Abstract

Technology is creating opportunities in the language classroom for cultural competence to be highlighted and communication facilitated. Implementation of instruction via Web 2.0 tools produces authentic, meaningful and engaging learning environments. In order to determine if a particular technology supports the intended learning outcomes and instructional goals needed to facilitate students developing cultural competencies, the Technology Evaluation Rubric for Cultural Competence (Products, Perspectives, and Practices) (TERCC-P³) was developed. This evaluative tool is designed to aid teachers in aligning their instructional design with the many available technology Web 2.0 tools.

Introduction

Culture is why many students decide they want to learn another language. They are fascinated with the culture of a country; they desire to explore someplace new,
and to be able to communicate (Rodriguez-Perez, 2012). Cultural celebrations, cultural traditions and cultural nuances captivate our students. During these discussions students are more likely to remain engaged and motivated. All too often, however, culture is treated in world language classrooms as an add-on or sidebar (Evans & Gunn, 2011; Galloway, 1985; and Lange, 1999). The reality is that culture and language are interconnected. The integration of cultural elements in language instruction adds a distinctive ambience to the classroom. It allows a student’s mind to be instantaneously transported to different geographical locations while raising awareness from different perspectives in the arts, politics, education, music, and cuisine. Students are able to express thoughts in the L2 while adding significance and meaning towards language acquisition. Student success is facilitated as cultural understanding is effectively developed and incorporated into lesson plans. Integration of culture promotes student interest in learning and thus facilitates student success.

“Human beings do not live in the objective world alone, nor alone in the world of social activity as ordinarily understood, but are very much at the mercy of the particular language which has become the medium of expression for their society. … The ‘real world’ is to a large extent unconsciously built up on the language habits of the group. No two languages are ever sufficiently similar to be considered as representing the same social reality. The worlds in which different societies lie are distinct worlds, not merely the same world with different labels attached” (Sapir, 1985, p. 162).

To effectively teach both language and culture, instruction needs to be contextualized and seamlessly integrated.

Meaningful learning assumes that a student’s prior knowledge is relevant to what he/she is learning. Comprehension and acquisition is finding a mental home for new information. This is more readily accomplished when connections are made between new learning and previous knowledge, lived experiences, or familiar circumstances. A study conducted by Savignon (1997) noted higher student contentment, specifically when communicating in “real world settings,” rather than through pre-fabricated sentences and or scenarios created by textbooks. As educators we should strive to prepare students to communicate in an authentic environment. This promotes value laden practical learning.

Virtual environments can help to create some of these opportunities for engaging, motivating, meaningful, and authentic communication. Our students are Millennials (Jonas-Dwyer & Popisil, 2004), they desire to be creators of content not just consumers. The relationship between technology and second language acquisition (SLA) offers opportunities for content creation. Blending communication within the context of culture via technology paves the path for the development of students’ 21st century skills, which include problem solving, critical thinking, and collaboration (Partnership for 21st Century Skills, 2011). Incorporating technology-based activities can facilitate the use of critical thinking skills and problem solving. Students develop leadership through collaboration, and become autonomous learners.
The fundamentals of communication within the ‘real world’ that Sapir spoke of remain. Yet, the rapidly changing technologies that are available are impacting the world language classroom, creating 21st century opportunities for contextualized and meaningful learning. World language learning today extends beyond the traditional activities that can be done within the brick and mortar walls of a classroom; technology allows for creative, dynamic, and collaborative learning venues, both within and outside the school day. “The ‘spaces’ where students learn are becoming more community-driven, interdisciplinary, and supported by technologies that engage virtual communication and collaboration” (Johnson, Smith, Levine & Haywood, 2010, p. 4).

The trend in many schools is to provide students with technology such as 1-to-1 initiatives, whether iPads, tablets or laptops for each student. Technologies are becoming more readily available, and rather than be reactive to implemented changes and initiatives, it is better to be proactive. It is vital to keep learning objectives as the cornerstone of instruction, then seek out meaningful and purposeful ways to integrate technology. McGrail (2007) emphasizes, “pedagogy before technology, rather than technology before pedagogy, … constructively re-envisioning technology in their (teachers) classrooms” (p. 83). As a result, the authors explored how to pragmatically and effectively integrate language instruction with cultural competence via Web 2.0 technologies. Extending the work done in a previous study, in which the Technology Evaluation Rubric for Communicative Competence (TERCC) was offered to gauge the value and effectiveness of Web 2.0 tools (author & author, 2014), a Technology Evaluation Rubric for Cultural Competence – Products, Practices, and Perspectives (TERCC-P3) is presented. The TERCC-P3 is intended to be a resource to evaluate how Web 2.0 tools can help facilitate students’ cultural competence via either input or output. To demonstrate its practicality, Web 2.0 tools will be highlighted, and examples outlined regarding how each was integrated within instruction.

Culture and Cultural Competence

World language classrooms have undergone pedagogical shifts over the years regarding how to teach culture, and what culture to teach. Culture is more than just teaching; 1) random cultural activities, the “Frankenstein” Approach, 2) folk dances, festivals, fairs, and food, the “4-F” Approach, 3) monuments, rivers, and cities, the “Tour Guide” Approach, or 4) sporadic tid-bits, random lectures, or stark contrasts, the “By-the-Way” Approach (Galloway, 1985). The “4-F” and “Tour Guide” approaches to culture offer a sense of big “C” culture, the elements of the culture that are most visible. But what about the little “c” culture, the nuances of daily life, interactions, and ways of thinking that are omitted? Frankenstein and “By-the-Way” approaches may tap into both big “C” and little “c” culture, but they are done sporadically, unplanned and lacking purpose. This makes it difficult for students to establish connections and/or contextualize their learning. Therefore, cultural competence is achieved through recognizing, exploring and appreciating how people from other cultures think and interact, what they value and believe, the combination of both big “C” and little “c” culture. Cultural instruction has
moved toward a process oriented constructivist approach providing, “learners with the experiences they need to approach, appreciate, and bond with people from other cultures” (Shrum & Glisan, 2005, p. 136).

