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Spanish Civil War Museum Exhibit: Five-Day Playable Case Study (PCS)

Dennis West
dwest@denniswest.com

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Spanish Civil War Museum Exhibit: Five-Day Playable Case Study (PCS)

Dennis West

Design & Development Project Report

Instructional Psychology & Technology (IP&T)

Brigham Young University

Chair: Jason McDonald, Associate Teaching Professor, IP&T
Committee Member: Peter Rich, Associate Professor, IP&T
Committee Member: Jon Balzotti, Assistant Professor, English
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Background

Brigham Young University’s English and IT departments have collaborated in recent years in the development of online playable case studies (PCS) which are “immersive, transmedia [stories] controlled by [puppetmasters] (i.e., teacher[s]), but played by participants who advance the plot through their contributions and interactions with fictional characters” (Balzotti, Hansen, Ebeling, & Fine, p. 104, 2017). A PCS is intended to provide learners with engaging interactive experiences that enhance their learning in a particular area of study by providing opportunities to apply what they have learned in simulated fictional situations. Subjects covered in these PCSs have included cybersecurity, computational thinking, and professional communication. This PCS is intended to provide, through simulation, Spanish language learners (SL2) opportunities to practice their conversational and cultural engagement skills with native Spanish speakers (SL1) from the country of Spain.
Description of Need

A higher level of second language learning is aided by conversational skills practice (Saito & Akiyama, 2017, p. 44). Additionally, immersion in the language studied offers students an opportunity to change their focus from learning about language, to learning its function and purpose as they use it to accomplish tasks (Balzotti, Montgomery, & Hansen, p. 5, 2018). For this purpose, students engage in study abroad programs to enhance their “oral proficiency, listening strategies, and the use of communication strategies” (Schoonamker-Gates, 2017, p. 181). For many students, however, there are limited opportunities to participate in study abroad programs due to lack of funds or other circumstances. For students such as these, opportunities to learn are restricted to classroom interactions with teachers and textbooks. While a knowledge of a language that can be derived from classroom learning can enable linguistic understanding (i.e. learning about language) regional context and conversational skills are important aspects of an SL2’s development. The Spanish Civil War Museum Exhibit: Five-day PCS was developed to bridge the gap between classroom instruction of an SL2 and the benefits attainable through a study abroad program.

The benefits of presenting a skills practice exercise such as this in a PCS is that it provides the opportunity for students to experience a contextualized application of what they have learned in the classroom, which aligns with the theory referred to as situated learning or situated cognition. The central principle of situated learning as it is tied to second language acquisition is that it is tied to “people’s experiences of situated action in the material and social world” (Gee, 2004, p. 44). This context provides a situated, contextual experience where the learner interacts with a virtual community of practice. It is anticipated that as the students engage with the Spanish Museum PCS, they will uncover new strategies and gain experience in comprehending and negotiating with SL1 speakers with native dialects.
Product Description

The Spanish Civil War Museum Exhibit: Five-Day Playable Case Study (PCS) is an online simulation designed for 300-level university SL2s. Common to this phase in their language learning is an exploration in culture and conversation with the aim of increasing the student’s skill and integration into the culture that inhabits the language they are studying. This project endeavors to immerse students in an activity where they fully participate in the curation of museum exhibits focused on the Spanish Civil War for a fictional museum in Spain called the Museo del Valle.

This PCS is intended to be administered in a classroom setting where students are divided into teams of 3-4 students who will collaborate with each other on a final exhibit. The exhibits that result from these activities are anticipated to be refined and published for use by secondary
school SL1 students in Spain as educational resources for learning about the Spanish Civil War. While the participating students will work in groups, each student will experience the simulation individually and will interact with the characters of the simulation independently.

Prior to beginning the simulation, the instructor receives an access code that creates an instance of the PCS for their classroom. The instructor will also receive access codes for the students, so they may register and gain access to their class’s activity. Additionally, the instructor receives instructional materials that provide guidance for administrating the PCS, learning objectives, and handouts to be given to the students for orientation to the PCS and supplements to use in conjunction with it.

During the PCS, students engage in simulated employment as assistant curators to assemble an exhibit of artifacts from the Spanish Civil War. In this PCS, students experience interactive video sessions with pre-filmed characters that speak in Castellano, the Spanish dialect common to those in the country of Spain. Response options are provided to the students as a means for them to interact with the pre-filmed characters. Students also will have opportunities to record their voice as a response to the video conference characters. These recordings are forwarded on to their instructor for review.

In development of their exhibits, students search through hundreds of artifacts that have been pre-entered into the museum’s archive gallery and organize their selected artifacts into themed exhibits based on a common topic or historical aspect of the Spanish Civil War. The artifacts curated through these interactions culminate in an online museum exhibit that will have historical descriptive texts framing the exhibit that provides context for the students who will later learn from these exhibits in Spain. Because of the real-life application of the work done in this PCS, the Spanish language skills displayed by the students in the written descriptions accompanying the artifacts will require a high level of regional authenticity and cultural sensitivity. Although many decades have passed since the Spanish Civil War ended, there is still a great deal of sensitivity related to the events and motivations of the war.
During the course of the PCS, students discover clues to recover a painting by Joan Miró called *The Reaper* (see Figure 2), which was a 5.5-meter-high anti-war mural commissioned by the Republican Government during the Spanish Civil War. This painting was either destroyed or lost at the end of the Spanish Civil War. Its location is currently unknown and only black and white photographs of it exist (Daniel, 2011).

![Joan Miró working on his mural, The Reaper, in the Spanish Pavilion at the Paris World Fair in 1937. © Clovis Prévost, Hédouville.](image)

While the *The Reaper* remains lost, students are presented with clues to its fictional recovery that will heighten their engagement in the PCS and help them gain a deeper understanding of the history involved with the civil war and the artists who created works in protest of it. This exercise helps students practice their language skills as they virtually interact with pre-filmed characters with whom they will need to negotiate for artifact donations and additional information regarding the clues they find about *The Reaper*. 
Theoretical Framework

A goal of the directors of this work is that it operates within the this-is-not-a-game (TINAG) framework that creates an alternate reality for the user. TINAG is a type of anti-game ethos, “wherein [users] participate in the experience in authentic ways that make it feel like it is not a game, although in most cases they know it is” (Balzotti., Hansen, Ebeling, & Fine, p. 105, 2017). This alternate reality allows them to believe that what they are experiencing is actually occurring. The TINAG approach requires that all expository information related to the functioning of the simulation be conveyed through the alternate reality situations, and not through instructive orientation information that would break the figurative “fourth wall.”

TINAG is a subset or variation of an alternate reality game (ARG) and is meant to take place in a real-world platform or across multiple platforms that the participant would naturally engage with on a daily basis (Bonsignore, Kraus, Visconti, Hansen, Fraistat, & Druin, 2012). Through participation, students assemble the story and live the narrative through their personal interactions with the characters and situations. Because these experiences are happening to them and not through a third person avatar or through a virtual reality simulation, the activity conveys a high degree of authenticity for the student.

In language learning, the term authenticity takes on additional importance as it refers to the authenticity of the materials presenting the language that is studied. Rogers and Medley define authentic as referring to “language samples—both oral and written—that reflect a naturalness of form, and an appropriateness of cultural and situational context that would be found in the language as used by native speakers” whether or not the material was actually composed by or sourced from native speakers (Rogers & Medley, 1988, p. 467). The videos incorporated into this PCS provide an opportunity for authentic exposure to native Castilian dialects as they are presented as video conferences and chats that the students interact with. Further, Lutcavage (1992) proposed the need for the video presentations used in language learning to provide more than a passive environment for the students to view events, but “that the teacher incorporate tasks
and strategies into the video program which engage the students actively and which facilitate and advance their ability to comprehend what they hear (and see)” (p. 33). The plot of the PCS, along with the fictional recovery of the lost painting provide a context for engagement as the students interact with the native characters in the videos to advance the story.

The value of authenticity in these interactions is that it presents an experience for the student wherein they can gain embodied (or tacit) knowledge that relates their classroom-learned Spanish to the real world. This codifies their acquired language into usable meanings that they may draw from in the future. In other words, the “meaning of an object, event, or sentence [becomes] what the person can do with the object, event, or sentence” (Glenberg, 1997, p. 3). Gee argues that “humans understand content, whether in a comic book or a physics text, much better when their understanding is embodied: that is, when they can relate that content to possible activities, decisions, talk, and dialog (2004, p. 35). The experiences in this PCS will embody the student’s previously academic language knowledge into a concrete skill as they use it to understand and converse with the characters they will encounter.

In addition to authenticity, which drives and describes the efforts surrounding the practiced application of learned language, other learning theories are informative to draw from when considering a PCS learning intervention. These theories include situated learning and cognitive apprenticeship model (CAM).

Situated learning has been used in reference to language learning because of the benefits obtained by legitimate peripheral participation (LPP), a key principle in situated learning theory. LPP enables a learner to “become part of a community of practice (i.e., mutually constructed relations among participants, activities, and the world)” (Lave & Wenger, 1991, p. 29). This provides a situation for practical application of knowledge that has been obtained in the classroom. This practical application in a community of practice creates a mechanism that enables the classroom knowledge to become part of the identity of the learner as it is applied in unrehearsed, authentic situations.
The cognitive apprenticeship model (CAM) is related to a traditional apprenticeship with the goal of aiding a learner achieve expertise in an area of study. Similar to situated learning, CAM focuses on placing a student in the context where the area of study is found in the real world (García-Cabrero, Hoover, Lajoie, Andrade-Santoyo, Quivedo-Rodríguez, & Wong, 2018). This model of learning is cognitive in nature as it focuses on the mental tasks involved with learning rather than the physical activities. By placing the student in a situation with relevant tasks to do in an apprentice-type situation, the student’s actions and choices will have meaning as they apply their previously obtained knowledge to solve authentic problems.

