the teachers during that time did not have experience with them as a part of their everyday lives, and were not trained to use them in their professional settings. As the need for computer training increased, courses were offered for educators, and some schools provided very basic professional development. However, limited access, as well as intrinsic factors such as attitudes, beliefs, and lack of confidence were major barriers to technology integration at the time (Ertmer, 1999). As access has become less and less of a barrier, and teachers who entered the profession in the age of computers in the classroom are now the more predominant generation of teachers in schools, the problem of resistance to technology integration still remains very prevalent (Johnson, A., et

al., 2016). Bećirović, Brdarević-Čeljo, and Delić (2021) found that world language teachers' attitudes and low levels of competence were major barriers to integrating technology-based teaching strategies into their methods. Due to the rapid, constant advances in technology, teachers have difficulty finding the time to keep up with the changes, and cite lack of time, training and professional development as major barriers to developing competency. Not feeling competent leads to a lack of confidence in the use of technology in their lessons. Provision of adequate time, training and modeling are the most commonly requested solutions to these problems (Kelly, 2015).

Because our society is becoming more and more globalized, learning more than one language is considered an asset (ACTFL, 2023). As with all subject areas, finding innovative ways to teach world languages alongside proficiency with current technology can save time and reach multiple types of learners in ways that have never been possible before. Research indicates that technology can benefit teaching and learning in all subject areas, but in subjects such as world language, there is an attitude that taking the "human to human interaction" component out of language acquisition and replacing it with computers and other technology can be detrimental. This attitude has shown to be shared by both teachers and learners (Wesely & Plummer, 2021). However, there is a wealth of information and resources in the world that prove that technology can be successfully integrated into world language curriculum to enhance teaching and learning if implemented correctly. Bećirović, Brdarević-Čeljo, and Delić (2021) found that technology integration into world language curriculum improves student engagement and interest, and can open up a wealth of possibilities in a world language classroom, such as communications with native speakers in other countries, virtual field trips, and games for language learning. In order to be successful and to maximize language learning, it is essential that teachers be educated,

equipped and trained properly to use technology as a tool to complement their knowledge of language acquisition (Stockwell and Wang, 2023).

Statement of Purpose

The purpose of this project is to construct an evidence-based reference manual of strategies and resources, as well as an example unit with sample lesson plans to assist world language teachers with the integration of multiple technologies and technological resources into their curriculum. The examples will be presented in the format of a Spanish language classroom, but can be applied to any world language classroom at the secondary education level.

Objectives

The objective of this project is to create a reference manual of research-based strategies and resources, including a sample unit for technology integration in the Spanish classroom for the Saugatuck Public Schools District World Language department that can be modified and implemented in any world language classroom. This reference manual will be designed to provide examples of how current technology can be interwoven into everyday lessons in the world language classroom, promoting confidence and proficiency with the designing of technology-integrated lessons in the target audience.

All strategies, resources, lessons and sample units will be tied directly to the Michigan Department of Education (Michigan Merit Curriculum) World Language Standards (MDEWLS), as well as the International Society for Technology in Education (ISTE) Standards. Achievement of success in the objective will be measured by survey. Success will be appraised if 70% or more of teachers/world language teachers who examine the reference manual report an increase in knowledge and self-efficacy regarding technology integration into their world language curricula.

Definition of Terms

1:1 Devices - one to one technology. In schools, when each student and teacher is provided a device (typically a computer with hardware or tablet) for their individual use by the district (Harris et al., 2016).

ICTs - Information and Communication Technologies (Ghavifekr, 2015).

Target language - The language that an individual seeks to learn or teach aside from their first language (Morris, 2022).

Teaching strategy - a generalized, structured plan for a lesson(s) which includes desired learner behavior in terms of goals of instruction, and an outline of planned tactics necessary to implement the strategy. The term refers to methods used to help students learn the desired course contents and be able to develop achievable goals in the future. Teaching strategies identify the different available learning methods to enable them to develop the right strategy to deal with the target group identified (Sarode, 2018)

Technology Integration - The practice of embedding technology resources into daily practices of the classroom. It involves students in the unit development process, and affords them the opportunity to identify topics, develop questions, plan inquiry, divide tasks, research information and share the learning process and content (Sarode, 2018).

World Language - A language spoken internationally and learned by many people as a second language. It is a form of communication, essential to the culture of a community, with a system of sounds, letters, symbols, and/or signs recognized and utilized by humans (NDLA, 2023).

Scope of the Project

This project will be a reference manual of strategies and resources to integrate technology into the world language classroom, complete with a sample unit and lesson plans based on scholarly research. The examples will be presented with the target language being Spanish, but world language teachers of any language will be able to adapt and implement these strategies and resources to fit the needs of their own classrooms. The strategies and resources will be tailored to reach multiple tiers of learners using differentiated instruction, allowing for a blend of large group, small group and individual activities. The focus will be on one developed unit, but the methods, strategies, and resources will be adaptable and applicable to the teaching of multiple concepts.

The strategies, resources, and methods may not be suitable for or accepted by every teacher. Factors such as class size, age group, demographics, time frame available, and teacher and student comfort and competency with technology could affect adaptability and ability to apply these strategies and tools. Implementation of the strategies and resources shared will depend heavily on the individual teachers, but the ultimate objective for the reference manual is to promote confidence and self-efficacy with the integration of technology into the world language classroom.

Chapter Two: Literature Review

Introduction

The explosion of technology over the last decade and post-COVID-19 shutdowns has made Internet access a mainstream commodity, and has also given rise to a surge in an unprecedented high ratio student advanced technological device model in schools. According to a study by Akram (2022), teachers' overall perceptions regarding the integration of technology into teaching and learning practices are positive. However, teachers face difficulties with maximizing their use of Information and Communication Technology (ICT) due to inadequate technological competencies, lack of time to create meaningful ICT-integrated lessons, and lack of ongoing training and support.

This chapter provides the theory/rationale for this project, as well as a review of the research, which provides the evidence necessary to support the problem statement, as well as the effectiveness of the strategies and resources presented that integrate technology into world language instruction. It starts with an exploration of Mishra and Koehler's Technological Pedagogical and Content Knowledge (TPACK) framework and Stephen Krashen's five hypotheses of second language acquisition, and their relation to Computer Assisted Language Learning (CALL). The TPACK framework and Krashen's theories will provide the basis for the strategies and resources presented in this project. After the theoretical framework is examined, the next section will review the evidence provided by the pertinent research that will provide the basis for the technology integration strategies and example unit plan that will constitute this project. The literature review will be succeeded by a summary and a conclusion.

Theory/Rationale

The theoretical framework for this project is based on the Mishra and Koehler's (2006) Technological Pedagogical Content Knowledge (TPACK) framework, as well as Stephen Krashen's theories of second language acquisitions. These two theories will provide the foundation upon which the CALL strategies that I develop are constructed. Mishra and Koehler built the TPACK upon Shulman's (1983) pedagogical content knowledge (PCK) framework, incorporating the technological aspect. Hence, TPACK is the basis of effective teaching with technology, combining teachers' content knowledge, pedagogical knowledge, and technology knowledge. This framework stimulates the use of technology in education, but also provides teachers with a cognizance about the integration of technology with content knowledge and pedagogical knowledge (Mohebi, 2021).

The TPACK framework is a theory that was developed to explain the set of knowledge that teachers need to effectively teach their students a subject with the use of technology. Seven components are addressed in the TPACK framework: Technology Knowledge, Content Knowledge, Pedagogical Knowledge, Pedagogical Content Knowledge, Technological Content Knowledge, Technological Pedagogical Knowledge, and Technological Pedagogical Content Knowledge (Mohebi, 2021). Mohebi (2021) defined Pedagogical Content Knowledge (PCK) as a teacher's ability to transform subject-matter knowledge into accessible forms that all learners could master. Mishra and Koehler (2006) stated that it also means that knowing and understanding how ICT may be used to obtain and process information can support learning in combination with PCK. TPACK can be said to be a natural extension of the PCK concept as it incorporates the technological aspect. Hence, TPACK not only stimulates the use of technology in education, but also provides understanding to the teachers about the integration and interaction of technology with pedagogy and content knowledge. The TPACK framework can be applied to

all subject areas. To develop the strategies for technology integration that will be presented in this project, it is necessary to complement TPACK with a theory that is specific to the field of second language learning. Stephen Krashen's (1982) Language Acquisition Theory consists of five principal hypotheses pertaining to learning a second language: the Acquisition-Learning Hypothesis, the Monitor Hypothesis, the Input Hypothesis, the Affective Filter Hypothesis, and the Natural Order Hypothesis. Three of these hypotheses are relevant to the framework of this project: the Acquisition-Learning, Input and Affective Filter Hypotheses.

TPACK requires an understanding of the representation of concepts using technologies, as well as the pedagogical use of technologies in constructive ways to deliver content, and a knowledge of why certain concepts are easy or difficult to learn. This knowledge, along with an understanding of students' prior knowledge, can help resolve some of the problems that students face with learning (Koehler and Mishra, 2006). TPACK acknowledges that knowledge of how technologies can be used to build on existing knowledge to develop better teaching and learning practices. This idea runs parallel with Stephen Krashen's concept of Comprehensible Input Hypothesis: $i + 1$, where i represents the input drawn from students' prior knowledge and 1 the extension in which the teacher adds new concepts or information. Building from learners' current stage of linguistic competence by giving them input that is one step beyond their level of understanding is Comprehensible Input. Krashen's Input Hypothesis emphasizes that in order for language acquisition to occur, teacher talk in the target language must be comprehensible to students. TPACK principles can be used to develop teaching strategies that provide comprehensible input through mediums in addition to the teacher talk.

In relation to technology integration, the "learning" component of Krashen's Acquisition-Learning Hypothesis is the most relevant to this project. Krashen's concept of "acquisition"

refers to the language learner learning unconsciously, which is akin to a person who acquires his or her first language effortlessly in the comfort of their household or community. The “learning” component asserts that learning is the product of formal instruction and the “conscious” process of learning about a language. He contends that the way language is learned is through attending to linguistic forms taught in the students’ first language. This way of teaching, he claims, does not lead to acquisition and proficiency in a second language.

The third hypothesis of Stephen Krashen’s (1982) Language Acquisition Theory that is applicable to this project is the Affective Filter Hypothesis. This theory asserts that emotional states can have a potential effect on the acquisition of language input. The affective filter is a term that Krashen uses to describe the mental block that can be created by several affective variables such as motivation, self-confidence, anxiety, and personality traits. He claims that learners with higher motivation, higher self-confidence and lower anxiety levels are more likely to be successful with second language acquisition. Individuals with lower motivation, lower self-confidence, lower self-esteem and higher anxiety are more likely to experience a higher affective filter, preventing comprehensible input from being optimally used for language acquisition.

A TPACK-based approach emphasizes helping teachers develop and apply their understanding of technology, pedagogy, content, and context. Therefore, teachers, much like language learners, must also have a lower affective filter to effectively become proficient in the integration of digital resources into their everyday lessons. They in turn, properly prepared in their content knowledge, and proficient in the use of technology, can facilitate a low-anxiety environment. Lowering the affective filter through the use of technology to promote confidence and motivation can ultimately lead to effective learning and language acquisition (Rafiquah, et al., 2022) .

While TPACK and Krashen's Language Acquisition Theory are the theoretical frameworks upon which this entire project is built, it is important to note that there are gaps and weaknesses in the application of these theories to certain settings and contexts. TPACK is a theory for technology, which is constantly changing and evolving, and it is a relatively new theory. Hence, of the studies measuring the effects of different interventions, the number of longer-term longitudinal studies focusing on the development of TPACK is minimal. Valtonen (et al., 2019) conducted a longitudinal study that tracked the development and changes in pre-service teachers' TPACK during the first three years of teacher education. The results indicate that teacher training seems to have a beneficial impact on TPACK, with positive gains especially in areas related to pedagogy. They further indicate that teacher education provides strong support for the development of pre-service teachers' pedagogical thinking, providing pre-service teachers with stronger confidence in areas related to pedagogy. Lightbrown et al. (2002) conducted a longitudinal study that revealed that comprehension-based instruction can be effective for facilitating proficiency in beginning level students. However, it can also result in students neglecting to notice features of the target language which would improve their accuracy in areas apart from listening. These findings indicate that some instruction which focuses on language form should be included (Bryson, 2014).