Therefore, cultural instruction has transitioned from a bifurcated stance on culture, big “C” and little “c” culture, to viewing cultural competence as trifold, investigating products, practices, and perspectives (ACTFL, 2014). High quality cultural instruction is teaching using materials, resources, and artifacts that are culturally authentic; those that are created by native speakers for native speakers. Products can be concrete or intangible creations of a particular culture. For example, products could include physical household items, clothing, housing, literature, artwork, and musical instruments, or intangible creations such as dance styles, music, language, and political or social institutions. Cultural practices have to do with patterns of social interactions and behaviors; rites of passage, traditions, gestures and nonverbal communication, dinner etiquette, social norms, or when to use formal or informal language. Perspectives include the attitudes, values, beliefs, and ideals of a culture; the perspectives that underpin the cultural products and practices of a society. For example, cultural perspectives include a people's view of freedom, family, privacy, education, etc. When combined, the triad of authentic products, practices, and perspectives, provides students with a more holistic understanding and appreciation of a specific culture.

**Standards-driven Instruction**

Teaching culture in today’s schools requires more than the integration of supplemental materials or cultural notes from the textbook. Instead, students need opportunities to interact with the language and culture, to engage with the content in a meaningful way. Theisen (2013) supports an, “engaging and relevant lessons and supportive learning environment where they (students) can advance at varied rates and in different ways. We know they need choices, challenges, respectful tasks, flexible grouping, and opportunities to take on leadership roles” (p. 7). Successful cultural instruction is contextualized, integrated, and standards-based; supported through authentic resources, emphasizing communicative, creative, and collaborative demonstrations of learning. Therefore, teaching within the silo of the 5 C’s (Communication, Culture, Connections, Comparisons, and Communities), is not sufficient anymore. Standards-driven instruction includes not only the World Readiness Standards (ACTFL, 2014), but also includes the Common Core State Standards (CCSS) (Common Core State Standards Initiative, 2014), and skills identified by the Partnership for the 21st Century (P21) (P21, 2011).

The World Readiness Standards for Learning Language stress the, “application of learning a language beyond the instructional setting. … To prepare learners to apply the skills and understandings measured by the Standards, to bring a global competence to their future careers and experiences” (ACTFL, 2014, p. 2). This stress of ‘application for the future’ is echoed within the CCSS and P21 skills. Common Core State Standards emphasize skills and understandings that students will need outside the classroom; skills and understandings that support
success within 21st century society. The P21 World Language Skills Map reinforces this within its introduction,

“global economies, a heightened need for national security, and changing demographics in the U.S. have increased attention to our country’s lack of language capability. Every call to action to prepare our students for the 21st Century includes offering them the opportunity to learn languages other than English and increase their knowledge of other cultures” (P21, 2001, p. 2)

Yet again, value and importance is placed upon the need to combine language and cultural learning in a fashion that is relevant, meaningful and characteristic of the ‘real world.’ When utilizing instructional materials and techniques that are culturally authentic and stress cultural competence, students are able to move beyond traditional and/or benign educational experiences to embark upon significant and rigorous learning.

**Culture in the Classroom**

While world language instruction teaches to the 5 C’s of language learning, not all of the C’s end up carrying the same weight within the teaching and learning. For example, the Communication standard is focused upon daily within the world language classroom; whereas, the Connections standard might be addressed only weekly. Culture and cultural competence deserve significant emphasis and attention within the instructional design. However, determining how to teach culture, what to include and where to locate quality cultural resources can prove challenging.

When planning for cultural integration within lessons, it is often easiest and wise to design instruction with culture as a thematic backdrop, or premise for a learning unit. This provides the most cohesion between culture and language, and it optimizes instructional time. The following model provides one example of how to embed culture within language learning. Instruction was designed to activate students’ schema, engage students in culturally authentic texts, and assimilate their learning through creative incorporation of technology. Lessons were based upon a culturally thematic instructional design. Pre-reading assignments and/or activities were created in order to prepare students to explore the cultural text. (When speaking in terms of reading, the authors interpret the term “reading” as viewing in addition to reading. One can “read” a poem, a painting, a gesture, a piece of music). Pre-reading tasks stressed activating students prior knowledge and assessing the readiness of students for the upcoming instruction. “Pre-reading tasks should seek to activate appropriate linguistic and cultural schemata” (Shook, 1996, p. 9). These pre-reading tasks allowed students to organize and structure their prior knowledge so that they were prepared for the new learning. Then, students were presented with a cultural text/activity that sought to address and blend together new learning within current frameworks. The post-reading assignment encapsulated the pre-reading new learning thus allowing the student to further his or her knowledge acquired based on all three activities.
The majority of the instructional activities were designed to be collaborative, encouraging communication while fostering cultural competence. Autonomous learning is the ultimate goal for our students, where they can function without the assistance of others, as opposed to requiring mediated guidance through the language. Scaffolding instruction and a gradual release of responsibility (Pearson & Gallagher, 1983) are important elements when working towards achieving this autonomy. The authors have found this constructivist, scaffolded instructional framework to be grounded in research, highly effective when integrating culture within instruction, and supports overall student learning.