The benefit of authentic experience within the TINAG framework of this Spanish Museum PCS is that it provides the student with an opportunity to experience native dialects, conversation, and cultural exposure without having to leave the classroom environment. The students will experience the authentic language interactions in the following ways, (1) through listening to instructions from museum management in video conferences and selecting appropriate responses from an answer bank below the videos, (2) by reading professional email instructions from the museum head curator and composing professional responses, (4) by engaging in formal and informal video chats with characters and replying either verbally in a recorded message or through text selections beneath the videos, and (5) through creating a museum exhibit about the Spanish Civil War intended for a real-world audience of high school students in Spain.
Design Process

Deliverables that I contributed to the final product include:

- Edits to the English language scripts validating that the structure and content contribute to the storyline and learning objectives of the PCS.
- Interface designs and graphics support for the website dashboard elements of the PCS.
- Filming and on-set direction of actors portraying characters in the PCS, whether we were in the same physical space or recording via video conference.
- Editing the audio and video of MP4 files and dividing them up into sections needed for insertion into the PCS system.
- Creation of teacher support materials, including pre-simulation orientation materials, instructor lesson plans, in-simulation student worksheets, and pre- and post-simulation questionnaires.

Phases

The Spanish Civil War Museum Exhibit: Five-Day PCS is an iteration of a PCS framework that has been developed by IT students under the direction of Derek Hansen in collaboration with Jon Balzotti from the Department of Humanities. Other implementations of this PCS framework include Cybermatics (https://cybermatics.byu.edu), which exposes students to some of the concepts and practices involved with cybersecurity; and Microcore (https://microcore.byu.edu), which helps students practice professional communication skills. Many elements, such as the five-day structure, video conferences, and mysteries to solve, are carried over from these previous incarnations of the PCS.

Planning and some early development on the project had already begun when I was brought on to the project, the bulk of which was the early efforts of adapting the PCS framework from previous applications to this one. The learning objectives had been established, the first drafts of the video scripts were written, and a functioning version of the PCS was prototyped. My initial
tasks were involved with filming and editing the videos that were the central interactions that participants would experience.

My approach for the videos in the PCS was to produce them in a way as to reflect how actual video chat and conferences appeared in the real world. I evaluated video conferences to ascertain what set them apart from a staged video. Some elements that stood out to me was that they (1) sometimes have abrupt beginnings, especially if you are calling into a conference with more than one participant who may have already begun a conversation; (2) often have less than ideal camera angles and audio/video quality; and (3) sometimes experience glitches due to network congestion or poor connections. One of the goals of a PCS is to provide a simulated, real-life experience where the participant may believe that “this is not a game” (TINAG), because of this I endeavored to incorporate a variety of these video chat/conference idiosyncrasies throughout the videos to aid in believability.

The videos were to play automatically and then pause when the character in the video had a question, or when it was time for the participant to ask a question. The questions or answers were provided below the video and the participant would simply click on the text which would cause the video to continue. As I was filming the first day video, I began to realize that having single response options under the video seemed like a glorified next button interface. In order to challenge the participant, I believed that there needed to be a variety of options available where the incorrect selection would elicit a confused response from the on-screen characters and only the correct selection would allow the video to proceed. Therefore, during the filming of the videos, I filmed a collection of confused responses from the characters.

Throughout the rest of the video production, a variety of techniques were used to capture the character sides of the chats/conferences. In one instance, the Francisco character was facilitating a meeting with a librarian through a phone video chat. This was accomplished using an iPhone to film the handheld video of himself and the librarian. On another occasion, because the actress
who was portraying Carmen, the donor, lives in Hawaii, we used the Zoom videoconferencing service to capture her performance.

Another element involved in the production of the videos is the need for some visual effect work to incorporate the mysterious lost painting into the above-mentioned video with Carmen, the donor. This was a requirement for two reasons; because she was located in Hawaii and we couldn’t physically get a painting to her location, and because the painting itself doesn’t exist in physical form. To accomplish this, I first needed to create a color version of Joan Miró’s painting since only black and white photographs of it have survived (see Figure 3), which I then used to create a disassembled version of the painting panels.

![Figure 3 - Top left: original image of The Reaper in black and white. Top right: a reference painting by Joan Miró I used to determine how color may have been used in The Reaper. Lower left: the colorized version of The Reaper. Lower right: composited panels.](image-url)
During the filming of this sequence, I directed the actress to place a picture in the corner of her room that would act as a placeholder for the painting panels (see Figure 4). After the video was captured, I worked in the application Adobe After Effects to insert the painting into the corner (see Figure 5).

*Figure 4 - Raw video of the donor with the placeholder picture frame in the corner of the room to the left.*

*Figure 5 - Final version of the video chat with the donor with the panels composited into the video.*
In addition to inserting the painting into the video in After Effects, it was necessary to edit the video frame-by-frame to mask out instances when her arm and hand would pass in front of that area of the screen. It was also necessary to track the motion of the camera because occasionally the actress would bump the table and cause the image to jitter. I would then need to ensure that the inserted painting moved with the background image.

When video production was complete, attention was then needed on the materials that would provide support to the instructors who would be administering the PCS. These supplemental materials took the form of a lesson plan which includes an introduction, the learning objectives, pre-simulation instructions, simulation instructions with summaries of the daily tasks, and post simulation instructions. Also included in the lesson plans are a job opening handout (see Figure 23) that is to be given to the participants prior to the simulation, which introduces the TINAG format as it is presented as if it were an authentic job; and a weekly report handout that the students can use to take notes and prepare information for their daily email reports.

Once developed, the final product will be contained entirely in a website that is optimized for Google Chrome on a desktop or laptop computer. The website is representative of a dashboard interface tool that, as part of the PCS story, is used by the museum administrators in Spain to communicate with their curators that are located throughout the world.
Design Evolution

User Interface

The first draft of PCS layout (see Figure 6) was created by the IT development team. This version displays their initial vision of the system before my involvement. The stripped-back nature of this design was inspired by what they observed in web sites created by museums that simplify design elements in favor of allowing the art presented in images to provide the visual interest from the site. While this design does indeed allow for page content to be the center of interest, there are few affordances given to the learner that provide intuitive guidance on how to operate the PCS.

My first design iteration for the interface presented a skeuomorphic design (see Figure 7), which was inspired by a conversation with project lead, Jon Balzotti, regarding his desire to create a more immersive experience where the learner is virtually transported into an environment that they can explore, similar to the 1993 video game, Myst (see Figure 8). This design was rejected...
by the IT development team (as described later in the Reflection and Critique section) because it strayed from the TINAG that aims to present simulation elements as real-world interactions that use the computer as it is used in real life instead of as a portal to a virtual world.

My second design iteration (see Figure 9) provided a layout that presents a dashboard interface that might be used for the management of the project that the PCS is simulating for the student. The design uses art museum inspired branding and interface controls that provide affordances
represented by icons, colors, and shapes that should be familiar to the students in the target audience.

Figure 9 - Revised user interface design intended to be presented as a Museum website intranet dashboard.

The final design iteration (see Figure 10) used none of my design proposals but rather evolved from the initial design presented by the development team before I joined the project.
Figure 10 - The final design of the user interface for the PCS.

Videos

The videos are intended as video conferences or chats with teams or individuals involved in the curation activities of the student. They are presented within the user interface (see Figure 11) and make use of the web camera on the student’s computer to show their image picture-in-picture, which adds an additional element that aligns with real-world online video interactions providing enhanced immersion into the simulation.
In a user test held on November 1, 2018 (see appendix page), it was discovered that students were taken out of the simulation when they found they could recognize BYU buildings in the background of a video chat that takes place inside a car (see Figure 12). To remedy this, I adjusted the exposure of the video (see Figure 13) so that the background image outside of the car would be too bright to reveal any identifiable features.
Figure 12 - The original video of Francisco where a BYU building is identifiable in the background.

Figure 13 - The modified version of the video of Francisco where the exposure was adjusted in a manner that removes most of the background outside of the car.
Product Implementation

Following the 1 November 2018 user test that I conducted, the project directors held an additional pilot test on 30 November 2018 of the PCS in a class that even more represented the conversation and culture students who are the intended audience. Following these tests, final revisions to the simulation will be completed and the final product will be available for real classroom use in the Winter semester of 2019. The 30 November pilot test and future implementation occur after my participation in this project has concluded.
Evaluation

Stakeholders with an interest in the results of the evaluation of the Spanish Civil War Museum Exhibit PCS are Jon Balzotti, Derek Hansen, and Cherice Montgomery. The initial formative evaluation that I performed was concerned with usability of the system and to what level the technology aids or hinders the progress of the learner through the learning objectives of the PCS.

On 1 November 2018, the Spanish Museum 5-day playable case study (PCS) was tested for usability in a class of students at Brigham Young University in the Spanish 378, Spanish Teaching Methods 2 class. The class contains 9 female and 3 male students who are nearing the end of their university experience preparing for careers teaching Spanish to middle school and high school students. All of the students had previously served missions for The Church of Jesus Christ of Latter-day Saints in Spanish-speaking countries. While none of the Spanish-speaking missions were in Spain, a few of the students had previously visited Spain.

Criteria

The purpose of the test was to evaluate the usability of the PCS system while receiving feedback on the simulation itself in its current state of completion. In presenting the usability test there was more discussion of it being a simulation, what they should expect, and what the purpose of it was than there would be in real-world deployments of the PCS. The students were given a 10-minute introduction to the PCS, 45-minutes to work through as much of it as they could, and 20-minutes to review and discuss.

Observations

The students had received login information and were able to confirm the ability to log into the system prior to class. They used the class code and their individual login code to successfully login with no assistance. Within minutes from starting the test, a number of students had begun the first day activities and were watching the welcome video.
Ten minutes into the test, 3 students had requested the onboarding survey which indicated that they had read the first day welcome email. Also, in the first 10 minutes, students were helping each other with minor technical computer issues and directing them to the email menu where they were to go to read the first email.

The picture-in-picture (PIP) video conferencing element that utilizes the computer’s webcam to place the student’s picture in the bottom right of the video window in the simulation only functioned in Firefox and Google Chrome. In both of those browsers, each time the student would access the video the browser would ask if they wanted to allow the site to access their computer’s web camera. If they did not allow access, the webcam function would not work. In the Safari browser, students were not asked to grant access and the webcam function never worked.

Within 20 minutes the students had begun viewing the gallery of artifacts, browsing websites that were linked to from the museum library, and watching the video of Francisco in the car from day two.

There is confusion over the first day task “Conduct Research: research the target audience for your exhibit.” Most of the students are clicking on the task to go to the section of the museum site related to that task. The previous task, “Gather Information,” takes them to the Library that contains articles related to the Spanish Civil War. The “Conduct Research” task takes them to the Library as well, but it wasn’t obvious that it was to read the article about High School students in Spain and their knowledge of the Civil War. Clearer directions to that article would help.