Research/Evaluation

This review of relevant and important literature as a basis for this project will be organized into several sections. The first section will delve into teacher preparation, and the major barriers to technology integration into world language curriculum. The subsequent sections will provide the research upon which the strategies, resources, and example lessons in this manual will be created.

Teacher Preparation. With an unprecedented number of schools post-COVID moving to the 1:1 device model, a positive connection between technology integration and increased student achievement has been shown. A study by Mosley (2013) found that although technology has the potential to positively impact K–12 education, it is currently underused in schools. Durff and Carter (2019) found that a team approach among administrators, technology support personnel, and teachers resulted in the strongest technology integration in schools. Successful strategies included providing congruous professional development, building collegial and collaborative support among staff, and training teachers to procure relevant technological resources. In their qualitative, multicase study, Durff and Carter’s (2019) identified barriers to technology integration, and their causes, by interviewing, surveying and observing teachers nominated by their principals. Their findings indicated that attitudinal barriers were fueled by a lack of confidence in the use of technology, and that professional training, particularly in their own classrooms was particularly effective in promoting efficacy in technology integration into their instructional practices. This study and the solutions provided clearly relate to Krashen’s (1982) Affective Filter Hypothesis. While Krashen’s theories were meant to be applied to second language acquisition, his ideas can also be applied to barriers to proficiency in technology. Technology proficiency and language acquisition have many parallels, especially in the context of barriers to success in each of these domains. Attitudes, beliefs, and self-confidence, all things that can raise the affective filter, have been cited as principal barriers to successful technology integration in many studies, including those conducted by Ertmer (1999), Francom (2019), Johnson (et al., 2016), Kelly (2015), Peng (2023), and Wesley (2021). Provision of adequate time, resources and preparation are among the top solutions to lowering teachers’ affective filters as it applies to technology competence. Rafiq, Yunus, and Susiati (2022) in their quantitative

study, expounded on the debate on quality teacher education, particularly in Technological Pedagogical Content Knowledge (TPACK), which lacks the training component to equip teachers to cope with online learning. TPACK is a framework consisting of a teachers' knowledge, which means they need to be properly prepared to be effective educators. The United Nations Educational Scientific and Cultural Organisation (UNESCO) reported that online education lacks quality because teachers are unprepared for online pedagogical knowledge. Only 43% from high-income countries and 56% from lower-middle and low income countries received training in teaching using online resources (UNESCO, 2020).

In a qualitative study conducted by Koç, Yüksel, and Altun (2021), findings clearly indicated that teachers lacked knowledge in possible limitations of technologies that they use and that they needed guidance and training in pedagogical design strategies. Lack of preparedness was the second most commonly cited challenge consistent with the low mean score calculated in the study for perceptions of ease of technology use. Their findings that teachers need training in technology integration, and that institutional support for professional growth was lacking comply with previous studies by Banegas (2012), Denman, Tanner and de Graaff (2013) and Korbek (2019). This contributes to the debate on quality teacher education, particularly in Technological Pedagogical Content Knowledge (TPACK), which lacks the proper preparation of teachers to cope with online learning. TPACK is a framework consisting of a teachers' knowledge.

Technological Pedagogical Content Knowledge (TPACK). The technology explosion, as well as the movement to online learning during the COVID-19 pandemic, has resulted in a major shift in the emphasis placed on the integration of technology in classrooms. Mishra and Koehler (2006) built off of Shulman's Pedagogical Content Knowledge (PCK) framework to develop a technology integration model called TPACK, because of the fact that new technologies

have the potential to change the nature of the classroom and have already done so. From their point of view, technology could provide access to explanations, representations, analogies, and demonstrations that make the subject matter more accessible to the learner. In his research on TPACK, Mohebi (2021) defines TPACK and its core principles and principal components, and then reviews and discusses methods and activities related to language teaching. TPACK divides teachers' knowledge into 3 categories: pedagogical knowledge, content knowledge, and technological knowledge. According to Bugueño (2013), research indicates that there appears to be an absence of TPACK in language teaching. He defines pedagogical knowledge as teachers' capacity to understand learners' linguistic skills, adapt instruction, and apply second language acquisition theories in the classroom. This type of knowledge permits teachers to design and deliver language lessons, assess students' performance, and create an environment where learners are able to develop communicative competence using authentic tasks. Content knowledge in language teaching is defined by Bugueño as teachers' knowledge about the grammar, structure and technical aspects of the language, and the standards involved in teaching in their specific subject area. Technological knowledge in education refers to teachers' expertise with current technologies and how that technology may be used to promote effective teaching and learning in their subject area.

The Use of Technology to Provide Personalized Language Instruction. One of the reasons technology has become an integral part of today's language learning environment is its ability to provide personalized language instruction and materials enabling learners to select the lesson and adapt it to their needs (Bećirović, 2021). Kumar, Shet, and Parwez (2021) conducted an examination of the effectiveness of technology integration experiences in ELT classrooms using a qualitative and descriptive research design, as well as elements from previous research

and studies. Through an analysis of existing research, they identified emerging trends in the use of technology in the EFL classroom to produce a research-based list of steps and benchmarks in the integration process that are perceived by experts as critical to the success of technology integration in the language classroom. The results of their study also showed that teachers must prepare and deliberate when integrating technology into their lessons if they want to make a substantial impact on student learning. The authors acknowledge that one drawback of this study is its focus on the influence of technology in the teaching and learning of solely English. It is widely acknowledged in the literature that technology has various disadvantages in teaching and learning across all subject areas. And while many findings in these studies can be applied to teaching other world languages, and other subjects, ELT classrooms have their unique characteristics as well that may make the findings not translate in the same way to other subject areas. Additionally, although they were not substantially negative, no major differences in students' success between technology and conventional techniques were seen in at least some experimental trials. This study also did not explain the scientific techniques and the findings of this research. Further work could include development of efficient technologies first, so experimental research could then be carried out to disclose the impact of the technology on students' performance. This article only briefly acknowledged teachers' and students' attitudes, beliefs and perceptions about technology in the classroom, and how they can affect teachers' and students' preparedness to implement it.

While Kumar, Shet, and Parwez (2021) did not address this topic, Bećirović, Brdarević-Čeljo, and Deliće conducted a study in which they analyzed high school students' perceptions of technology-based language learning and their connection to language achievement. The analysis revealed that the participants shared rather positive perceptions towards the use of technology for

the purpose of language learning. Lurdes Martins (2014), in an action research project conducted over two semesters, collected data on the impact of Web 2.0 tools on the implementation of interactional tasks in English language learning. The use of authentic materials related to engagement was extremely positive, because in addition to leveraging students' motivation, it also allowed them a rich and varied input in English, stimulating reading and an autonomous exploration of these resources, attaching meaning to unfamiliar vocabulary. Data analysis indicated a markedly positive impact on the acquisition of vocabulary and the development of writing skills. A critically important finding relevant to this project is that students recognized potential in learning English using Web tools, due to increased opportunities to communicate in the target language outside the physical walls of the classroom. Additionally, the sharing of ideas among participants contributed to the production of more complete outcomes and promoted an increased metalinguistic awareness. Mustafa (2015) produced similar findings in a qualitative research study involving 99 students at an English language teaching at Ishik University. 78.8% of students surveyed strongly agreed that technology-based instruction helps learners develop their language skills over traditional instructional methods.

Vocabulary Building and Practice with Grammatical Concepts Through the Use of Games and Online Activities. There is a growing wealth of language teaching resources on the Internet every day. Interactive learning games and activities can provide comprehensible input in an engaging manner to students of all ages. According to Klimova and Kacet (2017), games create an environment where education is mostly learner-centered, with a good opportunity for socialization when well-organized. They use the term game-based learning (GBL), which they define as training that uses game elements to teach a specific skill or achieve a specific learning outcome, by taking core content and objectives and making them fun. They refer to Ashraf's (et

al., 2014) focus on vocabulary acquisition as the basis of any language to be learned and their perceived advantage of games in vocabulary training because the use of computers and the Internet is natural for children. Students' familiarity and comfort with computers, the Internet and games have the potential to lower the affective filter, therefore promoting better conditions for language acquisition. Ashraf (et al., 2014) analyzed 44 studies/articles conducted between 2010-2016 about the efficacy of computer games on foreign language learning. Their study found that children learning vocabulary by playing digital games were more motivated than children who were taught vocabulary through traditional methods. The study indicated that there were advantages of adaptive computer games because they may be adjusted to a particular student's progress and the play component can be a source of motivation. However, familiarity and comfort with the use of the actual games, regardless of the subject material, was not addressed in the article, and could play a factor in student success. Another factor that could affect success is that it would also be up to the teachers to gather up-to-date information about the Internet and specific websites that are applicable or adaptable to their own content area.

In an analysis by Klimova and Kacet (2017), a study conducted on 24 students aged 16-22 over a period of 15 weeks showed that the experimental group who played online learning games every day outperformed the control group, who were taught vocabulary using traditional methods such as pen and paper, vocabulary lists, and textbook activities. The subjects were given the same test, and the experimental group outperformed the control group, indicating that playing online games can enhance vocabulary acquisition in language learning. This research supports some of the strategies and resources that I will present that will multiple online game platforms that help to drill vocabulary and grammatical concepts. These methods will be based on

principles of Krashen's Acquisition-Learning Hypothesis, where students will be consciously learning vocabulary and grammatical concepts.

There were some limitations of this study in terms of the samples used and the cross-sectional study design. The samples are limited to only second year EFL pre-service teachers in a university in Indonesia. Also, the cross-sectional survey design was used due to time constraints. The time constraints also likely limited the results. Future studies should possibly address these limitations by comparing the TPACK and pre-service teachers' readiness in terms of possibly gender (not included in this study), other subject areas, or year of studies. Limitations could also be addressed by carrying out a longitudinal study, which could provide better insights into the current TPACK model regarding readiness to use technology in online classrooms.

Culture and Online Realia. In the pursuit to effectively teach culture through technology in the language classroom, the integration of the Technological Pedagogical Content Knowledge (TPACK) framework and Stephen Krashen's language acquisition theories offer a comprehensive approach. TPACK emphasizes the intersection of technological knowledge, pedagogical knowledge, and content knowledge, providing a theoretical foundation for educators seeking to incorporate digital tools purposefully into their cultural instruction. Krashen's Input Hypothesis, which posits that language acquisition is optimized when learners are exposed to comprehensible input slightly beyond their current proficiency level, aligns seamlessly with the TPACK framework. According to Dema and Moeller (2012), research on teaching culture has shown that language and culture are closely related and are best acquired together. Technology promotes socially active language in multiple authentic contexts due to its accessibility, flexibility, connectivity speed and independence of methodological approach. It gives foreign language teachers a multitude of opportunities to create better and more effective instructional

materials to teach not only the language structure, but also the target culture. In their meta-analysis, Dema and Moeller (2012), provide numerous research-based examples of how teachers can create online collaborative communities and promote interactivity beyond the walls of the physical classroom. They assert that one of the benefits of technology is that it provides authentic communication in an interactive environment that facilitates the teaching of culture. Through the use of interactive media, students become more engaged with authentic cultural content they can access and explore more freely than printed material, because they have more control over the selection and application of materials and resources. These numerous resources and materials allow teachers to tailor digital media to make culture learning more relevant and accessible to the students in their classroom. With the incorporation of technology, both the teacher and the students become part of the interactive environment.