Once the decision has been made about what cultural topics to teach and an overall structure established for how to design the learning, there is still the question about which resources to use and the specifics for how to facilitate the learning. The remainder of this paper will highlight specific examples showing how to facilitate cultural competence within instruction. However, quality cultural resources are still needed in order to integrate within instructional activities and technology tools in order to create valuable learning opportunities. The following list offers materials and resources to integrate culture within instruction.

- @openculture is a culture repository within twitter. Daily cultural tweets offer additional resources for teachers to implement in the classroom.
- Flickr is a repository of images that can be viewed by both Apple and Android devices. Uploading, editing and sharing photos are excellent sources for learning. Graphics can be embedded within any instructional lesson.
- mipuebaosugente.com is a Spanish website that has many of El Salvador's cultural categories which are located and linked within other websites. Videos and audio provide authentic cultural and historical traditions of El Salvador.
- http://www.historiacultural.com/ allows users to navigate through various historical eras of time. This is an excellent historical source of history in Spanish.

Technology Evaluation Rubric for Cultural Competence – Products, Practices, Perspectives (TERCC – P³)

When designing instructional opportunities and integrating technology, pedagogy must always remain at the forefront (McGrail, 2007). The educational purpose and learning objectives, are the cornerstones when planning and executing effective standards-driven instruction. From here, one can consider how best to situate learning experiences in order to make them motivating, engaging, and meaningful. There are a plethora of strategies to choose from and technologies available; how does one decide which is the best fit for an intended outcome?

The Technology Evaluation Rubric for Cultural Competence (Products, Practices, & Perspectives) (TERCC-P³) was created in order to support language teachers in determining IF a particular technology will support intended outcomes, and students’ ability to demonstrate cultural competence.
Table 1. Technology Evaluation Rubric for Cultural Competence (Products, Practices, & Perspectives) (TERCC-P³)

<table>
<thead>
<tr>
<th>Technology Evaluation Rubric for Cultural Competence (Products, Practices, &amp; Perspectives) (TERCC-P³)</th>
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</thead>
<tbody>
<tr>
<td><strong>Part 1</strong></td>
</tr>
<tr>
<td><strong>Products</strong></td>
</tr>
<tr>
<td>Highly supportive</td>
</tr>
<tr>
<td>Technology allows cultural products to be integrated, embedded and/or highlighted. Technology allows participants to interact with and/or annotate the cultural product.</td>
</tr>
<tr>
<td><strong>Practices</strong></td>
</tr>
<tr>
<td>Technology allows participants to participate within cultural practices.</td>
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<td><strong>Perspectives</strong></td>
</tr>
<tr>
<td>Technology allows integration of diverse and authentic cultural perspectives. Participants can interact with these perspectives, and/or contribute to them.</td>
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<td><strong>Part 2</strong></td>
</tr>
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<td><strong>Authenticity</strong></td>
</tr>
<tr>
<td>Technology encourages/supports the integration of resources that are culturally authentic (Resources that are made by native speakers, for native speakers)</td>
</tr>
<tr>
<td><strong>Feedback</strong></td>
</tr>
<tr>
<td>Technology offers participants timely feedback. There is ease of use when giving or receiving feedback.</td>
</tr>
<tr>
<td><strong>Language/Culture Connection</strong></td>
</tr>
<tr>
<td>Technology encourages/supports language learning through cultural competency.</td>
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</table>

Cultural competence was analyzed based upon its sub-categories of products, practices, and perspectives. While all three elements are needed to gain a true sense of another culture, there are situations in which meaningful learning is taking place, yet one sub-category is emphasized over another. Therefore, the three P’s of cultural competence (as discussed previously) were analyzed separately within the first part of the rubric. Part 2 of the rubric deals with elements that are integral in the evaluation of a technology’s ability to support cultural competence, but not direct elements of culture themselves.

Authenticity of cultural products, practices, and perspectives is paramount. Without authentic materials and resources, learning is more artificial, and less genuine. Therefore, there is a real strength in technology tools that support, encourage or offer students the opportunity to interact and engage with culturally authentic materials.
In addition, the ability for teachers to provide and students to receive feedback is essential. Without this element, misconceptions can be perpetuated and opportunities missed to extend student learning. As a result, the ability to offer quality and timely feedback is evaluated.

The connection between communication, language learning, and cultural competence is also addressed. As mentioned earlier, cultural learning should not be isolated, but contextualized to support meaningful language learning. Consequently, it is important to evaluate a technology's ability to support and foster the link between language and culture.

The TERCC-P\textsuperscript{3} is a semi-subjective evaluative tool. Pawson and Tilley (1997) state, “the ‘findings’ of evaluation are inevitably equivocal, but … they are still profoundly useful” (p. 16). The rubric is intended to provide a measure to assist world language teachers in determining if a particular piece of Web 2.0 technology is a good match for the instructional objectives and cultural outcomes. It may also be viewed as a resource to justify to administrators, curriculum specialists, or naysayers, the feasibility of a specific technology tool’s integration within world language instruction.