I observed one student who was in the email section of the site at the end of a day in the simulation. When they clicked to go to the next day, the email for the first task for that day didn’t appear until they clicked away from the email section and then back to it.

At thirty minutes into the test, students are reporting some errors in the Library. Some report incorrect or missing accents on words. Others are reporting text link problems such as on the “El
ruído de los manifestaciones crece” article, there is an in-text link that is appearing as the code for the link instead of rendering as a clickable link. On the same article, the linked site https://allendemares.wordpress.com/2015/04/14/la-segunda-republica-espanola-y-la-reforma-agraria-de-1932/ is no longer available. Students are also wishing that all links to external sites opened new browser windows, so they wouldn’t lose their places.

A student who had taken a responsive web design class from Derek Hansen was testing the responsiveness of the site and pointed out that the text in the question blocks under the videos weren’t wrapping, so they appeared cut off when the width of the window was made narrow.

At thirty-five minutes into the test, I observed a student submitting an end of day email to Susanna in English. She spent a considerable amount of time typing her two-paragraph long message and I thought that was interesting that she was taking that much time on this task while knowing that this was an exercise in testing the system and her response wouldn’t be recorded, nor would she be graded.

Forty minutes into the test students are watching the YouTube videos linked from the Library.

Students are confused by the “Meet with Curator Team” task. Clicking on it takes them to the test exhibit that has been pre-populated. It was explained to them that this task is meant for them to meet with their in-class team to discuss the exhibit. Teacher instructions will need to explain this element of dividing up the class into teams clearly.

Students are reporting that every time they click to view a video, the video page shows a blank video. Only when they click away from the page and back again does the video begin to play. This was observed happening in Safari and Chrome. Firefox did not have this issue.

Some students watching the Francisco in car video from day two recognized Heritage Hall in outside the window. This took them out of the experience a little and they mentioned that they had believed that the videos were actually originating from Spain. The exposure of the video can
be adjusted so the background buildings are too bright to see. Another student remarked, “is his hair a wig?” It’s not, and there’s nothing to be done about that.

Students asked about how to add stuff to the gallery. This is an issue that the development team has discussed, and a solution should be in place soon to make adding items to their gallery more apparent.

Students reported that the videos that allowed students to record a message back to the site were locking up. This is either because they are not given a timer to indicate that something is happening, so they think it’s locked up, because their computer isn’t allowing access to their web cam, or the site actually did lock up on that function.

At forty-five minutes the test ended, and the Job Exit Survey (see Figure 35-Figure 37) was distributed to all students.

After the Job Exit Survey, ten minutes were reserved for open discussion of the experience. Overall the response was enthusiastic and positive with comments such as, “awesome program” and “benefit to students.” Regarding the format it is presented in, it seemed more real to them than a mere assignment. The entire group expressed a high level of interest during the PCS and half of them expressed a desire to keep going.

Many suggested that they would get more out of an assignment like this than they would from a research paper or similar assignment. They liked how it touched on a variety of learning styles—speaking, writing, listening. They noted how writing an email was a different type of skill than writing research and this project included both of those elements.

The students involved in this test group are preparing for careers teaching middle and high school Spanish. Because of this, they are aware of pedagogic techniques and what a system like this can offer to other students. They immediately imagined how this system could help their
future students and thought that it was too advanced for beginners. They recognized that the PCS provided frequent and varied methods of evaluation.

Some suggestions that resulted from this discussion are to:

- Provide the ability to save drafts in emails so they can keep their work if they need to go to a different section of the site to reference information.
- The portion of the orientation video where Beatrice gestures to the right side of the screen in discussing the menu items no longer applies since the user interface (UI) has changed. Suggest editing that section out and that it was not necessary anyway because most people would easily find the email, library, and other sections of the site.
- One student thought that the room echo during the orientation video was a problem because it added to the difficulty in understanding the unfamiliar accent with the speed of their speech. Other students found that it added to the authenticity of the experience because there naturally would be environmental and technological aspects that would interfere with such interactions.
- To mitigate the above concern, it was suggested to add pause/rewind options to the videos. They suggest that the pause/rewind features could be always available response options. The pause button could toggle between options labeled, “Could you please hold on for a moment?” which would pause the video and when paused would read “ok, I’m ready, go ahead,” which would start the video again. The rewind button could be labeled “I’m sorry, could you repeat that?” which would rewind the video ten seconds.
- The students discussed the fact that they recognized buildings in the car video and that they also recognized the library in the Librarian scene. An option for the car video is to increase the exposure (brightness) of the video to obscure the exterior scenery. Regarding the library scene, the development team has already discussed editing out the opening portion for a different reason. That section contains the staircase, which is the most recognizable element of that scene. Another option to obscure the portion of the library scene that takes place in Special Collections is to flip the video horizontally. This option
would work as long as there is no on-screen text that makes it obvious that it has been flipped.

**Outcomes**

This user test was a successful way to test the functionality of the site as well as the concept of the PCS. The students were all of a technological skill and experience level as to make them able to engage the PCS with little or no intervention, and there were few unforeseen glitches that hindered the students’ ability to progress. With the positive results of this test there must also be a recognition of some areas where this test group may not have represented the students who would experience this PCS in a real class environment.

This sampling of university 300-level, Spanish language-learning students all served Spanish-speaking missions for The Church of Jesus Christ of Latter-day Saints. As such, they have a potential advantage over students in the same university level who did not have a similarly immersive extracurricular Spanish-speaking experience. Future tests and pilots of the PCS should make special note of the experience of non-Spanish mission students and whether those differences warrant any adjustments to the presentation or functionality of the PCS.

These students are on the verge of embarking into careers teaching Spanish. As such they have been educated in pedagogical practices and have a more heightened awareness of instruction techniques, learning styles, and assessment strategies than other participants in the PCS may have. This educational training and interest may have influenced their opinion to be more positive than what a traditional Spanish language student may have. There is currently a plan in place to pilot the PCS in a class that more closely resembles the target audience. The reaction of that class should be contrasted to the reaction from this user group to determine if this group’s education training biased it to be more positive.

It was known on the outset of this test that there were some elements of the technology and content that weren’t complete, much of the text on the site was in English, and there are still
some glitches that are in the process of being worked out. All of these aspects restrained the students from fully immersing themselves into the story of the PCS—although many did feel highly engaged in it. When all translations are complete, distractor questions added to the video responses, glitches worked out, and the remaining aspects of the site finished it will be necessary to perform a final test to ensure that the students are able to become as fully immersed in the experience as possible.

This user test has been valuable as a milestone that determines the validity and value of the Spanish Museum PCS in providing an immersive and authentic Spanish language experience that focuses on culture and conversation. While there is still work to do before this product is ready for deployment in real-world educational settings, its current form already shows much promise in meeting the goals of its creators.
Reflection and Critique

My primary instructional design duties included editing the scripts to enhance the TINAG integration; the creation of lesson plans and supplemental materials; and a user test evaluation of a functioning prototype in a classroom setting. In addition to my instructional design contributions, I understood my responsibilities to include the addition of design enhancements to the web interface and interactions to insure the museum website dashboard students interact with would help immerse them into the alternate reality provided by the PCS. I also directed and edited the video conference scenes featuring SL1 actors who are natives of Spain.

I believe that this project aligned well with my goals of pursuing my education in instructional design as it combined the implementation of pedagogically sound learning methods in a PCS while creating an aesthetically compelling, immersive experience that is intended to enhance the experience of the SL2 student.

Upon first hearing of this project, I imagined that this would be an intriguing challenge and opportunity for me to collaborate with individuals from other disciplines to create a learning object that could get much use. As was the case with my prior attempts at finding a project that would fulfill requirements for my master’s degree, I expected this to become my project. As I’ve worked on this for the last few months, my impression on my ownership of this has changed dramatically, as I will explain.

When I began exploring the project after joining it in the Spring of 2018, I noted how the learning objectives, narrative outline, scripts, user interface, design, etc. had in large part already been established. Having a background in animation, I sensed an enthusiasm for my filmmaking abilities, and I believed that I could enhance the quality of the final product. While I was happy to provide these skills, there were times I felt more like a service provider than a useful contributor.
Prior to returning to school for additional degrees, I worked for many years as a professional graphic/web designer. I consider it a given that I will always have a keen interest in the visual aesthetics of any project that I work on and it appeared that those on the team shared this expectation and welcomed my input.

I initially designed a skeuomorphic design as the PCS interface (see Figure 7) where the video chat window was contained in a virtual iPad and the note sections were lined paper. This was intended to create the impression that the screen was showing the top-down view of the assistant curator’s desk. This design sprang from my conversation with Jon Balzotti regarding how immersive the interface could be, recalling techniques used in the 1993 video game Myst, among other things. When this design was presented to the rest of the development team, it was clarified to me that a TINAG interface is one that resembles the element as it would be found in the real world so as to present to the user the illusion that what they are experiencing, in this case through a website, is an authentic activity. This is an example of how, at this time, I didn’t have a concrete grasp on exactly what TINAG meant and how the website interface was an important part of the immersive, real-world simulation. From this experience I learned of the importance to ensure that I have a complete grasp on all of the parameters defining what the final product should be. I had heard the acronym TINAG before, but it’s clear that I hadn’t researched it thoroughly enough at this point to really understand all of the implications.

With this valuable feedback, I returned to my computer to create an alternate design that could serve to add some more visual interest to the PCS. The programmers who had developed the interface had designed their prototype to resemble what they thought was an authentic museum site, having taken as their inspiration the look and feel of museum websites that currently exist in Spain. They noted how these sites were very minimalistic, featuring limited color and fonts with everything on a white background. The challenge with this approach, I believed, was that the reason such a minimalistic design would be used in a museum is to allow the art featured on the site to take center stage without any peripheral distractions. This PCS, on the other hand, would be made up of mostly text, video chats, and a gallery page. I believed that a minimalistic design
for this PCS would seem barren, so I jettisoned my skeuomorphic attempt and designed a site that could work for a museum, but with more subdued colors, fonts and graphics (see Figure 9) that would complement the text, videos, and gallery of the PCS. In a follow-up meeting, I presented my new design and received what I believed was a positive reception. Shortly afterwards I provided the source files for the graphics to the development team, so they could integrate them, and then I took some time away from the project for family business.