Research provided by Dema and Moeller (2012) as well as by Kim (2020) support the use of social media and other technologies for language learning by intertwining language and culture. Kim's (2020) article builds an original conceptualization of language learning and teaching that imagines language learning as a tool for developing whole people. Kim (2020) conducted research on the affordances of social media and other technologies for language learning. The research uncovered significant evidence that new media technologies allow learners not only to process but also to practice culturally appropriate speech and interaction autonomously and at a more accelerated rate. Kim explores the interconnectedness of language and culture and advocates for an integrated approach that considers both linguistic and cultural aspects in language teaching. Educators can leverage technology to provide a holistic language and culture learning experience. Kim underscores the importance of moving beyond language proficiency as the sole focus in language education, emphasizing the need to nurture students as

whole individuals with cultural awareness. This perspective aligns with TPACK, encouraging educators to integrate technology in ways that not only enhance language skills but also deepen cultural understanding. Kim (2020), as well as Dema and Moeller (2012) highlight the interconnected nature of language and culture, reinforcing the argument for a technology-infused pedagogy that embraces both dimensions. By integrating TPACK with Krashen's theories, language teachers can be better equipped to design technology-mediated activities that expose students to authentic cultural content, interactive language experiences, and meaningful cultural interactions. By synthesizing these frameworks and drawing on relevant literature such as Kim's (2020) and Dema and Moeller's (2012) articles, educators can construct a robust foundation for technology-enhanced cultural instruction that addresses the diverse needs of language learners in the modern digital age.

Reading, Writing, Listening and Speaking. The integration of technology into language education has emerged as a pivotal force in reshaping instructional strategies for reading, writing, listening, and speaking skills in second language learning. The Technological Pedagogical Content Knowledge (TPACK) framework guides educators in effectively integrating technology tools into language classrooms, potentially providing new and innovative ways to teach these four components of language. Concurrently, Stephen Krashen's influential theories, particularly the Input, Acquisition-Learning, and Affective Filter hypotheses in relation to this project, will also be a guide in the construction of my reference manual of strategies and resources for the integration of technology in the teaching of world languages. A quantitative study conducted by Munzur (2017) investigated the impact of a technology-enhanced reading program on English language learners in a secondary school setting. The study employed a quasi-experimental design, comparing the outcomes of students who used the technology-

integrated reading curriculum with those in a traditional instructional setting. The findings revealed significant improvements in reading comprehension and vocabulary acquisition among students who engaged with the technology-enhanced program. This empirical evidence aligns with TPACK principles, demonstrating that when technology is strategically integrated into language instruction, it can enhance students' engagement and proficiency in reading. This study, however, was implemented on a small sample, which limited the study's outcomes. Information on larger groups of EFL learners could help to generalize the significant outcomes. More quantitative and qualitative methods such as SPPS or observations should also be conducted to compare the advantages with the disadvantages. This article also lacks the research to assess the impacts of technology-enhanced classrooms with other skills such as listening, speaking, and writing, as well as with different levels of students.

A study by Özdemir (2021) examined the effectiveness of collaborative online writing platforms in a college-level language course. The research employed both quantitative and qualitative methods, revealing that students who utilized the collaborative writing platform not only demonstrated improved writing skills but also reported increased motivation and a sense of community in the virtual writing environment. This study supports TPACK's emphasis on pedagogical strategies, technological tools, and content knowledge converging to enhance language skills.

In regard to listening and speaking skills, a notable empirical investigation by Yanguas (2018) explored the impact of technology-mediated language labs on oral proficiency in a high school Spanish class. The study utilized pre- and post-assessments, as well as student surveys, to evaluate the effectiveness of the language lab intervention. The results indicated a significant improvement in students' speaking abilities and a positive perception of the technology-enhanced

language learning experience. This empirical evidence underscores the potential of technology to create interactive and immersive language environments, aligning with both TPACK and Krashen's theoretical frameworks.

Summary

Integrating technology into the world language curriculum requires teachers to have technological knowledge, pedagogical knowledge, and content knowledge (TPACK). Knowledge on how to increase comprehensible input, promote learning through formal instruction, and lower the affective filter (Krashen, 1982) are also essential to being able to integrate technology into everyday activities in the classroom. One of the most prominent barriers to the integration of technology into school curriculum is lack of preparedness of teachers with instructional technology resources (Kelly, 2015). By educating teachers on what technological resources are available and how to use them, teachers' affective filters are more likely to be lowered, allowing them to learn and grow and be better-equipped to implement strategies for technology integration. Technology has the potential to provide personalized language instruction to students, allowing them opportunities for growth beyond the walls of the traditional classroom. Studies by Mosley (2013), Durff and Carter (2019) and Kelly (2015) cite adequate professional development, as well as applicable, area-specific example strategies as solutions to teachers' feelings of lack of preparedness.

Bećirović (et al., 2021) provided evidence that students' perceptions toward technology integration in language learning is very positive. Ashraf (et al., 2014) and Klimova and Kacet (2017) produced data that indicates that the use of online games and activities increases student engagement and achievement in vocabulary building and grammar practice.

Dema and Moeller (2012) provide research that indicates that language and culture are closely related and are best acquired together. Their meta-analysis provides a multitude of research-based examples of how teachers can create online collaborative communities, and find authentic cultural content that promotes interactivity beyond the walls of the physical classroom.

Munzur (2017), Özdemir (2021), and Yanguas (2018) provide both quantitative and qualitative data indicating positive results and high student achievement with integrating technology into lessons that teach reading, writing, listening and speaking, the four components of language learning.

Conclusions

In order for teachers to feel prepared to effectively employ the wealth of technological resources available to assist with language learning, the research indicates that they must have adequate professional development and example strategies. There is an innumerable amount of resources and strategies on the Internet for teaching reading, writing, listening comprehension and speaking skills, as well as vocabulary building and culturally-infused language learning. Teachers can increase their self-efficacy with technology if given adequate time as well as appropriate professional development and real-world applicable examples of technology-integrated strategies. The integration of TPACK, Krashen's theories, and empirical research studies provides a comprehensive understanding of the positive impact of technology on reading, writing, listening, and speaking skills in the language classroom. These insights collectively contribute to a nuanced approach for educators aiming to optimize language learning outcomes through purposeful technology integration.

TPACK requires an understanding of the representation of concepts using technologies, as well as the pedagogical use of technologies in constructive ways to deliver content, and a

knowledge of why certain concepts are easy or difficult to learn. To develop the strategies for technology integration that will be presented in this project, it is necessary to complement TPACK with a theory that is specific to the field of second language learning. To make it relevant to technology integration in the world language classroom, it is appropriate and directly applicable to combine TPACK with Stephen Krashen's (1982) Language Acquisition Theory.

The literature review supports the assertion that one of the principal barriers to technology integration in the classroom is a lack of teacher preparation, which includes a lack of time provided to teachers to prepare. Providing teachers with content area-specific coaching for technology integration has been shown to be a major factor in increasing their preparedness.

The research indicates that students of world languages can benefit greatly from technology integration in the classroom, particularly from the use of online games to teach vocabulary, practice grammar concepts, and practice basic reading and writing skills. The Internet is a rich resource to find cultural realia and provide authentic experiences that reach beyond the walls of the classroom. Lessons that incorporate technology such as online games, virtual reality, social media and news articles are second nature to the modern student, so they provide a measure of comfort and familiarity to the classroom environment that could help lower the affective filter, and therefore promote language acquisition.

Chapter Three: Project Description

Introduction

One of the most prominent barriers to the integration of technology into school curriculum is the lack of preparedness of teachers with instructional technology resources (Kelly, 2015). With the rapidly changing and evolving landscape of technology use in education, teacher roles and student learning behaviors are also changing. As technology advances, the ways of producing, acquiring, and sharing knowledge evolve, and therefore educational collaborative works have also been affected by these changes.

This chapter will first address the project components; which include the description of the local context, the objectives, project conception, and project elements; then it moves to the project evaluation, conclusions, and plans of implementation.

Project Components

Local Context. Saugatuck Public Schools is a small lakeside Michigan school district that covers both Douglas and Saugatuck, Michigan. It consists of one elementary school (Douglas Elementary School), one middle school, and one high school. The middle-high school is in one building. As of 2023, the district had 836 students in grades K-12. Class sizes average 25 pupils to one teacher, but can be larger or smaller, depending on scheduling issues. The district's minority enrollment is less than 10%. Also, 23.6% of students are economically disadvantaged. There are a total of 7 English language learners (less than 1% of the student population) in grades K-12.

The Saugatuck Public Schools World Languages Department consists of only Spanish. There are two Spanish teachers that teach grades 6-12. World Language instruction is not currently offered at the elementary school level. There had once been a FLES program (Spanish)

at Douglas Elementary School between the years 2005-2012, but it was cut due to budget issues in 2012. Subject area departments consist of 2-3 teachers per subject area in the middle-high school. In the year 2014, the Saugatuck Public School District passed a bond that allowed for a significant upgrade in technology resources. Among the most significantly impactful benefits were:

- 1.) The purchasing of Chromebooks for every student in grades 6-12 to borrow for the year for their in-school and out-of-school use.
- 2.) Chromebooks on carts for each student in each elementary school classroom in grades 1-5.
- 3.) MacBook Pro laptops for each teacher, and media carts for every classroom in grades K-12, that consisted of a document camera and projector compatible with all district MacBooks and Chromebooks, a smartboard, a microphone, a sound system, and a DVD/VCR player.

Teachers were provided with two days of professional development that focused on the basics of how to use the new technology, and suggestions to navigate the new district-wide online learning platform. We had one additional professional development day later in the year that focused on check-in and troubleshooting, and reviewing the foundational technology usage skills to ensure that all teachers knew how to operate their new devices. During that session, teachers could use their devices as well as the school technology under the instructors' supervision. Additionally, they were encouraged to explore resources and select the ones that they could utilize to enhance their curriculum and pedagogy. There have been no subsequent professional developments over the years that give guidance to teachers on the implementation of technology strategies specific to their subject areas. While the general consensus from my

viewpoint through collaboration with my colleagues is that most appreciate the autonomy, it has come up numerous times in meetings that teachers still just do not know what is out there, and do not have the time to search for and experiment with new online resources.

Purpose and Objectives. The purpose of this project is for it to serve as a research-based resource guide for language teachers to assist them with technology integration into the world language curriculum. To accomplish this objective, I will create a reference manual of research-based strategies and resources, including a sample unit for technology integration in the Spanish classroom for the Saugatuck Public Schools District World Language department that can be modified and implemented in any world language classroom. This reference manual will be designed to provide specific examples of how current technology can be interwoven into everyday lessons in the world language classroom, promoting confidence and proficiency with the designing of technology-integrated lessons in the target audience. Specifically, teachers will be shown field-tested and research-based strategies and resources such as the integration of social media, learning game sites, and virtual reality field trips for learning about culture. From a broader perspective, these strategies, resources, and examples can be adapted to fit multiple subject areas, and to support the construction and continual adaptation of technology-integrated curricula to keep pace with the ever-changing landscape of educational technology and Internet resources.

All strategies, resources, lessons and sample units will directly relate to the Michigan Department of Education (Michigan Merit Curriculum) World Language Standards (MDEWLS), as well as the International Society for Technology in Education (ISTE) Standards.

Project Conception. The Saugatuck Middle School Spanish program operates in the format of Exploratory rotations. Students rotate to different elective-style classes every six

weeks. Students attend Spanish classes in two different six-week rotations. Every third rotation, students rotate back to Spanish. For the high school program, students meet their two-year requirement by taking two trimesters of Spanish a year for two years. For example, most freshmen will take Spanish 1A first or second trimester, then complete Spanish 1B second or third trimester. The same goes for Spanish 2A and 2B. There is no textbook for middle school Spanish, so teachers must create their own curriculum that aligns with the Michigan World Language Standards and Benchmarks. We arrange our middle school program to be progressive from 6th grade through 8th grade and focus on concepts that they will also encounter in high school, so they already have exposure to them when they get to high school, allowing some units to go more smoothly.