Web 2.0 Tools in the 21\textsuperscript{st} Century World Language Classroom

In today’s world, we must prepare our students to adapt and adjust to different registers, from posting to a blog to tweeting, from composing an email to an employer to updating your status on Facebook (Blommaert, 20013, and Godwin-Jones, 2013). As reflective educators, the authors continually pursue different instructional tools and techniques to enhance teaching and support 21\textsuperscript{st} century learning. In order to help ensure the use of valid technology aligned to instructional objectives, the TERCC-P\textsuperscript{3} was used to explore how cultural competence is actualized when employing Web 2.0 tools during instruction. The Web 2.0 tools had to meet certain requisite criteria in order to be selected. They needed to be: open source, asynchronous, intuitive, offer classroom management features, and allow for creativity, collaboration, and support communication. Additionally, the TERCC-P\textsuperscript{3} was used to analyze and evaluate how each potential technology supported cultural competence outcomes. Based upon this information, final determinations were made regarding which technology to integrate, with which learning objective, and in alignment with which cultural resource(s).

General qualitative research methods were employed (Creswell, 1998) using a case study design (Stake, 1995). Internal Review Board (IRB) protocol was secured and followed when informing participants of the scope and potential impacts of this project. The participating classroom was a post-secondary level one Spanish class. The class was considered a hybrid, a blending of in-class and online learning. This provided the 47 student participants with instructional opportunities afforded by an online learning environment in addition to the more traditional face-to-face classroom setting. Data were collected through artifacts, surveys, qualitative comments, researcher observations and field notes. These data sets were triangulated with the TERCC-P\textsuperscript{3} data to create a more holistic analysis of the interaction between Web 2.0 technology tools and resulting cultural competence.
The Tool. Animoto is an open-source web-based application that allows individuals to create professional quality videos from their computers or mobile devices (Animoto, 2014). Participants import their images, short video clips, audio, and/or text, and with the ability to customize the final product Animoto will help create a polished video.

TERCC-P³ Results. Animoto, even with its limitations was shown to be moderately supportive overall when addressing cultural competencies (Figure 1).

<table>
<thead>
<tr>
<th>Technology Evaluation Rubric for Cultural Competence (Products, Practices, &amp; Perspectives) (TERCC-P³)</th>
<th>Highly supportive</th>
<th>Moderately supportive</th>
<th>Unsupported</th>
</tr>
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<tr>
<td><strong>Products</strong></td>
<td>Technology allows cultural products to be integrated, embedded and/or highlighted. Technology allows participants to interact with and/or annotate the cultural product.</td>
<td>Technology offers participants the ability to observe and/or analyze cultural products.</td>
<td>Cultural products cannot be addressed.</td>
</tr>
<tr>
<td><strong>Practices</strong></td>
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<td>Potential exists for the integration of culturally authentic resources. Technology is used either by or for native speakers—semi-authentic.</td>
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<td><strong>Feedback</strong></td>
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<td>There is limited connection between communicative competence and cultural competence.</td>
<td>Cultural competence is isolated from further language learning.</td>
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Figure 1. Animoto TERCC-P³

Animoto offers students the ability to observe and/or analyze cultural products, practices, and perspectives. The nature of the Animoto tool is geared toward student output; therefore, cultural resources are rarely authentic and opportunities for feedback do not exist. Depending upon how the Animoto project is structured and then implemented, the language/culture connection is moderately supportive. There is at least a limited connection between communicative and cultural competencies.
In Action. Animoto was the first Web 2.0 technology introduced to students. It was chosen as one of the first technologies due to Animoto’s simplistic navigation within their platform. The online account registration and movie instructions for creating and sharing the images are easy to understand. Students add their personal photos and/or use professional videos or graphics from Animoto’s library in order to produce a high quality final product. Multiple assignments were given to students using the Animoto template. Animoto’s cinematic visual technology is engaging. It allows students to be creative, and promotes personalization of content through integration of personal photos or uploading pictures from within their website.

The first assignment using Animoto served as a springboard for a series of future cultural assignments to be strategically and purposefully assigned within the duration of the course (Appendix A). The learning objective of this assignment was to introduce the concept of culture by comparing and contrasting similarities and differences among the student’s culture and that of the Latin American community. As a pre-reading task, students were asked to reflect upon and analyze the following questions:

1. Find two similarities and two differences between your culture and the culture of the people from Puebla. Reference the movie “Food for the Ancestors.”
2. What does the word ‘culture’ mean?
3. What does culture mean to you?

To demonstrate their understanding, students created a video using Animoto expressing “culture” in the L2. Expressions were in the form of video and text. Some students chose to add cultural music conveying the tone of the movie. Upon completion of the assignment the Animoto movie was tweeted via twitter.com. The embedding of the video in Twitter allowed for students to view, reflect and comment in the L2.

As students completed their final products, some became dissatisfied due to Animoto’s watermark appearing across the final polished cultural assignment. Some students were also upset and frustrated with the limited free 30 second download (which Animoto limited without the watermark). As a result, a typically quiet student transformed into a motivated autonomous learner, collaborating with peers to find a solution using an alternative, but similar technology, Stupeflix.com (Stupeflix, 2014). Students were learning from each other. A teachable moment arose due to a perceived need, followed by collaborative communication. Students were allowed and encouraged to use the newfound technology. Half of the class chose to use Stupeflix, the other half Animoto. They were motivated and engaged; thus, they did not mind having to re-do their movies or the time it took to do the extra work. As an instructor, it was a satisfying moment to see students creatively engaged and enveloped in their assignments. Students were pleased when implementing Stupeflix, because the technology visually enhanced their final product, producing a better quality movie. According to Page (1992), “Learners, must no longer sit there and expect to be taught; teachers must no longer stand up there teaching all the time. Teachers have to learn to let go and learners have to
learn to take hold” (p. 84). The student who discovered the alternative technology of Stupeflix was transformed, taking ownership of her assignment.