Upon recommencing my work in mid-August 2018, I attended a meeting where the current prototype of the system was demonstrated. It was then that I learned the development team had not used the designs and interface suggestions that I had provided. When I asked why my designs weren’t used, they explained that they weren’t able to find the graphics in any Creative Commons database to determine if they were license free. I was confused about why this misunderstanding could have occurred until I realized that, while I habitually think of myself as a graphic designer, I was taking on the role of instructional designer on this project and the development team was not expecting these visual design tasks to be completed by me. This illustrates to me the importance of gaining a clear understanding up front of what everyone’s roles and responsibilities are so that I don’t spend valuable time on an incorrectly assumed role.

It was at this point that my sense of ownership in this project began to wane, which presented doubt and concern that this project would be something that I could confidently defend to my committee as something that I had influence on. The motivational struggles that followed plagued my ability to focus on the further work that I needed to complete.

Soon, however, my focus shifted from the graphics and videos associated with the interface of the PCS and turned towards the need to conduct a user test and create supplemental materials for the teachers and students. This transition in focus provided a renewed interest in this project and reminded me that this project is in support of my Instructional Psychology and Technology master’s degree and is not a graphic design or video production portfolio piece. I learned that my focus should have been on the evaluation of the PCS and learning materials while allowing any
other aesthetic enhancements that I could provide to be fringe benefits, and only if they were requested.

From this point on, I had more meaningful interactions with my fellow students who were working on the project and the directors who were overseeing production. I successfully conducted a user test with a university Spanish language class that provided some illuminating insights on how the PCS could be improved. I was also able to create some learning materials that met the needs of the instructors who would be administering the PCS to their class, and the project directors were very pleased with.

So often in my previous career I have either worked as a freelance designer, or as the sole designer in a marketing organization. In these cases, I have become accustomed to taking responsibility for multiple aspects of projects. In my career going forward, I know that I will work on complete learning development teams that include subject matter experts, instructional designers, graphic designers, and eLearning programmers. To be a successful member of a team, I have learned that I need a solid knowledge of the purpose and framework of the final product; the role that I am to play on the team; and the responsibilities that the others on the team will be required to fill. I also need to understand the value that other contributors can provide to the project and allow them to create as they see fit.

As I reflect back on this project, it has been a great learning experience for me. I see the final product as a great tool for an advanced Spanish language student to practice their skills in an enjoyable playable case study. I learned a great deal developing the learning materials and conducting the classroom user test. I enjoyed interacting with everyone in the production of the videos. The lessons that I have learned from my mistaken assumptions have taught me a great deal as well. Ultimately, the Spanish Civil War Museum Exhibit Playable Case Study is a project I am happy to have been a part of.
Lessons for Future Development of Playable Case Studies

The Playable Case Study (PCS) framework used for this Spanish Civil War Museum Exhibit project is a framework that has been utilized for previous subjects, namely Cybermatics (https://cybermatics.byu.edu), which exposes students to some of the concepts and practices involved with cybersecurity; and Microcore (https://microcore.byu.edu), which helps students practice professional communication skills. Future projects based on different subject matter are currently under development. Since a PCS can be created for virtually any subject that would benefit from simulated real-world interactions in a controlled environment, a few words concerning the lessons I’ve learned through this process might be helpful.

Get involved in the process early. When I began work on this project, many of the concepts and scenarios were already planned out, as well as much of the technological implementation. Earlier involvement with all of the teams would have afforded me with the opportunity to have a greater influence on the direction of the project.

Meet regularly with all team members. The nature of these PCS projects are such that they typically span multiple departments at the university. The team members in the various departments will likely have regular working and meeting times established. Make yourself available for these smaller meetings instead of waiting for the few occasions when all teams will meet together. Decisions will be made in the smaller department meetings that will be important for you to know about and would be beneficial if you could influence.

Gain a clear understanding and do your own research about all of the theoretical frameworks that drive the creation and implementation of a PCS. Situated learning, cognitive apprenticeship, and embodied knowledge were instructive for me in researching the theories relevant to this type of learning activity. Additionally, learning theories and instructional strategies related to the learning objectives of the course are instructive. This is where much of the discussion about authenticity, as related to language practice, was derived from.
As can be seen in the following section, Product Walkthrough, the entire experience takes place through a web portal. In this case it was conceptualized as the back-end Intranet for the museum where administrative matters could be attended to. The students engage with the system under the guise of curating a museum exhibit, but that is only a MacGuffin. The real purpose for their participation is to provide an opportunity for them to practice their language conversation and comprehension skills. When engaging in the development of a PCS, the focus for the interactions must be the learning objectives that are driven by the academic subject matter that is being learned. This may be difficult at times when focus shifts in development to writing the stories or creating scenarios. The story must always serve the purpose of a practical application of the learning objectives. Perform a thorough analysis of the skills an expert performer in the field of study will exhibit for all of the items in the learning objectives. Since a PCS is a simulation where students will be asked to perform certain tasks, an outline of what those expert performances will look like will be a useful benchmark when planning the activities and interactions.

The Brigham Young University IT department is continuously developing the PCS system and introducing new enhancements and features not previously available. When reviewing this and past instances of the PCS, make note of areas that can be improved upon and make suggestions for additional features. For example, an improvement upon this PCS would be the introduction of voice recognition technology so that the student could verbally communicate with the video chats in a way that would provide an additional layer of reality to the simulation.

Finally, as conveyed in my Reflection and Critique, gain a clear understanding of your responsibilities and contributions to the project, both as you understand them and as the other team members understand them. Ensure that you are making minimal assumptions so that your time will be used to the greatest advantage. There are many teams and team members on these projects. Some may be working as paid research assistants; others may be working towards a degree supporting project. Understanding their motivations is helpful as well so that everyone may meet their individual goals through this process.
Appendix

Product Walkthrough

The Spanish Civil War Museum is a playable case study (PCS) intended to provide an advanced SL2 student with an immersive experience where they are able to practice conversational Spanish with SL1 natives of Spain while learning that country’s culture. The final product is located at the web address https://museodelvalle.byu.edu/. There is access available as either student or instructor.

The following is a brief summary of the general narrative the user of this simulation will experience during the Spanish Civil War Museum PCS.

Figure 14 - Day 1 of the Spanish Civil War Museum PCS.
Once logged into the simulation, the user becomes engaged in the simulation where they take upon themselves the persona of a newly-hired assistant curator for the Museo del Valle and are tasked with gathering information and artifacts for use in creating an exhibit about the Spanish Civil War. On the left of the screen (see Figure 14) they see a “Progreso” (Progress) section which tracks their daily tasks with open boxes which are filled when the task is marked complete. Below the Progreso section is the “Dia 1 – Tareas” (Day 1 – Tasks) section where they view a checklist of items they must complete and check off before their day is complete.

Across the top of the interface are menu items which include

- The “Biblioteca” (library) section contains resources the student can use to learn about the Spanish Civil War and also do research on their target audience.
- The “Galería” (Gallery) section contains an archive of various artifacts that are available for curation in the exhibit. The user will organize these into themes that align with their area of focus for their exhibit (e.g., weapons of war, women of the civil war, art, propaganda, etc.).
- The “Teléfono” (Phone) section contains the interface where the user will virtually communicate with personnel of the museum as well as a historian, a donor, and a librarian. The Teléfono section also features a “Mis Notas” (My Notes) panel where the user can type notes of useful information learned in the video conferences.
- The Email section is where the user will send and receive emails to others in the simulation. Each day will begin with an email from Susana, the head curator of the museum, and will end with the user sending Susana a report of the day’s activities which will be sent to the instructor for the class for review.

The task list is presented as a check list with instructions regarding what the participant must accomplish each “day” of the simulation. A day in the simulation represents a set of tasks to be
completed before the user can progress to the next day of the simulation. The participant may perform multiple simulation days in one class session or may take multiple days to complete a single simulation day. Each task description also contains a link to the section of the site where they will go to accomplish the task; for example, clicking on the second task of day one will take the user to the “Teléfono” (Phone) section of the site for a video conference orientation with key museum personnel.

The first task of day one instructs the participant to check their email in which they’ll see a welcome message from Susana Gomez (see Figure 15), the lead curator of the library. This message provides an introductory orientation to the library and the general tasks they’ll perform as an assistant curator. This message also provides a link to a Job Entry Survey where the participant can provide some demographic and background information which is intended to provide the developers of the simulation with data that can be used for future improvement.

![Figure 15 - Welcome email from museum Curator, Susana.](image-url)
The second task from the first day instructs participants to make a video call to Beatriz so they can meet the rest of the museum staff and receive instructions (see Figure 16). This video sets the format for many of the online interactions that the user will experience. It is in the format of a video conference with the point of view (POV) of being joined via a web camera. The characters in the video address the participant directly and pause occasionally after asking the participant a question. The participant uses a phrase or question from a bank below the video to provide their response. If the response is correct, the video continues to play and they obtain more information. If they choose one of the distractor responses, then the characters in the video act confused, as if they didn’t hear the response or they didn’t understand what was being said.

Figure 16 - Day 1 orientation video conference with key museum personnel.

With one of the objectives of this PCS being to allow the student to gain cultural exposure, some of the distractor answers in the response bank have been phrased to include words that might sound correct, but in reality, have very different meanings. For example, the Spanish word for
hand is “mano,” but a word that sounds very similar to mano is “mono,” which is the Spanish word for monkey. Another more culturally relevant example is the word, potatoes. In Mexico, potatoes are called “papas,” while in Spain they are called “patatas.” If a phrase in the response bank contains the more regionally accurate word choice, that option would be correct. These techniques in the distractor responses are intended to provide linguistic and cultural challenges throughout the video interactions.

Additional tasks on the first day will direct them to view a gallery that contains a pre-compiled collection of art and artifacts that they can choose from to create their exhibit and visit the library (see Figure 18) where they can research articles and videos about the Spanish Civil war that they can reference for more historical and cultural background on Spain as well as for information regarding their target audience.
At the end of the first day, and each day thereafter, the students will send an email to Susana summarizing what they were able to accomplish along with any requested information about that particular day. Once sent, these emails will be forwarded to the class instructor for evaluation. On the final day, they will complete a Job Exit Survey which will gather more data for the PCS developers to use in future improvements.

During the course of the PCS, participants will discover clues to a mystery involving a painting by Joan Miró called *The Reaper* (see Figure 2), which is a well-known abstract painting that protested the Spanish Civil War and was ultimately either destroyed or lost. Participants will encounter a fictional situation where this lost painting is actually in pieces in the home of a donor with whom they are negotiating regarding artifacts to be featured in the exhibit. This discovery
of the lost painting adds a level of intrigue to the PCS and provides an opportunity for the participant to have some additional back and forth conversation with other team members from the museum as well as a historian and librarian who are able to authenticate details regarding the painting.