The COVID-19 pandemic cancellations created a 3-year break in the SPS Spanish department's attendance at conferences and professional development opportunities. When our district resumed the funding for conference attendance, my department jumped at the chance to begin learning again. Immediately it became very apparent that in just a 3-year period, many of our technology strategies and resources were outdated, due to the significant increase in Internet and technology language learning resources that resulted from the COVID-19 shifts to remote learning.

Through discussions during networking sessions, we came to the general consensus that many teachers find it extremely difficult to find the time to search for new resources, develop lessons with them, test them out, and work out the potential issues with them. The most cited barriers we noticed related to a lack of time, and insufficient district-provided, subject-specific professional development and modeling. Teachers said they were more likely to implement new strategies, tools, and resources if they saw examples in action first. I identified fully with these

perceived barriers during my numerous discussions with these teachers. I noticed that the most well-attended sessions at these conferences were the ones whose pre-session summary promised to provide examples, materials, and learn-by-doing style workshops. My observations and conclusions based on informal conversations were validated by the extensive research I conducted for this project. I discovered that there is a wealth of information about barriers to technology integration into the world language curriculum, and many of the studies conducted revealed similar conclusions. My department colleague and I both have experienced very high student engagement levels when working with computer-related activities, social media, and other technology-related tools. Throughout my research, I encountered various studies that indicated that this is more than just personal experience. My research made it clear that technology assisted language learning and barriers to implementing technology into curriculum are impactful in my local context as well as in a global context. It was a commonly recurring theme across various studies that teachers are more likely to integrate technology into their classrooms if they are shown how and allowed time to do so. The idea for my project came about with this in mind. This project will provide research-based strategies, resources, and adaptable examples for technology integration that could save world language teachers time and promote self-confidence and self-efficacy.

Kumar, Shet, and Parwez (2021) conducted an examination of the effectiveness of technology integration experiences in ELT classrooms using a qualitative and descriptive research design, as well as elements from previous research and studies. Through an analysis of existing research, they identified emerging trends in the use of technology in the EFL classroom to produce a research-based list of steps and benchmarks in the integration process that are

perceived by experts as critical to the success of technology integration in the language classroom:

- The instructor should know the ownership, availability, and preparedness of the pupils for ICT and should work on the technology taking into account students' unique peculiarities.
- During technology use, the student-centered approach should be concentrated.
- The usage of technology should be designed to ensure that the language learning flow of students can be provided.
- Students' successes should be identified and technology should be utilized based on their successes in listening, reading, speaking, and writing.
- Technology should be employed to enhance the creation of fundamental target language abilities by pupils.
- The use of technology for learning should be promoted for students.
- Technology should offer an environment to use high-level thinking abilities such as critical thought.
- Technology should enable cooperative student learning in and out of the classroom.
- Technology should make language skills easier to acquire.
- The instructor should analyze his/her technological skills and take steps to improve them and stay current.
- The instructor should follow up on current technologies which are available in the discipline and use relevant technologies in the classroom/curriculum.
- Technology should be consistently employed over the whole term, and ICT instruments should be picked for each topic or activity in the language curriculum.

- Applicable, collaborative, active, or constructive technology should form the basis of learning environments.
- The teacher should incorporate technology in a planned and meaningful manner at the level of speaking abilities.
- The teacher should be able to understand the basic language abilities of the digital environment such as listening, reading, speaking, and writing.

These benchmarks by Kumar, Shet and Parwez (2021) will serve as a guide to the construction of the technology integration strategies and the procurement of resources for personalized language instruction presented in this project.

Project Elements. The reference manual, which can be found in Appendix A, is an easy to read and comprehensive document that can serve as a quick reference/guide for world language teachers who would like to construct technology-integrated lessons and units, but find the process time consuming. The manual will be easy to use, with a quick reference guide set up like a table of contents for ease of navigation and use as a quick reference. Each section will briefly summarize the research and rationale for the strategies and resources, then in a concise manner provide a brief description of each. The manual is comprised of 6 sections:

- 1.) A summary of the research I conducted and applied to this project, as well as a synopsis of the theoretical framework on which the strategies and resources are based.
- 2.) Strategies and resources for creating an environment of that lowers the affective filter
- 3.) Strategies and resources for using games and online activities for vocabulary building and reinforcement, and practice with grammatical concepts.
- 4.) Strategies and resources for teaching culture through the use of online realia and

virtual field trips.

5.) A description of strategies for how to choose activities for the teaching and reinforcement of reading, writing, listening and speaking.

6.) Strategies and resources for teaching students to practice online safety when using social media and other platforms for communication in and outside of the world language classroom.

Project Evaluation

An online Google Forms survey will be administered at the beginning of the workshop in which this reference manual is presented (Appendix D). The participants will then be presented with the data in this project, as well as the reference manual of strategies and resources for technology integration in the world language classroom. They will examine it, and I will provide some hands-on practice with some of the activities and strategies from my reference manual and example unit. At the end of the workshop, the post-workshop Google Forms survey (Appendix E) will be administered and data collected. The pre- and post-workshop surveys will be similar, so that I can get accurate information about whether or not knowledge and confidence level increased. The questions will assess teachers' attitudes, confidence level, and perceived proficiency regarding technology integration into curriculum before and after the workshop. The pre-workshop survey will include specific questions, such as, "If provided for me, I would appreciate the help of a technology integration workshop where a reference manual with an example unit plan is provided." Its post-workshop counterpart survey item will read, "With the help of the given reference manual and example unit plan in this workshop, I feel more confident with trying new strategies and resources for technology integration into my curriculum." The data from the graphs provided by Google Forms will display any improvements in participants'

knowledge and confidence with implementing the strategies in the reference manual and workshop. The success of the project will be measured based on whether 70% or more of the participants report an increase in knowledge, confidence, and self-efficacy regarding technology integration into their curricula after participating in the workshop.

Project Conclusions

One of the most prominent barriers to the integration of technology into school curriculum is lack of preparedness of teachers with instructional technology resources (Kelly, 2015). The increasing advancement of technological innovations has been challenging conventional approaches to the teaching of second languages. With the assistance of digital technologies, teachers now have the ability to more easily facilitate self-directed learning, as well as access endless resources beyond the classroom and globally (Bećirović. et al., 2021). The use of technology in the teaching and learning of languages has been met with mixed attitudes (Stockwell & Wang, 2023). The advent of new technologies in education has created a seemingly endless supply of pedagogical tools for teachers to use, but the expanse of the Internet can leave teachers feeling overwhelmed and under-prepared (Kelly, 2015). Advantages of technology integration into curriculum could be optimized with ongoing teacher education and training (Johnson et al., 2016). It is important to keep pace with technological advances, and teaching students to be proficient with technology resources to enhance their language learning. In today's world, technology and the Internet is interwoven into the everyday life of almost all people, and particularly young students. Students need to be proficient with technology in general in order to function in society and given the fact that we live in a global society, learning multiple languages can provide students with many advantages. Integrating the two disciplines

(technology and language learning) kills the proverbial two birds with one stone (Bećirović. et al., 2021).

The research from this project indicates that content area-specific professional development, examples, and learn-by-doing are some of the most effective ways to increase teacher confidence, self-efficacy and proficiency with the implementation of technology integration strategies and tools in the classroom (Peng, 2023)..

The research and literature provided a clearer understanding of the challenges teachers still encounter with technology integration in an age where there are almost unlimited resources available, and computers and smartphones are more accessible than ever. Newer frameworks such as TPACK (Rafiq et al., 2022), in combination with credible and reputable theories such as Krashen's (1982) Second Language Acquisition Theory have enabled teachers to create more engaging, effective and relevant lessons that teach both world language curriculum as well as technology proficiency. Implementation of these strategies and resources can assist teachers with building a world language program that prepares students for our diverse, technology-centered world. It is my aspiration that this reference manual can be a valuable resource to help enhance world language teachers' toolboxes. Ideally, it will provide practical and adaptable ideas to guide them to develop adaptable lessons that help students reach beyond the confines of the classroom, and effectively integrate technology into lessons that facilitate the acquisition of a target language. Language learning methods were constructed through technology tools chosen based on pedagogical knowledge, as well as social interactions with appropriate comprehensible input, while promoting an environment that will effectively lower learners' affective filter.

Throughout the construction of this project, it was intermittently clear that continuing research and development will be needed to keep pace with the ever-changing landscape of

technology in education and in everyday life. This project does not address the challenges of keeping up with the most current resources available at any given time. A possible weakness in this project is that the resources that I researched and supplied may someday be irrelevant, obsolete, or outdated. The research-based strategies will likely outlive the resources provided, but the goal of this project is to assist teachers to challenge and motivate students in a comfortable, technology-relevant environment where they can gain confidence and proficiency in language learning.

Recommendations for stakeholders. Based on the research done in this project, it is recommended that administrators use the data given to construct meaningful professional development opportunities and allow more time for teachers to collaborate and work on technology integration into their curricula. By taking advantage of professional development opportunities to become more proficient with the integration of technology into their curricula, teachers will be better equipped to differentiate instruction for different styles of learners, as well as create more engaging, effective lessons in their content areas.

Limitations. This project does not address other barriers to technology integration, such as schools that do not have access to the technology needed to implement some of the specific strategies outlined in the reference manual and example unit. Throughout the creation of this project, it also became evident that more research is needed to fully investigate strategies that reflect best practice in the realm of technology integration in the world language classroom.

Plans for Implementation

This project will be implemented in a full day workshop, which will include Saugatuck Public Schools (SPS) teachers of all subject areas in grades 6-12 (approximately 40 teachers total) because most of the strategies and examples can be adapted to fit all subject areas. The

first half of the day will include the teachers from all subject areas. The second half of the day, non-world language teachers will focus on the world language teachers. Approximately 5-10 world language teachers will participate from Saugatuck Public Schools, as well as from Zeeland Community Schools, Hamilton Community Schools, and Holland Public Schools.

In the summer of 2023, I obtained permission from the Saugatuck Middle-High School building principal to present my workshop, pre- and post- workshop surveys, reference manual and materials in February of 2024. My professional development/workshop day will be set up as follows:

Part I of the Workshop:

- I will introduce myself, my acknowledgements, my background, and present my objectives for the day.
- I will begin with the pre-workshop survey, allowing participants adequate time to submit results.
- I will then have teachers brainstorm out loud what they think are the main barriers to technology integration in the classroom, and we will have a brief discussion.
- Next, I will present my research, while giving a brief overview of the TPACK framework and Stephen Krashen's Language Acquisition Theory, specifically his Acquisition-Learning and Affective Filter hypotheses, and the concept of comprehensible input and $i + 1$.
- After the presentation, I will have the teachers break into subject area groups, and discuss how they can apply these principles to their own content area. They will report their ideas out to the large group after their group discussions.

- I will then present my reference manual and example unit. I will put a QR code on the projector so that they can access my materials on their own devices.
- I will allow them time in small groups to look it over, recommending that they divide it among each other by section and summarize/share with each other due to lack of time during the workshop for everyone to fully read every portion.
- Next, I will model one of the strategies or resources for the entire group, with all of them participating as if they are students. After this, I will allow time for everyone in their groups to try out some more of the resources so they can get a hands-on experience.
- We will end the “all content area” teacher session with discussion and debrief, and then their “exit ticket” will be the post-workshop survey for non-world language teachers only, including a segment at the end where they are encouraged to leave comments.

Part II of the Workshop:

- Non-world language teachers will then be dismissed to participate in other pre-planned professional development sessions arranged by administration. World language teachers will stay behind to finish out the day as a continuation of my workshop.
- We will continue the day by exploring selected resources from my reference manual as a group and in small groups.
- The last segment of the world language teacher workshop will be allowing them time to set up some of their own free accounts with the resources of their choosing.
- If there is time, I will allow them time to also begin planning one of their own lessons using strategies and resources of their choosing from my reference manual and/or example unit.