**Visme**

**The Tool.** Visme is an online, open-source, free tool to create infographics, presentations, and more (Visme, 2014). The saying “a picture is worth one thousand words” could sum up the definition of an infographic. Infographics contain information whose visual representations are expressed by the person creating the infographic. The use of creativity, visualization, information, design, communication and vision are a form of artistic expression conveyed through an infographic. It is an intuitive technology, and it offers vast editing and customization tools, allowing for optimized personalization. Once complete, it’s possible to share the final product by downloading it for offline use, embedding it to a site, or sharing it online.

**TERCC-P³ Results.** Visme is an overall supportive technology that provides input that can support cultural competencies (Figure 2).

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**Figure 2.** Visme TERCC-P³
Visme offers students the ability to observe and/or analyze cultural products, practices, and perspectives. Since the premise of the technology is to provide input, to allow for the embedding of media, there is potential for authentic cultural products and resources to be embedded within the presentation/infographic. The largest limitation of the tool is its inability to provide feedback. However, because Visme is a presentation tool, this limitation is not unexpected. Visme encourages students to be exposed to the content and then to also process it whether through audio, visual or text; therefore, it is a highly supportive tool when encouraging language learning through cultural competency.

**In Action.** It was the intent with this assignment for students to gain an understanding of Spanish poetry and an introduction to the arts. Cultural products and perspectives were stressed as they were introduced to the poem, “Las Jarchas” and the artwork of Francisco Goya. The learning objective for the assignment was to have students demonstrate their understanding of products and perspectives of the language through Spanish poetry and art. As a pre-reading task, students viewed and discussed Francisco Goya’s painting, “Fusilamientos del tres de mayo” (“The Third of May”) which depicts a war scenario during the French invasion. Background knowledge about poetry was gained about “Las Jarchas,” poems written in Arabic dating back to the ninth century. As a post-reading task, students demonstrated their understanding through the creation of an infographic via Visme (Appendix B). Their infographic was to describe the emotions of the people portrayed within the painting and the emotions experienced by someone viewing the painting (the student). It was to also express their perception of the impact the painting and poetry had on Spain. Finally, they were to find another painting similar to the one used as an example, and compare them. Their infographic was assessed with a rubric, stressing learning objectives in addition to originality and creativity. One student self-reported his/her attainment of the learning objective when stating, “Without the text no one would have understood how to interpret the emotions behind the painting. After this I would like to look up other paintings and interpret the meaning behind each of the pieces.” Since every student depicts emotions differently, the Visme infographic was a good fit, allowing individual, unique responses to war and the emotions that these paintings evoke.

**ThingLink**

**The Tool.** ThingLink is an open-source, online tool that allows participants to make their images interactive through embedding video, audio, and/or text (ThingLink, 2014). Based upon the premise that every picture tells a story, ThingLink helps to facilitate and enhance that story.

**TERCC-P3 Results.** ThingLink is a versatile tool that supports cultural competence (Figure 3).
One of the strengths of ThingLink is its general premise that imagery and multimedia are embedded within it, this allows for cultural products to be embedded, or highlighted within the tool, thus allowing students to observe and analyze them. ThingLink is moderately supportive when it comes to cultural practices and perspectives, allowing students to observe and/or analyze but not participate. Depending upon the image/multimedia chosen, there is potential to integrate culturally authentic resources. This tool is geared strictly toward input. Therefore, the ability to provide feedback is unavailable, yet there is a clear connection between language and culture since students must process text, audio, or other visual media in order to comprehend what is being presented. Overall, when aligned with instructional goals, ThingLink can be a valuable teaching tool that offers directed cultural input for students.

**In Action.** A ThingLink was created to introduce the Mayan civilization (Appendix C). The learning objective for this assignment was to gain knowledge and appreciation about the Mayan culture. Mayan cultural practices and perspectives were highlighted through rich, authentic input. The home picture
for the ThingLink was Chichén Itzá, a pre-columbian city built by the Maya's located in Yucatan, Mexico. An authentic Mayan video (the pre-reading task) was embedded within ThingLink to frame the reading assignments (which were also embedded). Students were given instructions to click on each of the icons to learn more about the Mayan civilization. Students were to complete and visit all the different icons. Every time students hovered over an image within Chichén Itzá, they were able to see the tags. The tags, images, audio and/or video, embedded within the ThingLink highlighted cultural artifacts and information. Each icon took students through a series of tags via URL's. Students were asked a series of questions eventually leading them to the last question represented by a Twitter icon. Here they tweeted their final answer to the assignment. Students were able to view responses from their peers and in some cases tweets were a springboard for generating an online discussion forum. This demonstrates student engagement within the assignment and exemplifies their motivation when voluntarily extending their communicative interactions and learning.

Twitter

The Tool. Twitter is a social media platform that allows participants to connect and share information and ideas instantly (Twitter, 2014). Individuals can follow others for professional/educational development, for entertainment, or for social connection. This tool allows for versatility. Twitter, while free, requires participants to create an account, thus establishing/expanding their digital presence. A tool of pop culture, the educational integration of Twitter allows technology that is normally considered out of school to be brought into the classroom (Klopfer, Osterweil, Groff, & Haas, 2009).