On the fifth and final day of the PCS, the participants will, in their assigned group, use the PCS interface to create their exhibit in the form of a web page that will contain their written descriptions of their artifacts as well as historical information that ties all of the artifacts together into a single unifying theme.

Tasks of the five-day PCS include:

- **Day 1**
  - Read a welcome email from Susana and take the job entry online survey.
  - Participate in the orientation video conference with Susana, Beatriz, and Francisco to receive instructions.
  - Collect information about the Spanish Civil War from the museum’s library or from other websites.
  - Find out about the target audience of your research.
  - Compose an email to Susana summarizing what was accomplished today and what your thoughts about your target audience are.

- **Day 2**
  - Read an email from Susana for instructions on the day’s tasks.
  - Make a video call to Francisco to discuss your meeting with a donor to the museum that he is on his way to pick up items from.
  - Visit the museum gallery and choose items to use in your exhibition.
  - Make a video call to Carmen, an individual who may have items to donate to the museum for your exhibition. Note: this is where the student first sees and asks about the panels from the lost painting *The Reaper*. 

Send an email to Susana to update her on the meeting you had with Carmen and to inform her about the painting that you suspect might be *The Reaper*.

**Day 3**
- Read an email from Susana for instructions on the day’s tasks.
- Make a video call to Jose, a historian, to consult with him regarding your findings with the donor, Carmen.
- Make a video call to Francisco who will facilitate a conversation between you and a librarian who can confirm the authenticity of the painting, *The Reaper*.
- Write an email to Susana updating her on all activities of the day.

**Day 4**
- Read an email from Susana for instructions on the day’s tasks.
- Make a video call to Carmen to negotiate with her for the donation of the now confirmed, *The Reaper*, painting to the museum.
- Finish your online exhibition. Include 5 artifacts with descriptions and a page summarizing the Spanish Civil War.
- Write to Susana about the events of the day including a summary of the artifacts that you chose for your exhibition, and why.

**Day 5**
- Read email from Susana for instructions on the day’s tasks. You will be asked to complete an online exit survey.
- Make the final touches and revisions to your exhibition.
- Write an email to Susana about your experience working at the museum.

**Learner Analysis**

From information compiled by the senior personnel of this project for the purpose of obtaining funding, the learners who will participate in this PCS are 300-level SL2 university students. I have further discovered through discussions with the senior personnel that the learners will have had a variety of backgrounds in Spanish speaking, some of which may have included LDS
missions where they served in a Spanish speaking country, or area. These students are at a point in their education where they need to take what they have learned about the Spanish language and implement it into advanced usage. They will be engaged in conversation and culture classes in the Spanish and Portuguese Department in the BYU College of Humanities.

Further insights I have gained about the target students through interviews for previous work that I have done for an evaluation study in a recent course I took is that a great deal of these learners will have previous experience with computers, web video conferencing, and email. These comfort levels with related technology will provide the most natural connection for the student with the PCS, as it strives to replicate these interactions, providing necessary affordances for those familiar with technology. The overwhelming majority of students at BYU are between the ages of 18 and 24 (“Brigham Young University - Provo,” n.d.). This age range would place the majority of students engaged in this program the computer skills necessary to be successful in this PCS. Additionally, they are in their third year at the University, so any technological inexperience they may have had beginning their college careers would have been ameliorated by exposure to tools used for previous coursework.

Learners who participate in this PCS are derived from a generation that have routinely been exposed to video games and role-playing scenarios. Because of this, the act of taking on a persona of a person setting out to accomplish a fictional task in an alternate reality would be a concept they would be familiar with and should be something they would willingly engage in.

**Environmental Analysis**

This playable case study (PCS) will be used as an instructional unit in a 300-level SL2 course focusing on conversation and culture. It will be administered by the professor teaching the class and will be taken by students in small groups, but students will individually progress through the PCS. The groups will have their own set of exhibits to curate and the system will group them together in a final submission, but the PCS will address the students individually and each will have to work through the various tasks.
For the best experience, students will be encouraged to use the latest version of the Google Chrome browser on a laptop or desktop computer. The entire PCS is web-based through a single domain. The only time a student may need to visit another website would be when they require additional background information for the artifacts they are researching to include in their exhibit.

**Consulting Products/Precedent**

A product similar to this Spanish Civil War Museum Exhibit is the Cybermatics.io project that has also been developed under the direction of Derek Hansen and Jon Balzotti (See Figure 19).

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**Figure 19 - Screenshot of the Cybermatics day one interface.**
Cybermatics is a PCS that endeavors to introduce beginning IT students to the career of Cybersecurity. It uses the same back-end system that our PCS will use and attempts to place students in an alternate reality where they participate in penetration tests of a website as a member of a consultation team that tests internet security.

When I was enrolled in IP&T 661 Intro to Evaluation in Education, I participated in a group evaluation of the Cybermatics PCS. During that evaluation, I was able to gain insights into how usability and affordances can impact the experience of a PCS. Since the goal is to create an environment where the user believes that this is not a game (TINAG), the experience needs to allow for different levels of backgrounds and anticipate areas where users of varied experience levels in the medium or subject matter might run into difficulties, and provide natural, in-game affordances to mitigate those difficulties. These affordances will be in the form of conventional web interface devices and symbols that users will be familiar with as previous users of digital technology.

Among the lessons learned from Cybermatics was the importance of the user interface in informing the learner of what was happening. We found that the minimalistic design and color scheme of Cybermatics hindered our test user’s ability to identify elements that were indicating where they were in the process, and what they were to do next.

There were also browser compatibility and screen size issues that hindered user progress. It was not indicated that the required browser for full functionality was Google Chrome. As a result, buttons and other interface features did not function as users expected and progress was halted. There were also instances where small laptop screen sizes caused the user interface to push the buttons the users use to navigate to the next day below the fold in the browser window. Since the navigation was located in a page element that had scrolling and scrollbars turned off, there was no way to scroll down to the button to access that navigation.
These issues will be addressed in the usability and visual design of the Spanish Civil War Museum Exhibit PCS.

**Content or Task Analysis**

The tasks the students who participate in this PCS will perform focus on their ability to speak, understand, read, and write Spanish as SL2s who are not native to Spain. The central tasks associated with their Spanish abilities in a variety of scenarios and directed at various audiences. The standards of performance and proficiency for language learners have been established by the American Council on the Teaching of Foreign Languages (ACTFL). Within these standards, *performance* refers to practice that occurs within the classroom setting, which is assessed with near “authentic, real world use of language” (ACTFL, 2012a, p. 4) in a controlled environment; *proficiency* refers to the ability the language learner has to use the language in the real world, unrehearsed situations in a manner that would be culturally appropriate with SL1s (p. 4).

The ACTFL distinguishes three ranges of language performance: novice, intermediate, and advanced (p. 6) which describe what the language learner is expected to be able to perform within that range. What they are to perform is divided into three modes of communication: interpersonal, interpretive, and presentational with various associated tasks (see Figure 20).

For measuring proficiency, the ACTFL has established five ranges with descriptions of what a language learner can and cannot do at each level. The five ranges are novice, intermediate, advanced, superior, and distinguished (ACTFL, 2012b, p. 4).

The ACTFL also distinguishes domains (pp. 8-9) that identify the range of performance as well as the context for language use which include

- Functions, the tasks the learner can perform using the language;
- Contexts, the situations in which the language use takes place;
- Content, the topics about which the learner can understand and discuss;
- Text type, the combinations of words and phrases that the learner is able to utilize and understand within the given requirements of the level;
- Language control, the level of control over the features of the language that the learner can utilize to communicate and derive meaning;
- Vocabulary, the variety of words, terms, and phrases at the disposal of the learner to communicate and derive meaning;
- Communication strategies, the strategies the learner utilizes to communicate and derive meaning;
- And cultural awareness, the capacity of the language learner to communicate effectively in a culturally specific situation.

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<thead>
<tr>
<th>Interpersonal</th>
<th>Interpretive</th>
<th>Presentational</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Active negotiation of meaning among individuals</td>
<td>• Interpretation of what the author, speaker, or producer wants the receiver of the message to understand</td>
<td>• Creation of messages</td>
</tr>
<tr>
<td>• Participants observe and monitor one another to see how their meanings and intentions are being communicated</td>
<td>• One-way communication with no recourse to the active negotiation of meaning with the writer, speaker, or producer</td>
<td>• One-way communication intended to facilitate interpretation by members of the other culture where no direct opportunity for the active negotiation of meaning between members of the two cultures exists</td>
</tr>
<tr>
<td>• Adjustments and clarifications are made accordingly</td>
<td>• Interpretation differs from comprehension and translation in that interpretation implies the ability to read (or listen or view) “between the lines,” including understanding from within the cultural mindset or perspective</td>
<td>• To ensure the intended audience is successful in its interpretation, the “presenter” needs knowledge of the audience’s language and culture</td>
</tr>
<tr>
<td>• Speaking and listening (conversation); reading and writing (text messages or via social media)</td>
<td>• Reading (websites, stories, articles), listening (speeches, messages, songs), or viewing (video clips) of authentic materials</td>
<td>• Writing (messages, articles, reports), speaking (telling a story, giving a speech, describing a poster), or visually representing (video or PowerPoint)</td>
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*Figure 20 - Three Modes of Communication (ACTFL, 2012a, p. 7).*
The ACTFL identifies the high intermediate to advanced range of proficiency as the expected level that an undergraduate student should be able to achieve. The following performance descriptors identify the expert performance that the successful 300-level undergraduate language learning student should be able to accomplish within the language domains:

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<tr>
<th>Domains</th>
<th>Advanced Range</th>
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<tbody>
<tr>
<td></td>
<td>Interpersonal</td>
<td>Interpretive</td>
<td>Presentational</td>
</tr>
<tr>
<td>Overall</td>
<td>Expresses self fully to maintain conversations on familiar topics and new concrete social, academic, and work-related topics. Can communicate in paragraph length conversation about events with detail and organization. Confidently handles situations with an unexpected complication. Shares point of view in discussions.</td>
<td>Understands main ideas and supporting details on familiar and some new, concrete topics from a variety of more complex texts that have a clear organized structure.</td>
<td>Communicates information and expresses self with detail and organization on familiar and some new concrete topics using paragraphs.</td>
</tr>
<tr>
<td>Functions</td>
<td>Can communicate with ease and confidence by understanding and producing narrations and descriptions in all major timeframes and deal efficiently with a situation with an unexpected turn of events. May show emerging evidence of the ability to participate in discussions beyond the concrete.</td>
<td>Comprehends the main idea and supporting details of narrative, descriptive, and straightforward persuasive texts. Makes inferences and derives meaning from context and linguistic features.</td>
<td>Produces narrations and descriptions in all major time frames on familiar and some unfamiliar topics. May show emerging evidence of the ability to provide a well-supported argument, including detailed evidence in support of a point of view.</td>
</tr>
<tr>
<td>Content/Context</td>
<td>Functions fully and effectively in contexts both personal and general. Content areas include topics of personal and general interest as well as work-related topics and areas of special competence. May show emerging evidence of the ability to communicate in more abstract content areas.</td>
<td>Comprehends texts pertaining to real-world topics of general interest relevant to personal, social, work-related, community, national, and international contexts.</td>
<td>Creates messages fully and effectively in contexts both personal and general. Content areas include topics of personal and general interest (community, national, and international events) as well as work-related topics and areas of special competence.</td>
</tr>
<tr>
<td>Domains</td>
<td>Advanced Range</td>
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<tr>
<td><strong>Text Type</strong></td>
<td><strong>Interpersonal</strong> &lt;br&gt;Able to understand and produce discourse in full oral paragraphs that are organized, cohesive, and detailed.</td>
<td><strong>Interpretive</strong> &lt;br&gt;Comprehends paragraph discourse such as that found in stories, straightforward literary works, personal and work-related correspondence, written reports or instructions, oral presentations (news), anecdotes, descriptive texts, and other texts dealing with topics of a concrete nature.</td>
<td><strong>Presentational</strong> &lt;br&gt;Produces full paragraphs that are organized and detailed.</td>
</tr>
<tr>
<td><strong>Language Control</strong></td>
<td>Language control is sufficient to interact efficiently and effectively with those unaccustomed to dealing with language learners. Consistent control of basic high-frequency structures facilitates comprehension and production.</td>
<td>Sufficient control of language (vocabulary, structures, conventions of spoken and written language, etc.) to understand fully and with ease more complex and descriptive texts with connected language and cohesive devices. Derives meaning by: - Understanding sequencing, time frames, and chronology - Classifying words or concepts according to word order or grammatical use</td>
<td>Control of high-frequency structures is sufficient to be understood by audiences not accustomed to the language of language learners. With practice, polish, or editing, shows evidence of Advanced-level control of grammar and syntax.</td>
</tr>
<tr>
<td><strong>Vocabulary</strong></td>
<td>Comprehends and produces a broad range of vocabulary related to school, employment, topics of personal interest, and generic vocabulary related to current events and matters of public and community interest.</td>
<td>Comprehends generic and some specific vocabulary and structures, specialized and precise vocabulary on topics related to one’s experience and expanding number of idiomatic expressions.</td>
<td>Produces a broad range of vocabulary related to topics of personal, public and community interest, and some specific vocabulary related to areas of study or expertise.</td>
</tr>
<tr>
<td>Domains</td>
<td>Advanced Range</td>
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<td>--------------------------------------------------------------------------------</td>
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<tr>
<td>Communication Strategies</td>
<td>Uses a range of strategies to maintain communication, able to:</td>
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<td></td>
<td>• Request clarification</td>
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<tr>
<td></td>
<td>• Repeat</td>
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<td></td>
<td>• Restate</td>
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<tr>
<td></td>
<td>• Rephrase</td>
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<tr>
<td></td>
<td>• Circumlocute</td>
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<td></td>
<td>Comprehends fully the intent of the message adapting strategies for one’s own purposes; uses some or all of the following strategies, able to:</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>• Skim and scan</td>
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<td></td>
<td>• Use visual support and background knowledge</td>
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<td></td>
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<td></td>
<td>• Predicts meaning based on context, prior knowledge and/or experience</td>
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<tr>
<td></td>
<td>• Use context clues</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• Use linguistic knowledge</td>
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<tr>
<td></td>
<td>• Identify the organizing principle of the text</td>
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<td></td>
<td>• Create inferences</td>
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<td></td>
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<td></td>
<td>• Differentiate main ideas from supporting details in order to verify</td>
<td></td>
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<td></td>
<td>May use some or all of the following strategies to communicate and maintain audience interest, able to:</td>
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<tr>
<td></td>
<td>• Demonstrate conscious efforts at self-editing and correction</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• Elaborate and clarify</td>
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<tr>
<td></td>
<td>• Provide examples, synonyms, or antonyms</td>
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<tr>
<td></td>
<td>• Use cohesion, chronology and details to explain or narrate fully</td>
<td></td>
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<tr>
<td></td>
<td>• Circumlocute</td>
<td></td>
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<tr>
<td>Cultural Awareness</td>
<td>Understands and uses cultural knowledge to conform linguistically and behaviorally in many social and work-related interactions. Shows conscious awareness of significant cultural differences and attempts to adjust accordingly.</td>
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<td></td>
<td>Uses knowledge of cultural differences between own culture and target culture(s) as well as increasing knowledge of the target culture(s) to interpret texts that are heard, read, or viewed.</td>
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<tr>
<td></td>
<td>Uses culturally knowledge appropriate to the presentational context and increasingly reflective of authentic cultural practices and perspectives.</td>
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</tbody>
</table>

Figure 21 - ACTFL advanced performance descriptors for language learners (ACTFL 2012a, pp. 14-19).

The tasks in this PCS align with the ACTFL performance guidelines and will provide a controlled environment for the SL2 to put their language skills into practice. Figure 22 illustrates the flow of tasks, scenarios, and audiences associated with Spanish as presented in this PCS. Throughout this activity, the student will be exposed to a variety of situations that combine the skills listed in Figure 21 in which the learner will be expected to:

- Understand the website interface items written in Spanish and be able to successfully navigate the PCS interface;
• Speak professional Spanish in recorded audio messages to historical experts who are fluent in Spanish and natives of Spain;
• Select an appropriate Spanish-language response to a scenario or question posed in a video conversation from an answer bank—answers must be regionally appropriate and culturally sensitive;
• Write formal Spanish-language email reports to their supervisor who is a native of Spain and fluent;
• Understand historical Spanish-language text written formally for a broad audience;
• Understand historical Spanish-language video documentaries;
• Write Spanish-language artifact descriptions that are concise and culturally sensitive for high school students who are fluent in Spanish and natives of Spain;
• Write historical Spanish-language summaries that are culturally sensitive and written for high school students who are fluent in Spanish and natives of Spain;
• Understand fast-speaking Spanish-language conversation from natives of Spain in a video chat in spite of common technological glitches caused by technological difficulties;
• And speak Spanish informally in a recorded audio message in a conversation with a donor who is fluent in Spanish and a native of Spain;
Annoted Bibliography


In this article, the authors report on the PCS Microcore which was created for the purpose of practicing argumentative writing in a professional environment. This paper reviews some of the successes and shortfalls of this augmented reality game (ARG). This paper presents Microcore as a type of “proof-of-concept” to test the effectiveness of a ARG in the form of a PCS in enhancing educational experiences through application of principles taught. It should be noted that two authors of this article, Jon Balzotti and Derek Hansen, are senior personnel on the Spanish Museum PCS that is the subject of this prospectus.

This article explores video-based education and relates it to constructivism. It emphasizes that video alone is not enough to make content educational, because it can at times have the effect of rendering the viewer passive by providing all of the audio and video information at once. For something to be truly educational, it needs to engage the thought processes of the learner so they can actively participate and build knowledge through the experience. Also included in this paper is reference to the ARCS model of motivation (attention, relevance, confidence, and satisfaction). The authors note that the most impactful factor in their research of video was the ability of the video to hold the viewer’s attention.


This article explores the concepts of serious games, game-based learning and ARGs, how they have at times been used for marketing and entertainment, and how they can be useful tools to enhance learning. This article discusses a specific ARG that was developed as part of a project to support the teaching of modern European languages in an environment that promoted cooperation and learning. This article describes the positive effects that the use of an ARG had on the student’s motivation and engagement, not only in learning a language, but also in ancillary skills of cooperation, collaboration, and teamwork. Skills that will aid students to implement learning well beyond classroom exercises.


In this article, Hammond examines the differences in the Spanish language as spoken by native speakers throughout the world. The names by which the language is called is
outlined based on region. In Latin America, Spanish is often referred to as Castellano, in Spain it can be referred to as Galician or Catalan. Differences in plurals and verb choices is described, as well as words that have different connotations in different regions. This article is useful in identifying the regional differences in the languages and why cultural context is important when communicating.


Seeing that one of the great obstacles in learner engagement is their own personal motivation, Keller sets forth four components he sees as antidotes to learner apathy. These components are attention, relevance, confidence, and satisfaction. This article explores these four conceptual categories, provides a brief history, and outlines some methods for using the ARCS model within a typical design model such as ADDIE.


In the practice of learning another language, Lutcavage acknowledges a level of “panic” that a student experiences when being introduced to “authentic speech.” Because of this, care needs to be taken when selecting and presenting video materials to introduce to students. Since listening comprehension is not a passive skill, the videos should be incorporated with tasks and activities that focus the learner’s attention on the material, which will increase their ability to comprehend what they see and hear. Much of this article focuses on advice and tips from the author in using videos of commercial advertisements, weather forecasts, and news reports in the classroom as a means of exposure to authentic language usage.


In this article, the authors explore sources for authentic materials useful in aiding in the instruction of students on how to communicate effectively in a foreign language. They define “authentic” as language examples, both oral and written, “that reflect a naturalness of form, and an appropriateness of cultural and situational context that would be found in
the language as used by native speakers.” The authors explore three types of media that may be used for this purpose, i.e., video, audio, and print. While all may be effective, they recognize video as being the most effective since it is able to communicate to the viewer both visually and aurally. The authors identify levels of learning outcomes that may result from using these authentic materials to teach language. They range from identifying words and phrases, to interpreting complex meaning. The authors emphasize the importance of task design and objectives in aiding the instruction of language as being of greater value than the language itself. The tasks provide the meaning and context that provides its own scaffolding to aid the learner in comprehension.