- We will end our session with the post-workshop survey, including a segment at the end where they are encouraged to leave comments. I will say my thank yous, and end the workshop.

In quick succession after the workshop, I will examine and analyze the results of the survey to determine the success of the workshop and project. I will use comments to reflect and make improvements.

Shortly after my workshop, I will collaborate with our district administrators to possibly make this an ongoing professional development. Ideally, similar workshops will build off of this initial one, and be implemented once in the fall and once in the summer. World language teachers from the same schools that participated in the initial one will be invited back to participate in the subsequent workshops. I will make my resources available via QR code in order to disseminate the information. It is the ultimate goal to put into real practice the main objective for the project - to address and minimize the main barriers to technology integration in the world language curriculum as well as all other content areas. It is my hope that as faculty we can adapt and improve our professional development in this area, and continue adapting and revisiting at regular intervals to keep current with the ever-changing landscape of technology in education and the real world.

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Appendix A

Research-Based Strategies and Resources for Effectively Integrating Technology into World Language Lessons

Research-Based Strategies and Resources for Effectively Integrating
Technology into World Language Lessons

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Section 1 - Research and Theoretical Framework

The theoretical framework for this project is based on the Mishra and Koehler's (2006) Technological Pedagogical Content Knowledge (TPACK) framework, as well as Stephen Krashen's theories of second language acquisition. These two theories will provide the foundation upon which the CALL strategies that I develop are constructed. Mishra and Koehler built the TPACK upon Shulman's (1983) pedagogical content knowledge (PCK) framework, incorporating the technological aspect. Hence, TPACK is the basis of effective teaching with technology, combining teachers' content knowledge, pedagogical knowledge, and technology knowledge. This framework stimulates the use of technology in education, but also provides teachers with a cognizance about the integration of technology with content knowledge and pedagogical knowledge (Mohebi, 2021).

The TPACK framework can be applied to all subject areas. I will be using the TPACK framework to construct some of the strategies and choose some of the resources for teaching culture in this project, by using online realia, social media, current world events, cultural celebrations and virtual reality to create authentic cultural experiences, and enhance engagement in the learning process. In order to develop the strategies and procure the resources for technology integration that will be presented in this project, it is necessary to complement TPACK with a theory that is specific to the field of second language learning. Three of Stephen Krashen's (1982) Language Acquisition Theory hypotheses are relevant to the framework of this project. I will be applying concepts from the Acquisition-Learning, Input and Affective Filter Hypotheses, in conjunction with concepts from TPACK in order to construct a reference manual of strategies and resources for technology integration in the world language classroom.

TPACK requires an understanding of the representation of concepts using technologies, as well as the pedagogical use of technologies in constructive ways to deliver content, and a knowledge of why certain concepts are easy or difficult to learn. This knowledge, along with an understanding of students' prior knowledge, can help resolve some of the problems that students face with learning (Koehler and Mishra, 2006). TPACK acknowledges that knowledge of how technologies can be used to build on existing knowledge to develop better teaching and learning practices. This idea runs parallel with Stephen Krashen's concept of $i + 1$. Building off of learners' current stage of linguistic competence by giving them input that is one step beyond their level of understanding is Comprehensible Input. TPACK principles can be used to develop teaching strategies that provide comprehensible input through mediums in addition to the teacher talk which has comprehensibility in mind to facilitate language acquisition.

In relation to technology integration, the "learning" component of Krashen's Acquisition-Learning Hypothesis is the most relevant to this project. Krashen's concept of "acquisition" refers to the language learner learning unconsciously, much like the manner in which a person learns his or her first language. The "learning" component asserts that learning is the product of formal instruction and the "conscious" process of learning about a language, a common example being grammar rules. There are many online resources available for practicing grammar and vocabulary building, but it can be difficult to find online activities that can be used in a 60 minute class period that promote acquisition in the way that a person learns a first language.

Stephen Krashen's (1982) Affective Filter Hypothesis asserts that emotional states can have a potential effect on the acquisition of language input. The affective filter is a term that Krashen uses to describe the mental block that can be created by a number of affective variables such as motivation, self-confidence, anxiety and personality traits. He claims that learners with

higher motivation, higher self-confidence and lower anxiety levels are more likely to be successful with second language acquisition. Individuals with lower motivation, lower self-confidence, lower self-esteem and higher anxiety are more likely to experience a higher affective filter, preventing comprehensible input from being optimally used for language acquisition. A TPACK-based approach emphasizes helping teachers develop and apply their understanding of technology, pedagogy, content and context. Therefore, teachers, much like language learners, must also have a lower affective filter in order to effectively become proficient in the integration of technological resources into their everyday lessons. They in turn, properly educated in their content knowledge, and proficient in the use of available technology, can facilitate a low-anxiety environment, where students are motivated to learn the target language through innovative techniques. Lowering the affective filter through the use of technology to promote confidence and motivation can ultimately lead to effective learning and language acquisition (Rafiquah et al., 2022).

Valtonen (et al., 2019) conducted a longitudinal study that tracked the development and changes in pre-service teachers' TPACK during the first three years of teacher education. The results indicate that teacher training seems to have a beneficial impact on TPACK, with positive gains especially in areas related to pedagogy. They further indicate that teacher education provides strong support for the development of pre-service teachers' pedagogical thinking, providing pre-service teachers with stronger confidence in areas related to pedagogy.

In conclusion, the strategies, resources, and instructional methods provided in this project will provide world language teachers with practical and adaptable ideas for how to effectively integrate technology into lessons that facilitate the acquisition of a target language. Language learning methods will be co-constructed through technology tools chosen based on pedagogical

knowledge, as well as social interactions with appropriate comprehensible input, while promoting an environment that will effectively lower learners' affective filter. This manual of strategies and resources will enhance learning and motivate teachers to challenge and motivate students in a comfortable environment where they can gain confidence in language learning.

Section 2 - Creating an Environment of that Lowers the Affective Filter

Stephen Krashen's Affective Filter hypothesis asserts that emotional states can have a potential effect on the acquisition of language input. Variables such as motivation, self-confidence, anxiety and personality traits can create a mental block which hinders learning. He claims that learners with higher motivation, higher self-confidence and lower anxiety levels are more likely to be successful with second language acquisition. This section outlines some strategies and resources for promoting an environment that creates an atmosphere conducive to building students' self-confidence and self-efficacy with language learning as well as technology use.

References for Facilitating Self-Confidence: Bugueño (2013); Klimova, B., Kacet, J. (2017); Lurdes Martins, M. (2015); Nieves, K. (2020); Sarode, R (2018).

- **Establish a daily routine completely in the target language.** Doing this, students will learn quickly what to expect, and learn through context. This also allows teachers to use comprehensible input to build off routine daily (Sarode, 2018).
 - **Example routine:**
 - Begin with a greeting, where students respond, then go over the calendar where they also say the date out loud, what date tomorrow will be, and what date yesterday was.
 - Use teacher talk/comprehensible input to discuss current events or happenings for the day or week that are going on in the classroom, the school, the country, or the world. Use as many cognates as possible, gestures or visual aids to assist with comprehension.

- **Use a daily warm-up**, using technology such as a document camera, or short computer activities. This type of routine activity can also promote self-confidence with the target language through use of familiar activities and routine (Bugueño, 2013).
- **Establish clear expectations for procedures, student behavior, and use of the target language** from the very first day of school. The goal is to create an environment of trust and no second-guessing, so students can build confidence to take educational risks and take responsibility (Lurdes Martins, M., 2015).
- **Establish clear expectations for appropriate use of technology** from the very first day of school. This will minimize any issues such as off-task behaviors or unpreparedness, as a result, contributing to a lowered affective filter (Krashen, 1982).
- **Frequently check for comprehension and comfort level with the material.** Strategies like the “fist of five” (where students hold up fingers 1-5 as a scale for their comprehension or comfort level) or the “thumbs up, middle or down” are effective progress checks. These informal assessments of comprehension and comfort level could help the teacher adapt activities to help lower the affective filter (Krashen, 1982).

Section 3 - Games and Online Activities for Vocabulary and Grammar

There is a wealth of language teaching resources on the Internet that is growing every day. Interactive learning games and activities can provide comprehensible input in an engaging manner to students of all ages. According to Klimova and Kacet (2017), games create an environment where education is mostly learner-centered, with a good opportunity for socialization when well-organized. Game-based learning (GBL) uses game elements to teach a specific skill or achieve a specific learning outcome, by taking core content and objectives and making them fun. According to Ashraf (et al., 2014), vocabulary acquisition is the basis of any language to be learned, and there are advantages of games in vocabulary and grammar concept reinforcement because the use of computers and the Internet is natural for children. Students' familiarity and comfort with computers, the Internet and games have the potential to lower the affective filter, therefore promoting better conditions for language acquisition (Ashraf, et al., 2014). All of the following online games platforms are very user-friendly, and the teacher may choose from thousands of pre-made games, vocabulary and grammar sets to match their needs, or they may create their own. This flexibility addresses the problem of lack of time for preparation as a barrier to technology integration. (Durff, L., Carter, M., 2019)

Teacher and Learner Attitudes Toward Technology in Education: Ertmer, P. A. (1999); Johnson, A., Jacinova, M., Russell, D., Soto, C. (2016); Francom, G. (2019); Kelly, Daniel P. (2015); Koç, Ö., Yüksel, G., Altun, E. (2021); Krashen (1982); Wesely, P., Plummer, E. (2021); Yu, X. (2022).

Use of Games in Language Teaching and Learning: Ahsraf et al. (2014); Klimova, B., Kacet, J. (2017).

- **Whole-class computer games.** There are many current (as of December 2023) online whole-class educational gaming websites where the entire class can participate, and teachers can see whole-class progress. These are very engaging tools for building and practicing vocabulary, as well as grammatical concepts. Some of the most popular sites are:
 - **Kahoot.** This is a whole-class game website that has 7 different games that students can play. The traditional style presents questions that each student answers from their individual computers or smartphones. It is timed competition-style and highly engaging. The teacher can see if there are some students who are not participating, and how many students answer each specific multiple choice option for each question, as a formative assessment. Teachers may use any of the thousands of vocabulary and grammar sets available in their target language to meet their specific needs (saving a significant amount of preparation time), or they may create their own. The other games available on Kahoot have a variety of styles, some of them where students work together to build structures by answering questions, or to evade capture by an enemy.
 - **Blooket and Gimkit.** Both sites are whole-class educational gaming websites in which students answer questions individually and compete against each other to earn the most points. There are 14 different games on Blooket and 10 on Kahoot, all with different styles. The video game-style graphics and format of both Blooket and Kahoot have a tendency to promote comfort and familiarity, which can lower the affective filter, therefore promoting better conditions for language acquisition (Ashraf, et al., 2014).

- **Quizlet Live.** This is an interactive online race-style game, in which teachers choose or create a set of vocabulary and/or grammar questions, and students compete in teams against each other by answering questions to advance and beat the other teams. It is a time-saving way to formatively assess class progress or command of concepts in the target language.
- **Individual Computer Games**
 - **Conjuguemos.com and WordWall.** Teachers may create a class for students to join, and invite them via code or link. Students join and can complete assigned target language games or activities that the teacher creates or chooses from pre-made sets. The teacher can formatively or summatively assess students, or assign homework or in-class work through these two sites.
 - **Bamboozle.** This is an online gaming site where students may choose individual games to play that provide them with practice with their current target language vocabulary or grammar concepts.
 - **Factile.** This is an online site where teachers can create or use pre-made Jeopardy-style games in their subject area.