TERCC-P\textsuperscript{3} Results. Twitter as a social media platform was also found to be supportive when addressing cultural competence (Figure 4). Twitter offers students to observe and/or analyze cultural products and practices. However, depending upon how the assignment and interactions are developed, Twitter offers the opportunity for integration of diverse and authentic cultural perspectives, allowing students to interact and contribute to these perspectives. Due to the premise of the technology, it can be used either by or for native speakers, offering the potential for authenticity, or at least semi-authenticity. Twitter offers a variety of ways in which to connect, tweet and re-tweet; therefore, there is strong potential for timely responses, and the ease with which to offer feedback/tweet is great. Finally, since language is paramount when participating within this technology, there is a highly supportive connection between communication/language learning and the culture focus being emphasized. Overall, Twitter is supportive of developing cultural competencies, and strengths lie in how this well-known social media platform can be used as an educational and learning tool.

In Action. The use of Twitter within instruction offered a platform in which students could communicate, post reflective comments, publish assignments and communicate about those assignments. Twitter was an easy Web 2.0 technology to integrate because most students already had a Twitter account. Students were not obligated to use Twitter; they had a choice to post on a discussion board.
within the schools learning management system; however, all students chose to use Twitter. Students composed basic tweets or messages in the L2. Hashtags were looked at as topics. As previously mentioned, through the use of Twitter, students voluntarily and spontaneously tweeted back and forth as they expressed opinions and thoughts. For the purpose of the class the instructor's Twitter account was kept private. Only the people that the instructor accepted in the account were able to follow and see the class's tweets. Students enjoyed using Twitter inside and outside of the classroom. One student shared, “Twitter helped me learn and practice more Spanish, and involving technology made it interesting.” Another student echoed these sentiments when stating, “I really enjoyed digging into culture for this project; I wish more of my classes would use technology like this.”

Assignments that integrated Twitter included students' Animoto/Stupeflix movies and their Visme infographics. Because of the nature of Twitter, this technology platform boosted the support of students' cultural competence when using the accompanying technologies of Animoto and Visme. The TERCC-P3 identified various limitations of technology applications.

Figure 4. Twitter TERCC-P3
According to Kumaravadivelu (2003), “They [students] have acquired the learning strategies, the knowledge about learning, and the attitudes that enable them to use these skills and knowledge confidently, flexibly, appropriately and independently of a teacher. Therefore, they are autonomous” (p.140). Data was collected from tweets and were time stamped at all times. The level of engagement with the learning task was notable. Furthermore, it was encouraging to realize as educators, the collaborative environment that was being created and communication in the L2 that was happening independently outside the classroom. Twitter was fostering learner autonomy.

**VoiceThread**

**The Tool.** VoiceThread is an online, open-source, collaborative slideshow that allow participants to have virtual asynchronous conversations based upon embedded multimedia (text, images, video, etc.) within the slideshow (VoiceThread, 2014). VoiceThread allows participants to comment and converse through audio, video, and/or text. In addition to the basic operational functionality of this tool, participants can also use the doodle tool to annotate the embedded slide while commenting.

**TERCC-P³ Results.** Overall, VoiceThread was found to be a moderately supportive tool to support cultural competence (Figure 5). VoiceThreads are created around multimedia, which allows students to observe and/or analyze cultural products, practices, and perspectives. If the VoiceThread is accessible to everyone, there is potential that students might be able to hear from and respond to comments made by native speakers, which would allow students to interact with various cultural perspectives. Ideally, cultural content chosen and embedded within VoiceThread will be authentic. Again, the potential exists for authentic multimedia to be embedded. As a result of the asynchronous nature of VoiceThread, there are limited opportunities to provide or receive feedback; however, if done through a comment, there is an ease of use in commenting so that feedback could be offered as audio, text, or video. This form of feedback, while not most accommodating for individual students, can be highly effective when providing generalized feedback via comment or to help clarify misconceptions that would benefit the larger group. Finally, the discussion element (commenting) surrounding the multimedia slideshow encourages and supports language learning, the culture/language connection. While VoiceThread has limitations, there are many elements that make it potentially a valuable learning tool when teaching culture. Much is dependent upon how it’s created, structured, and implemented within instruction.

**In Action.** The assignment that integrated VoiceThread served as a capstone project that captured digital footprints of students’ own cultural perspectives (Appendix D). The learning objective for this assignment was for students to display an understanding of their culture and stimulate their linguistic ability in L2. Content for this assignment encouraged personalization, allowing students to demonstrate their learning when greeting others, interacting with families and making connections between the L2 culture and their own. Students had
to reflect upon their newly acquired knowledge in relation to cultural products, practices, and perspectives in order to translate that learning in a meaningful and comprehensible way. When assessing student projects, it was clear their linguistic prowess in addition to their cultural competence had improved.

**Discussion and Implications**

Based upon the data collected and analyzed from the implementation and integration of the Web 2.0 technologies (Animoto, Twitter, ThingLink, Visme, and VoiceThread) within the classroom, the authors can generalize that the TERCC-P³ is a valid metric when evaluating the level of support potential technologies will provide students in developing cultural competencies. Yet, when circling back to one of most basic questions, how does one know what culture to integrate within instruction, when and how; does the TERCC-P³ answer these questions? The simple answer is, no. The ultimate responsibility rests with teachers. It is up to the teacher to determine how instruction will support learning goals and objectives. Furthermore, it is paramount that these learning goals and objectives remain at
the heart of decision making when choosing instructional tools, activities and technologies (McKeeman & Oviedo, 2013). However, it is not enough for teachers to maintain focus on these instructional goals, students must be made aware of what the intended learning outcomes are as well. It should not be a guessing game for students regarding what they are to be learning, why they are learning it, and why this particular instructional format/activity was chosen to achieve it. As educators, countless decisions are made within each lesson, our students’ willingness to explore new things and challenge themselves will increase when they are clued into the larger picture. While the TERCC-P can not be all things and answer all questions, it can offer a guideline with which to begin the evaluation process when sifting through and deciding upon which available technology to use for instruction. This is where the value of the rubric lies. The TERCC-P can help teachers make supported and validated decisions when aligning technology tools appropriately to instructional design.