**Budget and Timeline**

The budget for this PCS was managed by the project directors who applied for and received grants for funding. For my work on this project I was paid $15 per hour and, per university policy, was able to work a maximum of 20 hours per week. Throughout the time that I spent on this project I averaged 5 hours per week. The discrepancy between the hours available to work and actual time spent is explained by the extended timeframe of the project and the time required to accomplish my responsibilities for development. It does not reflect an underutilization of resources.

The following table lists the dates the videos were shot, the characters involved, and format. This table was part of a spreadsheet that was used to track progress and status of the video portions of the project. The following table is a brief summary of the timeline involving my activities with the PCS development.
My initial timeline included an additional video chat with Susana that was to be filmed in her office. Due to logistical issues we decided that the information conveyed in the video chat could
easily be included in the end of day report to Susana, so that video was eliminated from the schedule. Also, the video chats with Carmen were scheduled to take place in August (highlighted in yellow above), but a hurricane that hit Hawaii compromised our internet connection and hindered our ability to video chat with our actor to capture the performance, so we rescheduled it for a later date.

Another change from the initial schedule was the readiness of the simulation for testing. Initially a functioning version was to be available at the beginning of the semester in August, but due to video and developmental delays, the user test was pushed back to November.

**Assessment Reports and Instruments**

Successful student progress through this PCS will primarily be assessed by the student’s ability to successfully complete all tasks presented throughout the activity, culminating in the compiling of a themed exhibit about one aspect of the Spanish Civil War represented through art and historical artifacts. The teacher who administers the PCS to students will have an interface where they will also be able to review messages the student has sent to the characters in the PCS and will be able to provide external feedback on the content of the messages.

**Implementation Instruments**

**Job Posting**

Another TINAG element is in the form of a Job Posting handout (see Figure 23) to be given to the students as an introduction to the project. It is meant to be received as an overview of the objectives and tasks associated with the PCS. Students will respond to this job posting by registering in the PCS and begin their first day “on the job.”
Museo del Valle

Open Position: Assistant Curator
Position type: Contract
Location: Remote

The Museum of the Valley located in Madrid, Spain has an immediate opening for an assistant curator to design an online exhibit to educate secondary school students about the cultural impact of the Spanish Civil War on Spain to this day.

Primary Responsibilities and Duties:
- Collaborate with assistant curators to assemble an online exhibit about the Spanish Civil War
- Communicate via email and video conference with museum personnel
- Negotiate with donors to acquire artifacts
- Meet with historians and subject matter experts to determine the historical context of artifacts
- Compose concise, historically accurate, culturally sensitive, regionally specific, and age appropriate descriptions of artifacts
- Provide prompt and thorough updates to the lead exhibit designer and museum curator

Requirements and Qualifications

The successful candidate will:
- Perform all job responsibilities in the Spanish language
- Interpret relatively uncomplicated, culturally authentic texts within their historical and cultural context
- Ask appropriate questions and interpret responses accurately both orally and in writing
- Make presentations about relevant topics in Spanish
- Make comparisons between cultural products and practices to understand perspectives of the individuals with whom you will interact
- Collaborate effectively with colleagues to accomplish your responsibilities

Knowledge and Education:
- At least 2 years of university-level Spanish language classes
- Conversational fluency in Spanish
- Understanding of cultural beliefs and practices of natives of Spain a plus

Please register for access to the Museum’s intranet dashboard to apply.
Instructor Lesson Plans

To aid the instructor in implementing this PCS with a class. The following lesson plan packet was provided.

Figure 24 - Lesson Plans page 1, table of contents.
Introduction

To augment the classroom language learning and practice students receive, it is beneficial to provide opportunities for authentic, unrehearsed practice in speaking, listening, reading, and writing the language of study. The Spanish Civil War Museum Exhibit 5-day Simulation is a Playable Case Study (PCS) wherein students of advanced Spanish language may develop critical literacy skills, cultural competence, and linguistic proficiency in the Spanish language. The purpose of this PCS is to immerse students in an authentic narrative that takes place within emails, video chats, and other online activities with the goal of curating a museum exhibit on the Spanish Civil War with secondary school students in Spain as the audience.

The presentation of this PCS is meant to provide a simulated, real-life experience where the participant may believe that this is not a game (TINAG). The TINAG framework creates an alternate reality for the user participates in realistic activities as themselves as if it were a real situation. This will provide the students with a simulation of a practical, real-world scenario from the convenience of a classroom or lab.

While the narrative of this simulation takes place in a five-day period, the actual class time that this simulation takes is entirely up to you as the instructor.

Learning Objectives

After participating in this simulation in Spanish, students will be able to:

- Interpret relatively uncomplicated, culturally authentic texts within their historical and cultural context
- Participate in spontaneous spoken, written, or signed conversations on familiar topics, creating sentences and series of sentences to ask and answer a variety of questions
- Communicate information, make presentations, and express thoughts about familiar topics, using sentences and series of connected sentences through spoken or written language

Figure 25 - Lesson Plans page 2, introduction and learning objectives.
• Make comparisons between cultural products and practices to gain an understanding of perspectives of others

Implementation Guidelines

• This PCS is designed to run on a desktop or laptop computer (Mac or PC) with the latest version of the Google Chrome browser installed.

• A functioning webcam and microphone are required. If the computer/browser asks the user if they wish to allow access to the webcam and/or microphone, they must select “yes” or “allow.”

• If administered in a lab or classroom environment, headphones are suggested.

Pre-Simulation

Instructor and student access to the simulation is through the URL https://museodelvalle.byu.edu. Prior to beginning the simulation in your class, you will need to obtain a classroom login code and register yourself as an instructor. You will also need student codes to distribute to each member of your class that you wish to participate.

Before you begin, divide your students into groups of three to four. Students will experience the simulation individually, but they may work in teams to research the Spanish Civil War and build their museum exhibit. Some tasks in the simulation will direct them to meet with their team of curators, which will be these groups of students.

Each day of the simulation the students will be asked to send a daily report email to Susana, the head curator. Those emails will be sent to you, the instructor, for review and grading.
Handouts

Two handouts are provided at the end of this document for use during this simulation:

- **Job Opening** – to introduce the class to the authentic narrative of this simulation and inform them of the tasks and goals of this activity. This handout should be given to the students in a class session prior to the day the simulation is to begin. Many students may have had an opportunity to view job postings and submit applications or resumes for employment. The intention of this document in this familiar format is to reinforce the concept that this simulation is a real-life activity that they are participating in while providing important details about what will be experienced.

- **Weekly Report** – for note taking, a five-page weekly report handout where they can record thoughts on language, culture, and content. This will be useful for the class discussion at the completion of the simulation.
During the Simulation

The following sections summarize the tasks involved in each day of the simulation. As student complete each task, they must check the appropriate box. They will only be able to progress to the next day when all boxes are checked.

Day 1

- **Task 1: Check your inbox** – visit the CORREO section of the site and read a welcome email from Susana Gomez, the principal curator of the museum. This email will link to an “Onboarding Survey” which will gather some initial demographics and background data from the student.
- **Task 2: Call into the Video Conference** – visit the TELÉFONO section of the site to participate in the orientation video conference featuring Beatrice, Susana, and Francisco.
- **Task 3: Learn the History** – independently or in groups, learn the history of the Spanish Civil War from the site’s BIBLIOTECA and other online resources.
- **Task 4: Research Target Audience** – for this task, students should read an article in the library, “La Guerra Civil en las aulas,” that discusses modern day high school students in Spain and their knowledge of the Spanish Civil War.
- **Task 5: Email Susana** – at the end of each simulation day, the student will send an email to Susana summarizing the day’s activities and insights gained.

Day 2

- **Task 1: Check your inbox** – read the email from Susana that will contain instructions for that day.
- **Task 2: Call Francisco** – video chat with Francisco to receive information on Carmen, an individual who may have some objects to donate to the museum for use in the Spanish Civil War exhibit.

- **Task 3: Visit museum gallery** – review artifacts available for inclusion in the exhibit by clicking on the GALERÍA menu. This can be done in their classroom curator team. Students can apply subject tags to artifacts. To add artifacts to their exhibit, they need to apply the “Galería Final” tag. The titles and descriptions of the artifacts should also be edited by the student as they develop their exhibit and need to adjust the text to align with the theme.

- **Task 4: Call Carmen González** – video chat with Carmen to discuss items she may have to donate to the exhibit. During this call the student will see panels in the bottom left of the video screen which could be a clue to a well-known missing painting by Joan Miró called “The Reaper.”

- **Task 5: Email Susana** – write the daily report email to Susana including any information discovered during the meeting with the donor, Carmen.

**Day 3**

- **Task 1: Check your Inbox** – read the email from Susana to obtain instructions for today.

- **Task 2: Meet with Historian** – video chat with historian, Jose Sánchez, to discuss what has been learned in the artifact search. Specifically, the panels that are potentially from the lost painting, “The Reaper,” will be discussed.

- **Task 3: Call Francisco** – video chat with Francisco so he can facilitate a meeting between the student and a librarian, with whom they will discuss the lost painting.
- **Task 4: Email Susana** – send daily report email to Susana including an update on the mystery of the lost painting.

**Day 4**

- **Task 1: Check your Inbox** - read the email from Susana to obtain instructions for today.
- **Task 2: Call Carmen González** – follow up video chat with donor regarding the donation of the painting, which has been positively identified as “The Reaper.”
- **Task 3: Complete Online Exhibit** – the student can access their GROUP EXHIBIT from the drop-down menu at the top left of the screen that shows their name. This is the page where their group will collaborate on their final exhibit.
- **Task 4: Email Susana** - send daily report email to Susana including a summary of the collection for the exhibit.

**Day 5**

- **Task 1: Check your Inbox** - read the email from Susana to obtain instructions for today. Also included in this email will be a “Job Exit Survey” link for the student to submit their closing perceptions on this experience.
- **Task 2: Complete Final Touches** – in their class groups, students make the final touches on their online Spanish Civil War exhibit and save it.
- **Task 3: Email Susana** – send final report to Susana with a summary of experience at the museum.

*Figure 30 - Lesson plans page 7, summary of tasks continued.*
Post Simulation

At the conclusion of the simulation, the following discussion questions may be used to prompt discussion with the class regarding their experiences in the PCS.