Section 4 - Culture and Online Realia

According to Dema and Moeller (2012), research on teaching culture has shown that language and culture are closely related and are best acquired together. Technology promotes socially active language in multiple authentic contexts due to its accessibility, flexibility, connectivity speed and independence of methodological approach. It gives foreign language teachers a multitude of opportunities to create better and more effective instructional materials to teach not only the language structure, but also the target culture. One of the benefits of technology is that it provides authentic communication in an interactive environment that facilitates the teaching of culture. Through the use of interactive media, students become more engaged with authentic cultural content they can access and explore more freely than printed material, because they have more control over the selection and application of materials and resources (Dema and Moeller, 2012). Kim's (2020) research supports the use of social media and other technologies for language learning by intertwining language and culture. Kim (2020), as well as Dema and Moeller (2012) highlight the interconnected nature of language and culture, reinforcing the argument for a technology-infused pedagogy that embraces both dimensions. By integrating TPACK with Krashen's theories, language teachers can be better equipped to design technology-mediated activities that expose students to authentic cultural content, interactive language experiences, and meaningful cultural interactions.

- **Use of virtual reality and/or videos in the classroom to teach culture.** This would require access to a smartphone and smartphone-compatible virtual reality (VR) goggles. These goggles may be obtained relatively inexpensively (currently \$5.99-\$12.99/pair on Amazon in December 2023), if funding is available. Youtube.com has numerous “360” (meaning, for use with smartphone VR goggles) cultural field trips to various countries

for various celebrations, etc. If a classroom does not have access to smartphones or VR goggles, the standard version of each video is also typically available, along with a wealth of other cultural videos.

- **Use of social media in the classroom to intertwine language and culture.** Creating class profiles on popular social media platforms such as X (formerly known as Twitter), Instagram, Facebook and TikTok can all assist with learning infusing culture into lessons in an engaging and familiar way (Kim, 2020). Ground rules, expectations, and safety guidelines are of paramount importance when using social media in the classroom (Al-Rahmi, W., Othman, M., (2016).
- **News outlets and online magazines for learning about current events.** Students can access nearly unlimited authentic material and realia through the Internet. Carefully chosen articles and/or online magazines and other materials can help promote learning of culture in an engaging and relevant manner (Dema, O., Moeller, A., 2012; Lurdes Martins, M., 2015).
- **Use of the Internet to find cultural realia.** Carefully chosen sites that provide cultural realia can allow students better cultural insight and more authentic experiences (Kumar, Shet, and Parwez, 2021).
- **Use of Artificial Intelligence (AI) to chat with historical figures.** AI Characters and Chat GTP can allow students to simulate conversations with historical figures or fictional young people in the target culture.

Section 5 - Reading, Writing, Listening and Speaking

The integration of technology into language education has emerged as a pivotal force in reshaping instructional strategies for reading, writing, listening, and speaking skills in second language learning. The Technological Pedagogical Content Knowledge (TPACK) framework guides educators in effectively integrating technology tools into language classrooms, providing new and innovative ways to teach these four components of language. Concurrently, Stephen Krashen's (1982) influential theories, particularly the Input, Acquisition-Learning, and Affective Filter hypotheses guided the development of the following strategies and resources.

- **Web 2.0 platforms.** Examples are social media platforms such as Facebook, X, Instagram or TikTok. The use of authentic materials such as social media, has shown to be extremely positive in terms of engagement. This is because in addition to leveraging students' motivation, it can also allow them a rich and varied input in the target language, stimulating reading and writing and an autonomous exploration of these resources, attaching meaning to unfamiliar vocabulary. Hence, use of Web 2.0 tools can produce a markedly positive impact on the acquisition of vocabulary and the development of reading and writing skills (Lurdes Martins, 2014).
- **YouTube videos, Chat GTP and AI Characters.** All of these platforms can allow students practice with reading, writing, and listening skills in an engaging, non-intimidating way, lowering their affective filters.
- **Skype, Zoom, Google Meet.** These platforms can allow teachers to coordinate communications with other teachers and students in other parts of the world, intertwining culture with speaking and listening skills, or just practicing speaking and listening skills.

- **Refer to Section 3 - Games.** All of the online learning games and activities sites described in Section 3 are proven ways to facilitate reading and writing practice.

Section 6 - Social Media and Online Safety in the Classroom

Digital citizenship and online safety is of paramount importance when using the Internet in the classroom. Students and teachers open themselves up to safety issues as well as legal issues if they are not well versed in the guidelines for digital citizenship and Internet safety (ISTE, 2022). The use of social media platforms and meeting platforms are listed strategies and resources in Sections 2-5 of this manual. The following are strategies for teachers to use to create an environment of safety and positive digital citizenship in the classroom.

Reference: International Society for Technology in Education

- **Set clear expectations and boundaries regarding Internet and other technology use in the classroom.** Create a contract that outlines expectations, rules and safety guidelines that students and parents must sign and follow at all times while using educational technology in the classroom.
- **Provide a copy of the International Society for Technology in Education (ISTE) Standards for digital citizenship and safety.** Make it available at all times.
- **Make students aware of the dangers.** Dangers can include the sharing of personal information, the use of social media or other Internet platforms for bullying or hate speech, or susceptibility to malware.
- **Set up student profiles and accounts separate from personal accounts when using social media or other online platforms.** Devote a class period to having students set up separate accounts and profiles, and direct them with how to avoid sharing personal information in their profiles.

- **Conduct periodic checks and reminders regarding Internet safety.** Repetition and frequent reminders when using specific resources can help promote a safe environment and experience for students using online resources routinely in the classroom.

Appendix B

Example Lesson Plan that Models the Implementation of the Research-Based Strategies and
Resources for this Project

Author: Angelina M. Bauer, 8-12 Spanish teacher at Saugatuck Middle-High School.

Grade/Age and Subject: High School Spanish 3B (Spanish Conversation), mostly juniors and some seniors. In Saugatuck Public Schools, Spanish 3A and 3B are set up as 65 minute classes of two 12-week trimesters. Students who enroll in this class enter it knowing that the course is centered around speaking Spanish out loud with classmates and the instructor, in order to increase comfort level and proficiency with Spanish speaking skills. By the time we reach Spanish 3B, all of these students have been together in Spanish 3A, so there is typically already a high comfort level with speaking to each other.

Unit Theme: The preterite and the imperfect tenses

Instructional Goals and Objectives

- Students will review and demonstrate proficiency with the conjugation and application of verbs in the preterite tense.
- Students will accurately conjugate verbs in the imperfect tense in both spoken and written form.
- Students will demonstrate that they can distinguish between when to use the preterite tense and imperfect tense (the two past tenses in Spanish).
- Students will correctly conjugate and use verbs appropriately in both the preterite and imperfect tenses, in both spoken and written form.
- Students will engage in conversations, using the preterite and imperfect tenses correctly.
- Students will apply their knowledge and skills with the preterite and imperfect tense by describing and discussing a virtual reality field trip experience.
- Students will use various technology applications, websites, and social media applications to demonstrate knowledge of the preterite and imperfect tenses.

Teaching and Learning Strategies

- Reviewing prior knowledge and applying it to learn new skills

- Modeling
- Scaffolding
- Use of visual aids for visual learners
- Use of virtual reality to teach culture and practice speaking skills for hands-on, visual and kinesthetic learners.
- Cooperative learning, flexible seating
- In-class discussion for auditory learners
- Speaking prompts
- In-class competition and games for hands-on and kinesthetic learners
- Addressing and correcting mistakes
- Providing feedback, correcting mistakes
- Video instruction and guided note-taking for visual and auditory learners
- Use of choices to reach different tiers of learners
- Differentiated instruction to reach the different tiers of learners, including struggling and gifted learners
- Online learning games and competitions
- Use of social media platforms for final assessment

Michigan Department of Education (Michigan Merit Curriculum) World Language Standards (MDEWLS)

1 - Communication: Communicate in Languages Other than English

- 1.1 Interpersonal Communication: Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions.
- 1.2 Interpretive Communication: Students understand and interpret written and spoken language on a variety of topics.
- 1.3 Presentational Communication: Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.

2 - Cultures: Gain Knowledge and Understanding of Other Cultures

- 2.1 Practices and Perspectives: Students demonstrate an understanding of the relationship between the practices and perspectives of the culture studied.

3 - Connections: Connect with Other Disciplines and Acquire Information

- 3.1 Knowledge: Students reinforce and further their knowledge of other disciplines through the world language.
- 3.2 Point of View: Students acquire information and recognize the distinctive viewpoints that are only available through the world language and its cultures.

4 - Comparisons: Develop Insight into the Nature of Language and Culture

- 4.1 Comparing Languages: Students demonstrate understanding of the nature of language through comparisons of the language studied and their own.
- 4.2 Comparing Cultures: Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own.

5 - Communities: Participate in Multilingual Communities at Home and Around the World

- 5.2 Personal Enrichment: Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment.

ISTE Standards Alignment

1.1 Empowered Learner

- 1.1.b.: Build networks and customize their learning environments.
- 1.1.c.: Students use technology to seek feedback and to demonstrate their learning in a variety of ways.
- 1.1.d.: Students understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.

Digital Citizen

- 1.2.a.: Cultivate and manage digital identity and reputation.

- 1.2.b.: Engage in positive, safe, legal and ethical behavior when using technology.
- 1.2.c.: Demonstrate an understanding of and respect for the rights and obligations of intellectual property.
- 1.2.d.: Manage personal data, digital privacy and security

Knowledge Constructor

- 1.3.a.: Plan and employ effective research strategies
- 1.3.b.: Curate information from digital resources using a variety of tools.

Innovative Designer

- 1.4.b.: Select and use digital tools to plan and manage a design process.

Computational Thinker

- 1.5.c.: Break problems into component parts, extract key information.

Creative Communicator

- 1.6.a.: Choose the appropriate platforms and tools for meeting desired objectives of creation or communication.
- 1.6.b.: Create original works or responsibly repurpose or remix digital resources.
- 1.6.c.: Communicate complex ideas effectively by creating digital objects.
- 1.6.d.: Publish or present content that customizes the message and medium.

Global Collaborator

- 1.7.a.: Use digital tools to connect with learners from a variety of backgrounds and cultures.
- 1.7.c.: Contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.

Content Areas Covered:

- The preterite tense in Spanish - conjugations and usage
- The imperfect tense in Spanish - conjugations and usage
- Technology integration in the teaching and learning of the imperfect tense (and how it differs from the preterite tense) in Spanish.

- Culture - El Día de los Muertos en México

Technology Required:

- Student Chromebooks
- Google Drive applications
- Teacher MacBook Air
- Document camera
- Projector
- Classroom sound system
- Virtual Reality smartphone goggles
- Smartphones

Internet Access Considerations/Alternatives

Internet issues are very familiar territory to me as a teacher. Whenever we have a “tech fail” or “Internet fail,” I have a variety of tools in my bag of tricks to improvise. These tricks include speaking activities/prompts, TPR (Total Physical Response) activities, hard copies of photos (as an alternative to the digital copies I put up on my projector), Tic-tac-toe games, various hand-made games, worksheets, notes packets, “Lotería” (“Bingo”) games, dice games...I have quite a large toolbox because I began my teaching career 18 years ago, before our staff had laptops, and before our students had 1:1 devices. Our devices have certainly changed the way I teach, but I still use my “old tricks” too, especially when my “tech tricks” fail. If the Internet for the class as a whole is working for most, but there are a few students whose computers die, freeze, or the Wi-fi is acting up for them, I allow them to buddy up with someone and work as a duo. Sometimes, I will allow them to use their phones in place of their computers.

How Beginning Tech Knowledge is Assessed

All of the activities implemented in this lesson use technology and programs with which all of my students are already familiar. At the beginning of each term, I spend the first week

having kids join my online classrooms in Google, conjuguemos.com, Gimkit, and Quizlet. Since this unit would take place about four weeks into the trimester, students would already be very familiar with Kahoot, Gimkit, Blooket, Quizlet and Quizalize. Every student in Saugatuck Middle-High School has a Schoology account with Edpuzzle, which they use in every class in the school, so they are very familiar with them. Whenever we begin an activity that needs technology, I walk around the classroom, checking in with students and helping them to troubleshoot. I am also a big proponent of having peers help their classmates. We do frequent whole-class check-ins with thumbs up. The thumb up means the individual completely understands and is ready, thumb to the side means they are in the middle but not completely lost, and thumb down means they are completely lost and need support. We have a media specialist and a tech support help desk if a student suddenly needs help with technology that is not functioning properly.