Cultural competency is such a valuable part of world language instruction; however, it can be challenging when integrating cultural content in a meaningful and relevant way. A major benefit of technology integration is the extension of learning beyond the traditional classroom setting; virtual experiences, connecting students with L2 culture, and increasing overall contact with instructional opportunities. One student stated, “I’m more aware of my surroundings and find similarities outside of the classroom.” Making connections between what is taught/learned and real-world experiences is a foundational goal of language educators. The use of technology created a bridge between learning and content. Activities and content did not happen in isolation and technology tools were not kept separate; there was a conscious effort to connect learning outcomes with instructional methods in order to optimize students’ cultural and communicative competencies. This connection and appreciation for other cultures was echoed when another student stated, “I never realized how something as simple as a meal can bring a family together and expand culture.” As a result of carefully scaffolded instructional activities via a platform that was appropriate and engaging, this student was able to have an “aha” moment when reflecting upon a cultural practice and perspective.

When done effectively, technology integration within instruction can offer student motivation and engagement along with enhanced and meaningful learning opportunities. One student stated, “It made me want to learn more about my culture. The assignment also allowed me to explore other cultures. Usually I do not have the time but I did through these assignments.” While unlikely that this student truly didn’t “have the time,” the comment speaks to the student’s increased motivation and willingness to take the extra time to learn and explore the L2 culture when embedded within technology. This increase in motivation was demonstrated when pockets of students were frustrated with a limitation of a technology and took initiative to seek out another venue that provided a better fit for what they wanted to do. This sense of ownership to the instructional task and thus the learning outcome was rewarding to observe. The technology integration was not a frill or add-on, but a needed, useful tool sought after in order to achieve
a desired outcome. Another student personalized their learning when sharing, “Once I started to think Spanish was too hard to learn, the assignment reminded me this is who I am, and I owe it to myself to try and learn.” This student’s comment highlights student engagement with the instructional tasks/tools/objectives. They recognized the relevance of the learning even though it proved rigorous and challenging. This balance between maintaining a low affective filter while still providing challenging instruction is the sweet spot where optimal learning takes place. Students recognized this and took ownership of the learning process.

While learning is collaborative, final instructional decisions are the responsibility of the teacher; teachers need to make the best choices for their own classes and students. Wise instructional choices are grounded in research and best practices. It was the intention of the authors to explore how technology could be integrated within instruction so that cultural competency was highlighted while stressing the importance of aligning learning goals and objectives with cultural competency outcomes and appropriate technology tools. The Technology Evaluation Rubric for Cultural Competence (Products, Practices, Perspectives) (TERCC-P) provides a metric upon which instructional decisions can be made.

References


Appendix A

Culture Assignments

Unit I. Introduced Broad spectrum of Culture to Students

Web 2.0 Technologies utilized: Twitter & Animoto

Pre-Reading - Movie “Food for the Ancestors”
Assignment- Cultural Dish
Post Reading- Animoto movie/twitter

1. Web 2.0 Technologies: Animoto & Twitter

**Learning objective** → Introduce Culture to students by comparing and contrasting similarities and differences among the students culture to include the Latin American community.

Day 1
**Pre-Reading** → Movie “Food for the Ancestors”

Day 2
**Assignment** → Students were asked to bring and or share a family dish or food that was shared at special occasions. The dish or food item could have been handed down from one family member to another, for example from a grandmother to the mother.

Students were asked to answer the following:
1. Find two similarities and two differences between your culture and the culture of the people from Puebla reference the movie “Food for the Ancestors”.
2. What does the word Culture mean?
3. What does culture mean to you?

Day 3
**Post Reading** → Create a movie using Animoto to express “culture”. The movie was tweeted via twitter.com. upon completion of the movie.

**Reflective Tweet:** Twitter.com
Appendix B

Web 2.0 Technologies utilized: Visme & Twitter & VoiceThread

Unit II. Art is introduced

Pre-Reading—“Las Jarchas”.
Assignment- Goya Fusilamientos del tres de mayo
Post Reading- Info graphic

Learning objective- Students will demonstrate an understanding of the cultural products and perspectives in the language studied. Students will understand Spanish poetry and art.

Day 1

Pre-Reading
Students read and interpret the first four strands of “Las Jarchas” This assignment is introduced with “Las Jarchas” –

Para la lectura se usara cuatro breves frases de el texto “Las Jarchas,”

Las Jarchas

Garid vos, ay yermanillas, Decidme, ay hermanitas, [Tell me, oh sisters,]
¿cóm’ contener a meu male? ¿cómo contener mi mal? [How do I contain my sadness?]
Sin el habiib non vivreyu: Sin el amado no viviré: [Without my love, I wont live:]
¿ad ob l’iréy demandare? ¿adónde iré a buscarlo? [Where do I go to look for him?]