New students who are not familiar with any of our school's technology or any of my platforms and applications would be called into my Advisory period one or two days in a row, where I could help them one-on-one and get them set up. I also would set them up with a class buddy to assist them as we go.

Accommodations for Student Differences and Learning Levels

I recommend grouping gifted students together for small group activities, as well as for final speaking assessments. The tools that I also gained from our Technology Tool Scavenger Hunt (Gimkit, Factile, Quizalize, new Kahoot games, and a different version of conjuguemos.com) will also be very helpful in terms of allowing my gifted students as well as my struggling and special needs students more choices/options for learning that best suits their levels, needs and learning paces. This falls in line with the UDL principles of Engagement/Recruiting Interest, Representation/Perception, and Action & Expression/Expression & Communication (CAST The UDL Guidelines). Many of our round-robin style speaking activities lend themselves really well to my linguistically gifted students because

the answers are a little more open-ended, allowing for them to answer at their level and challenge themselves. In the same way, this style of speaking activity also benefits general education and struggling students, because I will accept a variety of answers to open-ended questions, depending on the student's level. Students are also allowed to use their notes, books, and other resources as we go. It is important to note that by the time my students get to Spanish 3B, they are very familiar with this style of speaking activity/assessment, and they have a pretty high comfort level with it on the whole. This style of activity has a nice tie to UDL Engagement/Self-Regulation, as well as Representation/Perception, Language & Symbols, and Comprehension (CAST The UDL Guidelines). We have a variety of resources available that can assist students with reading disabilities, such as a function right on the Chromebook that will read and pronounce highlighted words out loud. We also have Audible and other downloadable applications that will read texts out loud to users. Student Chromebooks, teacher MacBooks, and OAISD resources allow for the use of a variety of technology aids to assist our English Language Learners, as needed, such as apps that translate texts out loud. However, most (about 85%) of my instructions and my course in general are taught in Spanish, since it is considered a college prep course.

Activities with specific directions for each lesson and support for higher order thinking skills (HOTS):

In Spanish there are two past tenses - the preterite and the imperfect. Native speakers of English who are learning Spanish tend to struggle with this concept, because in English, we do not conjugate verbs in two different ways to express the past tense. The strategies I will use to teach this difficult concept will be twofold. First, I will briefly review the preterite conjugations, which they have already learned in Spanish 2B and 3A. I will follow this by jumping into teaching the conjugations for verbs in the imperfect tense. Second, I will teach students the difference in usage between the preterite and imperfect tenses.

Day 1: Review of the preterite tense, with an emphasis on -ar verbs.

Standards addressed: MDEWLS 1.1, 1.2, 1.3; ISTE 1.1.c, 1.3.b, 1.5.c

- Teacher will begin with a Google Slides presentation that tells a mini-story about animals traveling, with pictures and captions, using previously learned travel vocabulary and the preterite tense.
- Teacher will project fun/odd pictures up on the board and have students describe them or narrate them, using the preterite tense. Students may use lists of verbs in their textbooks. Descriptions can be wacky and silly if they choose. The class will do a few pictures at a time for a few days, mixing up whole-class descriptions, and small group descriptions. Students will also find their own photos to narrate. They will share them aloud as well as in written form. This activity will promote higher order thinking skills in students of all tiers because they can work at different paces, as well as choose their own photos that go along with their current skill level. They are searching, processing, forming conclusions, and applying the current vocabulary and grammar.

Day 2: Continuing review, demonstration and application of the preterite tense.

Standards addressed: MDEWLS 1.1, 1.2, 1.3, 3.1; ISTE 1.1.c, 1.3.b, 1.5.c

- Teacher will show a 7-minute video clip called, "Gopher Broke." After the clip, students will take turns describing what happened in the preterite tense aloud, and the teacher will write the descriptions on the board.
- Students will watch the clip again, pausing and narrating as we go. Students must produce verbs and tie them to vocabulary to fit the context in real time, promoting higher order thinking.

Day 3: Introduction of the imperfect tense conjugations.

Standards addressed: MDEWLS 1.2, 2.1, 3.1, 4.1; ISTE 1.1.c, 1.1.d, 1.2.b, 1.2.d, 1.7.a, 1.7.c

To teach the imperfect tense, teacher will begin with how to conjugate -ar, -er, and -ir verbs:

- Teacher will begin by showing a short video by Señor Jordan on YouTube on imperfect tense regular -ar verb conjugations. Señor Jordan gives easy explanations, broken down into easy-to-follow-and-comprehend segments, and then gives practice examples where the teacher can pause the video and have students fill in the blanks. The teacher will first pause the video during the explanations so students can take notes. Students will then do the practice exercises/sentences as a class.
- The class will watch a second Señor Jordan video on the imperfect tense regular -er/-ir verb conjugations, and do the practice exercises as a class, so the teacher can informally assess their understanding and progress.
- The class will practice the imperfect verb conjugations with conjuguemos.com, an online verb conjugations game. Students can choose to do either the individual activities, or team up and do the group activities with classmates. [Conjuguemos.com](http://conjuguemos.com) is an excellent site that could allow choices that fit the needs of a wide range of learning levels, from struggling students to students with special needs to general education students to gifted students.

Day 4: Review, reinforcement, and practice with the imperfect tense conjugations.

Standards addressed: MDEWLS 1.1, 1.2, 1.3, 3.1, 4.1; ISTE 1.1.b, 1.1.c, 1.1.d, 1.2.b, 1.2.c, 1.3.a, 1.5.c

- The class will continue to practice and reinforce imperfect tense conjugations with additional activities on Quizlet for the first portion of class. Students will be allowed to search sets to find exercises that fit their individual needs, so struggling, general education, and gifted students can all work at their own pace in areas that will challenge them and give them proper practice.
- For the second half of the class, students will answer discussion prompts aloud round-robin style using the imperfect tense. Higher order thinking skills are employed whenever students must produce logical sentences to fit the context of the conversation.

Day 5: Checking for understanding, then introduction and practice with the differences between the preterite and imperfect tenses.

Standards addressed: MDEWLS 1.1, 1.2, 1.3, 3.1, 4.1; ISTE 1.1.c, 1.2.b, 1.6.b, 1.6.d, 1.7.c

- Students will take a short quiz to check their understanding of/proficiency with imperfect tense conjugations. The test will be online through Schoology, so they will get instant feedback. The teacher will examine the results to assess whether more work is needed in this area.
- The class will then move on to teaching and learning the differences between the preterite and the imperfect, and when to use each. To begin, they will watch the first and second videos in a 3-part series of videos by Señor Jordan on this topic, once again pausing to take notes and doing the practice exercises. The first of the three will actually cover the irregular verb conjugations, but touch on some of the differences.
- The class will then do a small-group competition to practice writing sentences in the preterite and the imperfect. Each group will compete to write the most grammatically correct sentences using one verb in the preterite and one in the imperfect per sentence in 10 minutes. They will do this on a Google doc, and they will use the projector to check/correct them as a class to determine the winning group, who will receive a small prize.

Day 6: Review, reinforcement, and practice with the preterite and the imperfect.

Standards addressed: MDEWLS 1.1, 1.2, 1.3, 3.1, 4.1; ISTE 1.1.c, 1.1.d, 1.2.b, 1.2.c, 1.3.a, 1.6.d, 1.7.c

- The class will continue to practice and reinforce concepts with some speaking exercises, where a prompt is given and each student contributes, round-robin style.
- The class will watch the third video in the 3-part series of videos by Señor Jordan on usages of the preterite vs. the imperfect, once again pausing to take notes and doing the practice exercises.

- Students will practice some more by narrating goofy photos, but this time, the teacher will put a photo up on the projector, and arrange students in groups. This will allow the teacher to try out the strategy of grouping gifted students together, and also strategically place my struggling students. Each group will come up with their own story behind the photo, using the preterite and imperfect, and then share with the class. They will then find their own photos and share with another group, who has to narrate them. They can come up with as many photos as they like within the set time period. This activity is similar to the one we did on Day 1, with slight differences. Students will now apply the knowledge they have gained over the last week. The activity promotes higher order thinking skills in students of all tiers because they can work at different paces, as well as choose their own photos that go along with their current skill level. They are searching, processing, forming conclusions, and applying the current vocabulary and grammar.

Day 7: More practice with the conjugation and usage of the preterite and imperfect.

Standards addressed: MDEWLS 1.1, 1.2, 1.3, 3.1, 4.1; ISTE 1.1.b, 1.1.c, 1.1.d, 1.2.a, 1.2.b, 1.2.d, 1.3.a, 1.5.c, 1.6.a

- The class will re-narrate “Gopher Broke” once more, but this time using both the preterite and the imperfect tense, employing higher order thinking skills to apply the skills they have gained in the last week.
- Students will practice and reinforce using activities that allow choices, in order to reach a variety of learning levels, from struggling students to students with special needs to general education students to gifted students, using Gimkit, Quizalize, Quizlet, and Edpuzzle.

Day 8: Checking for understanding, then more practice with the differences between the preterite and imperfect tenses.

Standards addressed: MDEWLS 1.1, 1.2, 3.1, 4.1; ISTE 1.1.b, 1.1.c, 1.1.d, 1.2.a, 1.2.b, 1.7.c

- Students will take a short quiz to check their understanding of/proficiency with the usage of the preterite vs. the imperfect tenses. The test will be online through Schoology, so they will get instant feedback. The teacher will examine the results to assess whether more work is needed in this area.
- The class will practice and reinforce using a variety of games from Kahoot and/or Blooket. They will first do the group/individual games where students can work at their own pace, and then they will do a whole-class game so the teacher can informally check for understanding.

Day 9: More practice and application of the preterite and imperfect tenses combined with culture, using virtual reality, and constructing exam questions for speaking assessment as a class.

Standards addressed: MDEWLS 1.1, 1.2, 1.3, 2.1, 3.1, 3.2, 4.2, 5.2; ISTE 1.1.d, 1.2.b, 1.3.a, 1.3.b, 1.5.c, 1.6.a, 1.7.c

- Students will use virtual reality smartphone goggles to take a virtual field trip to different locations in México and the U.S. to experience the Mexican holiday, Día de los Muertos. Students will be instructed in advance to bring their smartphones to class. Students who do not have smartphones will buddy up with a classmate, and the teacher will also have two “spare” smartphones available. Each student/pair will get their own set of VR smartphone goggles from a classroom set. There will be a list of several different 360 videos on YouTube on the board, and they will take about 20 minutes to view all or most of them. This is an excellent opportunity to teach culture and tie it to language in a way that is more exciting, engaging, and hands-on than lecture. It can hopefully combat “boredom” with kids of all tiers, and bring a topic that we have discussed in the past to life. If students are in pairs, they will divide up the videos and can take turns watching theirs, alternating between using the VR goggles and jotting

down questions and topics for the subsequent Spanish conversation. Plenty of sanitizing wipes should be provided for wiping down the smartphone goggles before and after use.

- In the case of technology issues, students could watch a few similar videos on their Chromebooks, or we could watch them as a class on the overhead projector. Students would not get the fun 3D experience of course, but they would still get the same information, and it would still set them up for the Spanish conversation piece that follows the videos (below).
- After viewing the videos, the students will discuss them en español in small groups using the preterite and imperfect tenses, and report out to the class what they have learned.
- As a class, students will construct 8-10 unit exam questions/prompts for their final unit speaking assessment. They will be allowed to work in small groups to come up with questions, and share their answers in a Google Doc that the teacher has shared with them.

Days 10-12: Assessment of knowledge and proficiency with the preterite and imperfect tenses.