Instrucciones

Paso 1—
Los estudiantes trabajan en parejas para la respuesta de una sola palabra que sea un resumen de las oraciones. 10 minutos. Los estudiantes contestan lo siguiente:
1. Escribe lo que viene a tu mente cuando leas cada sección.
2. Después, escribe una sola palabra de un sentimiento que describe cada jarcha. (Contestar en parejas)

[Paso 1—
Students work in pairs answering the following with a single word: 10 minutes.
1. What comes to mind upon reading each line of the poem?
2. Write one word to describe a feeling that captures the essence of each jarcha. (Answer and work in groups)]
Paso 2—
La clase compara las respuestas y se hacen tweet o escriben las semejanzas y diferencias de las respuestas en la pizarra de los estudiantes. 5 Minutos

[Paso 2—
The class compares their answers tweeting their differences and similarities. May be followed up with white board annotation. 5 Minutes]

Day 2
Assignment
Students watch video embedded on VoiceThread: Fusilamientos del tres de mayo por Goya: http://www.youtube.com/watch?v=TylGuoEN5x4
1. Students fill in different emotions between those that are going to be killed, the soldiers and those waiting to be executed.
2. Students post their findings of <emotions> on VoiceThread.

Day 3
Post Reading
Students create an Info Graphic interpreting the following:
1. Goya’s Emotions reference the Painting: Fusilamientos del tres de mayo por Goya
2. Emotions experienced by student
3. Emotions experienced by executioner
4. Emotions experienced by those being executed
5. Impact on Spain
6. Find an American painting similar to Fusilamientos del Tres de Mayo por Goya.
7. Use Vocabulary Chapter 5

Reflective Tweet: Twitter.com
Escribe las diferentes emociones entre los que van a ser fusilados, los soldados Franceses y los que esperan para ser ejecutados.
Write the different emotions experienced by individuals waiting to be executed, the French soldiers and those waiting to be executed

Las Emociones de…
[Emotions felt by....]
<table>
<thead>
<tr>
<th>Las personas que van a punto de ser fusiladas.</th>
<th>Los Soldados Franceses</th>
<th>Los que esperan ser ejecutados/ fusilados por los soldados Franceses.</th>
</tr>
</thead>
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<tr>
<td>[Individuals to be executed by French soldiers]</td>
<td>[The French Soldiers]</td>
<td>[Individuals waiting to be executed by the French soldiers.]</td>
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Appendix C

Web 2.0 Technologies utilized: ThingLink & Twitter

Unit III. Specific Culture is introduced- Mayan Culture

ThingLink #2

Pre-Reading - Mayan Video-
Assignment - Navigating ThingLink.com
Post Reading - Chichén Itzá Poem

Learning objective-
Students will have a broad knowledge and appreciation about the Mayan Culture.

Day 1

Pre-Reading-
Mayan Cultural Video

Day 2

Assignment
A series of icons were placed on a graphic of Chichén Itzá
Students will Tweet the answer to the question posted on ThinkLink. Students must complete a series of steps within ThinkLink in order to be able to answer the question.

Day 3

Post Reading- Chichén Itzá Poem A Ti Madre/Chawe Nan (artesmexico.com)

A Ti Madre/Chawe Nan
Tu amor es tierno,
Eres mi mejor tesoro,
nojbál
Me guías por un camino eterno,
Tu amor es más valioso que el oro.
Eres como una mariposa,
Bella, llena de alegría y color.
Tú, hermosa como una gran rosa,
Que despertaras amor con tu rico color.
ixlab’ la.

Le jun t’on laj ranima’,
Are la’ utzlái jutäq
Kink’àmb’i pa le utzlái
Ranima niml’ai bántajik
Laj junam ruk’jun pepe,
Ütz xuqüje’ laj nojnäq che tz’ajb’a
l’al pa cha lontentiyl.
Lal, ütz pa cha jun niml’ai roxox,
Kwalajsäj la jun utzl’ai nojb’ äl ruk’
You love is tender
You are like a butterfly
You are my best treasure
Beautiful, full of happiness and
color
You guide me through an eternal road
You, as beautiful as a grand rose,
Your love is worth more than gold  
Awaking love with your rich scent.

Reflective Tweet: Twitter.com

Appendix D

Web 2.0 Technologies utilized: VoiceThread, Animoto & Stupeflix, Twitter

Unit VI. Culmination Project: Student’s Cultural perspectives

VoiceThread assignments were spread out accordingly within the semester and or cycle. Each assignment consisted of a pre-reading, an assignment and a tweet or Twitter reflection. The final VoiceThread was to be a culmination of the previous two culture assignments. This allowed for students to focus on both cultural meaning relevant to their lives as well as grammatical concepts covered within the class time frame.

Learning objective - Students will be able to greet and make introductions in L2, comparing and contrasting similarities and making comparison between their family and other families in a Latin American community. Students will display an understanding of their culture.

Day 1

Pre-Reading- Movie 3 minute clip “Los Saludos” [Greetings].

Assignment- Students comment in L2 reference “Los Saludos”. Students will state their name, last name and where they are from as they greet each other using VoiceThread.

Post Reading- Discussing how the same greeting can be interpreted or misinterpreted in another country or by another culture.

Reflective Tweet: Twitter.com

Day 2

Pre-Reading→ Movie 3 minute clip “La Familia” <Family>

Assignment→ Students comment in L2 reference “La Familia”.

Grammar lesson is introduced “comparisons of equality and inequality” using adjectives, adverbs and nouns. Students will compare and contrast their family and a Latin American Family or a family from another country.

Post Reading→ Families and different cultures. Discussion- “La Familia”.

Reflective Tweet: Twitter.com
Day 3

**Pre Reading** → Discussion Family/USA/Ecuador

**Assignment** → Students create a VoiceThread in L2. The following content must be included in the VoiceThread.
- Introduction of yourself
- Introduction of family members
- Movie embedded in VT- **Animoto/Stupeflix**
- What does Culture mean to you?

**Post Reading** → Families and different cultures. Discussion- “La Familia”.

**Reflective Tweet:** Twitter.com