Standards addressed: MDEWLS 1.1, 1.2, 1.3, 2.1, 3.1, 3.2, 4.2, 5.2; ISTE 1.1.b, 1.1.c, 1.1.d, 1.2.a, 1.2.b, 1.2.c, 1.2.d, 1.3.a, 1.4.b, 1.6.a, 1.6.b, 1.6.c, 1.6.d, 1.7.a, 1.7.c

- On Days 10 and 11, in teams of 2, students will create a TikTok or a video with another approved social media application, using a menu of options for topics. Some examples could include describing their most embarrassing moment, what their school routine used to be when they were in elementary school, describing what they saw on their virtual field trip to see the Día de los Muertos, or a favorite story about their childhood. The teacher could include some topics that may have come up organically throughout our unit. The teacher will once again try out the strategy of grouping gifted students together, and buddying up struggling students with other students who can help them. Students will be supplied with a rubric and guidelines. This form of assessment

will give students of all tiers opportunities to move at their own pace, and demonstrate their levels of ability and understanding. It gives them many options, as far as choosing a platform that works for them, as well as choosing a topic that they can work with successfully. The teacher will devote a portion of class to reminding students about digital citizenship and Internet safety, as well as remind them where they may find a copy of the ISTE digital citizenship standards. The teacher will then have students create a “fake”/“class use” account, and also, if they are uncomfortable with using TikTok in class, will allow them to opt out of using TikTok and just create a video for this project.

- On Day 12, students will play their TikToks/videos for the class, and the teacher will grade them rubric style.
- For the last part of class, students will have another formal assessment, for which they have been prepped in advance several times. They will answer questions round-robin style out loud. The teacher will ask a question, and students will take turns answering it with their own thoughts, stories, and opinions. Students will do this with a random selection of 4-5 questions from a pre-constructed and shared bank of 8-10 questions, which the class constructed themselves, and the teacher approved.

Methods of Evaluation

Methods of evaluation are outlined above in the segment labeled, “Activities with specific directions for each lesson and support for higher order thinking skills (HOTS).”

Formative assessments include:

- The “thumbs up, middle, or down.”
- The “fist of five.”
- Listening and providing in-the-moment feedback and corrections as the class does speaking activities, and describes photos and video clips.
- Data collected from activities that students complete in the teacher’s Quizlet, Gimkit, and conjuguemos.com classrooms.

- Informally assessing their finished products from group work, games and competitions.
- Days 1 and 6 function somewhat as casual pre- and post-test situations.

Summative assessments for this unit include:

- Quizzes taken through Schoology as checkpoints to assess various skills, including reading comprehension and writing skills. The quizzes give them instant feedback, and provide the teacher with data regarding their progress.
- A TikTok/social media culminating project in which they demonstrate their higher order thinking skills and knowledge of the content.
- Answering questions and prompts round-robin style. Students practice this very frequently throughout most of our units, so it is a very familiar and comfortable format for them when it is time to formally assess their listening and speaking skills. They construct their own test questions/prompts as a class (usually 8-10 questions), and on test day, the teacher selects random questions from the list (usually about 4-5 of the questions). Students will take turns answering it with their own thoughts, stories, and opinions.

Resources, Digital Media, and Support Required

- Google Slides Preterite Presentation created by the teacher (**Day 1 Lesson**): <https://docs.google.com/presentation/d/1fFlqHgEgcyCTvbYzCShRe1R7oH4VYegDm1ff3bIKmNE/edit?usp=sharing>
- Gopher Broke video clip (**Days 2 and 7 Lessons**): <https://www.youtube.com/watch?v=WHVX9c4VKvM&feature=youtu.be>
- The Imperfect Tense, Regular -ar Verb Conjugations by Señor Jordan (**Day 3 Lesson**): <https://www.youtube.com/watch?v=6pNZ-BopVhs>
- The Imperfect Tense, Regular -er/-ir Verb Conjugations by Señor Jordan (**Day 3 Lesson**): <https://www.youtube.com/watch?v=wPRDovbiYg4&t=3s>
- conjuguemos.com (**Day 3 Lesson**)

- Quizlet.com (**Day 4 and Day 7 Lessons**)
- <https://app.schoolology.com/login> (**Day 5 Quiz**)
- The Imperfect Tense, Part 1 (Irregular Verbs) by Señor Jordan (**Day 5 Lesson**):
<https://www.youtube.com/watch?v=grNRqeMJSGA&t=2s>
- The Imperfect Tense, Part 2 (The Preterite vs. The Imperfect Part 1) by Señor Jordan (**Day 5 Lesson**): <https://www.youtube.com/watch?v=SooMUJrq4c8>
- The Imperfect Tense, Part 3 (The Preterite vs. The Imperfect Part 2) by Señor Jordan (**Day 6 Lesson**): <https://www.youtube.com/watch?v=RwtZ8PWEKV4>
- Gimkit.com (**Day 7 Lesson Option**)
- Quizalize.com (**Day 7 Lesson Option**)
- Edpuzzle.com (**Day 7 Lesson Option**)
- <https://app.schoolology.com/login> (**Day 8 Quiz**)
- Kahoot.com (**Day 8 Lesson**)
- Blooket.com (**Day 8 Lesson**)
- Virtual Reality Día de los Muertos Field Trip (**Day 9 Lesson**):
<https://www.youtube.com/watch?v=gdrjXHvDXek>
https://www.youtube.com/watch?v=10fAVzpHY_k&t=55s
https://www.youtube.com/watch?v=fniW5NZ_A1Y
https://www.youtube.com/watch?v=-RxZU_m8zqo
<https://www.youtube.com/watch?v=HBrXA4fwvR4>
https://www.youtube.com/watch?v=uOC_3pxLYW4
- Tiktok.com (**Days 10-12 Assessment**)

Appendix C

Pre-Workshop Survey

Technology Integration in the Classroom (Pre-Workshop)



Hello there! Please take a minute of your time to fill out the following survey about technology use in the classroom as honestly as you can. Data without names will be used as feedback and measurement of success for my Master's project. Thank you so much in advance! I know you are all extremely busy. I greatly appreciate your time and input :).

Email *

Valid email

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I feel that I am proficient with the integration of technology into my curriculum. *

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree



I feel like I could use ongoing help to become more proficient with the integration of technology into my curriculum. *

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree

If provided for me, I would appreciate the help of a technology integration workshop where a reference manual with an example unit plan is provided. *

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree

I have a good understanding of how to use social media to teach culture, and practice reading, ^{*} writing, listening and speaking in the world language classroom, or applicable concepts in my own classroom, and am comfortable doing so.

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree

I have a good understanding of how to use online games to build, practice, and reinforce ^{*} vocabulary and grammar concepts in a world language classroom, or applicable concepts in my own content area, and am comfortable doing so.

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree

I know what the affective filter is, and have knowledge of how to lower the affective filter in the world language classroom, and/or my own classroom. *

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree

I would use example units, if provided for me, as a guide assist me with ideas for and implementation of technology-integrated lessons. *

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree

I would find a workshop useful for expanding my understanding of how to integrate technology into the world language curriculum, or my own content area curriculum. *

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree



I would participate in ongoing workshops to expand my knowledge of current strategies and resources for the integration of technology into the world language curriculum, or my own content area curriculum. *

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree

Please list what you perceive to be possible barriers to technology integration in the classroom.

Long answer text

Please add any additional comments or questions that you might have.

Long answer text

THANK YOU SO MUCH for taking the time to fill out this survey. The information you gave will be extremely valuable with assisting me in the evaluation of the effectiveness of my workshop and reference manual :).



Description (optional)

Appendix D

Post-Workshop Survey

Technology Integration in the Classroom



Hello there! Please take a minute of your time to fill out the following post-workshop survey about technology use in the classroom as honestly as you can. Data without names will be used as feedback and measurement of success for my Master's project. Thank you so much in advance! I know you are all extremely busy. I greatly appreciate your time and input :).

Email *

Valid email

This form is collecting emails. [Change settings](#)

Prior to this workshop I was proficient with the integration of technology into my curriculum. *

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree

After this workshop I feel like I am more proficient with the integration of technology into my curriculum. *

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree

With the help of the given reference manual and example unit plan in this workshop, I feel more confident with trying new strategies and resources for technology integration into my curriculum. *

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree

I now have a better understanding of and more ideas for using social media to teach culture, and practice reading, writing, listening and speaking in the world language classroom, and applicable concepts in my own classroom. *

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree

I now have a better understanding of and more ideas for using online games to build, practice, and reinforce vocabulary and grammar concepts in the world language classroom, and applicable concepts in my own classroom. *

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree

I now have better knowledge of how to lower the affective filter in a world language classroom, *
and/or my own classroom.

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree

I will use the example units provided in this workshop as a guide assist me with ideas for and implementation of technology-integrated lessons. *

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree

I found this workshop useful in expanding my understanding of how to integrate technology into the world language curriculum, as well as my own content area curriculum. *

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree

I would participate in more ongoing workshops of this nature to expand my knowledge of current strategies and resources for the integration of technology into the world language curriculum and/or my own content area curriculum. *

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree

I feel that we have adequately addressed some of the most prominent barriers to technology integration (in the world language classroom as well as other content areas) discussed at the beginning of this workshop. *

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree

I feel that during this workshop, we took productive action steps to overcome some of the most prominent barriers to technology integration (in the world language classroom as well as other content areas) discussed at the beginning of this workshop. *

- Strongly Agree
- Agree
- Somewhat Agree
- Unsure or undecided
- Somewhat Disagree
- Disagree
- Strongly Disagree

Please add any additional comments or questions that you might have.

Long answer text

THANK YOU SO MUCH for taking the time to fill out this survey. The information you gave will be extremely valuable with assisting me in the evaluation of the effectiveness of my workshop and reference manual :).



Description (optional)

GRAND VALLEY STATE UNIVERSITY
ED 693/695 Data Form

NAME: Angelina Marie Bauer

MAJOR: (Choose only 1)

<input type="checkbox"/> Adult & Higher Education	<input type="checkbox"/> Educational Differentiation	<input type="checkbox"/> Library Media
<input type="checkbox"/> Advanced Content Specialization	<input type="checkbox"/> Education Leadership	<input type="checkbox"/> Middle Level Education
<input type="checkbox"/> Cognitive Impairment	<input type="checkbox"/> Educational Technology	<input type="checkbox"/> Reading
<input type="checkbox"/> College Student Affairs Leadership	<input type="checkbox"/> Elementary Education	<input type="checkbox"/> School Counseling
<input type="checkbox"/> Early Childhood Education	<input type="checkbox"/> Emotional Impairment	<input type="checkbox"/> Secondary Level Education
<input type="checkbox"/> Early Childhood Developmental Delay	<input type="checkbox"/> Learning Disabilities	<input type="checkbox"/> Special Education Administration
<input checked="" type="checkbox"/> TESOL		

TITLE: Strategies and Resources for Integrating Technology into the Secondary Education

World Language Classroom

PAPER TYPE: (Choose only 1)

SEM/YR COMPLETED: Fall 2023

Project

Thesis

SUPERVISOR'S SIGNATURE OF APPROVAL _____

Using key words or phrases, choose several ERIC descriptors (5 - 7 minimum) to describe the contents of your project. ERIC descriptors can be found online at: <http://eric.ed.gov/?ti=all>

- | | |
|---------------------------|--------------------------------|
| 1. Technology Integration | 5. Professional Development |
| 2. Spanish | 6. Workshop |
| 3. World Language Teacher | 7. Strategies Reference Manual |
| 4. TPACK | 8. Example Unit Plan |



The signatures of the individuals below indicate that they have read and approved the project of Angelina Marie Bauer in partial fulfillment of the requirements for the degree of Master's of Education.

Nagnondiarrassouba

01/08/2024

Dr. Nagnon Diarrassouba, Project Advisor

Date

Nagnondiarrassouba

01/08/2024

Dr. Nagnon Diarrassouba, Graduate Program Director

Date

Mary Bair

1/8/2024

Mary Bair, Unit head

Date