1. Think about your research. Can you recall a time when the information you were presented with was confusing or hard to follow? What strategies did you use to obtain clarification?
2. Think of a conversation during which you heard an unfamiliar word or expression. What were the unfamiliar words, phrases, or expressions? What did you do to understand?
3. Consider the target audience of your exhibit. What strategies did you use to ensure that the descriptive text that accompanies your artifacts and exhibit is clear and accessible to them?
4. Remember your experiences conversing with the people in the simulation who are native Spanish speakers from Spain. What do you recall in word choices, phrases, expressions, or accents they used that differ from Spanish speakers in the United States, Mexico, or South America? (For example, potatoes in Mexico are called “papas,” while in Spain they are called “patatas.”)

Assessments

While the overarching purpose of this PCS is to provide students with an authentic experience to speak, listen to, read, and write Spanish with native speakers from Spain, there will be a number of opportunities to assess the student’s work that is produced from their participation in this PCS.

- **Daily emails** – as the instructor, you will receive all of the email correspondence that the student sends through the PCS to the character Susana, the museum’s head curator. Because Susana is the supervisor of
their work, these emails should be professional and exhibit proper spelling, accents, grammar, and punctuation.

- **Video messages** – There are two instances in the simulation where the student will record a video message to two characters in the PCS.
  - One will be directed to a librarian who they are trying to obtain information from regarding the lost painting. The language used by the student in this recording should be of a more formal tone since they are negotiating with a professional who is reluctant to help.
  - The other video is directed to Carmen, the donor, who has realized that the painting she possesses is indeed the lost painting, The Reaper. The student will need to make a case for her to donate the painting to the museum for the exhibit. This recording should have a more relaxed tone where regional colloquialisms and a friendly tone would be natural.

- **The Exhibit** – The students will submit, as a group of three to four, a final exhibit on the Spanish Civil War. This exhibit will contain a brief overview of the war that relates to the theme of their exhibit and will be accompanied by artifacts with descriptions, all of which will be composed by the students. These submissions will later be used to help educate high school students in Spain so the language should be clear and concise and the spelling, accents, grammar, and punctuation should have no errors.
Evaluation Instruments

Onboarding Survey

In keeping with the TINAG approach to the PCS, surveys were created and presented as Onboarding and Job Exit surveys for the purpose of gathering affective data from the students regarding their skills, backgrounds, and perceptions of the PCS. During the 1 November 2018 user test, I presented the following surveys in paper form to the students. The Onboarding Survey (see Figure 33 and Figure 34) that will be integrated into the first “day” of the PCS was presented to the students in printed form.

The first “day” of the PCS includes an email from the Museum Curator welcoming them to the team. Part of that email mentions the Onboarding survey and, in the future, will link to Qualtrics where the data will be gathered for future reference. Printed versions were provided for those who read the email in the PCS that asked them to take it.
Museo del Valle
HUMAN RESOURCES

ONBOARDING SURVEY

This survey will help us to learn more about your skills in preparation for the Spanish Civil War Simulation. There are 15 questions and we expect that it will take you about 20-25 minutes to complete the survey.

Demographics

1) What is your first and last name?

2) How did you learn about the Museum of the Valley curation position?
   - SPAN 311R or Span 312R (Spanish Conversation)
   - SPAN 345 (Iberian Civilization) with Greg Stallings
   - SPAN 378 (Spanish Teaching Methods) with Yvette Rivera

3) Are you a heritage or native speaker of Spanish?
   - Heritage Speaker
   - Native Speaker
   - Neither a heritage nor a native speaker of Spanish

Proficiency

4) How would you RATE your overall ability to communicate in Spanish with others? (with zero being none at all and 100 being a lot).
   0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

5) How would you DESCRIBE your current ability to understand and communicate in Spanish? (Please mark all that apply.)
   - I can understand oral messages in Spanish.
   - I can understand written messages in Spanish.
   - I can communicate orally in Spanish in real-life situations.
   - I can communicate orally in Spanish in academic, specialized, and public contexts.
   - I can develop and articulate positions about the Spanish Civil War to an audience in Spanish.
   - I can engage others in conversation about the Spanish Civil War in Spanish.
   - I can evaluate how well written Spanish conveys meaning, informs, and persuades others about the Spanish Civil War.

6) How would you RATE your overall understanding of the Spanish Civil War? (with zero being none at all and 100 being a lot).
   0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
7) How would you DESCRIBE your current understanding of the Spanish Civil War?
   o I can describe the principal geographic regions and cultures involved in the Spanish Civil War.
   o I can analyze political, social, artistic, and religious developments that occurred during the Spanish Civil War.
   o I can recognize and describe key artifacts, people, places, and events from the Spanish Civil War.
   o I can compare and contrast cultural products, practices, and perspectives from the Spanish Civil War with those from my own culture.
   o I can use my cultural and historical knowledge of Spain to research people, places, and events from the Spanish Civil War.

8) How would you rate your overall technological proficiency? (with zero being none at all and 100 being a lot).
   0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

9) How would you describe your current technological proficiency? (Select all that apply)
   o I can find the information I need on the internet
   o I can participate in video chat/conferencing
   o I am comfortable using available resources to learn how to use an unfamiliar website

Personal Perceptions

1) What do you expect to experience during your time as a curator for the museum?

2) What concerns or questions do you have about performing your tasks remotely through a website dashboard?

Thank you for your responses to this survey!
Of the twelve participating in the test, eight students responded to the prompt in the first day welcome email and asked for the printed version of the survey. The following are the results.

**Spanish Proficiency.** Seven of the respondents were neither a heritage nor a native speaker of Spanish, while one identified as a native speaker of Spanish. All highly rated their ability to speak Spanish with the majority (five) in the 90-100% proficiency. While all considered themselves to be able to understand and communicate orally and in writing, half felt able to speak, write, and analyze materials related to the Spanish Civil War.

**Understanding of the Spanish Civil War.** The students were less confident about their understanding of the Spanish Civil War with one indicating 0% understanding and the highest rating 70%. While only a few expressed any current understanding of the regions, developments, and perspectives of the civil war, six felt able to research people places and events from the Spanish Civil War.

**Technological Proficiency.** The respondents’ assessment of the technological proficiency was evenly distributed between 60-100% with all of them able to find information on the internet, participate in video chat/conferencing, and learn how to use unfamiliar websites using available resources.

**Personal Perceptions.** The survey concludes with two short answer questions regarding their expectations. Following are the questions and their responses:

1) What do you expect to experience during your time as a curator for the museum?
   - Challenges. I expect to learn more about the Civil War and its products.
   - An increase in ability to articulate and an increased knowledge of facts about the Spanish Civil War
   - Working together to make information available.
Gain knowledge about Spanish Civil War, learn how to use Spanish in professional setting and what I lack/need to brush up on to be more professional and proficient

I expect to gain a deeper understanding of the Spanish Civil War

To learn and help others learn

See pictures, artifacts, learn about them. Have fun, like I’m on a tour of the museum.

I expect to learn the software and obtain more information on the subject.

2) What concerns or questions do you have about performing your tasks remotely through a website dashboard?

I’m a little nervous about technology related frustrations.

Concern: less human interaction

How will I know when to ask for tech help and when I should just figure it out?

None right now…

Is there a help site or person that can help when something isn’t working?

None

How would students talk into the computer with so many peers present?

Just understanding how it all comes together, but I think trying it will give me the experience.

Job Exit Survey

Similar to the Onboarding Survey, a Job Exit Survey (See Figure 35–Figure 37) has been prepared to obtain post PCS data from the students for the purpose of future improvements to the system. In the interest of time so there could be an open discussion, students were instructed to focus on the Personal Perceptions of the Job Exit Survey. Most of the students answered all of the questions while very few answered only one or two. The following are the questions and their remarks.
This survey will help us to learn more about your experience at the Museum of the Valley and your work on the Spanish Civil War exhibit. There are 15 questions and we expect that it will take you about 20-25 minutes to complete.

**Demographics**

1) What is your first and last name?

**Proficiency**

2) How would you RATE your overall ability to communicate in Spanish with others? (with zero being none at all and 100 being a lot).
   0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

3) How would you DESCRIBE your current ability to understand and communicate in Spanish? (Please mark all that apply.)
   - I can understand oral messages in Spanish.
   - I can understand written messages in Spanish.
   - I can communicate orally in Spanish in real-life situations.
   - I can communicate orally in Spanish in academic, specialized, and public contexts.
   - I can develop and articulate positions about the Spanish Civil War to an audience in Spanish.
   - I can engage others in conversation about the Spanish Civil War in Spanish.
   - I can evaluate how well written Spanish conveys meaning, informs, and persuades others about the Spanish Civil War.

4) How would you RATE your overall understanding of the Spanish Civil War? (with zero being none at all and 100 being a lot).
   0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

5) How would you DESCRIBE your current understanding of the Spanish Civil War?
   - I can describe the principal geographic regions and cultures involved in the Spanish Civil War.
   - I can analyze political, social, artistic, and religious developments that occurred during the Spanish Civil War.
   - I can recognize and describe key artifacts, people, places, and events from the Spanish Civil War.
   - I can compare and contrast cultural products, practices, and perspectives from the Spanish Civil War with those from my own culture.
Museo del Valle

HUMAN RESOURCES

JOB EXIT SURVEY

- I can use my cultural and historical knowledge of Spain to research people, places, and events from the Spanish Civil War.

6) How would you rate your overall technological proficiency? (with zero being none at all and 100 being a lot).
   0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Personal Perceptions

1) How did your experience at the Museum of the Valley differ from other activities you have engaged in during classes or other work experiences?

2) What did you enjoy most about your experience at the Museum of the Valley?
   as a separate question.

3) What aspects of your experience at the Museum of the Valley would you change? Why?

4) What are the most valuable things you learned here at the Museum of the Valley that you didn't know beforehand?

Figure 36 - Job Exit Survey, page 2
5) Which aspects of your experience facilitated your learning and personal growth the most?

Thank you for your responses to this survey!
1) How did your experience at the Museum of the Valley differ from other activities you have engaged in during classes or other work experiences?

- It requires a lot of time actually listening to native speakers in realistic situations.
- It was very engaging. I actually had to pay attention if I wanted to organize things well. It was also very realistic.
- It feels very authentic because you are listening to native speakers.
- It felt real and important looking for ways to teach history.
- More interactive-longer organized project. Very personalized/gives the opportunity to decide in which things I would like to focus.
- The videos and having the “calls” to interact with were great to be engaged in the activity.
- Seemed very authentic and was engaging.
- It was more engaging and had a lot of different ways to learn. It was a much more hands on experience.
- Very authentic.
- It was completely different. It was really authentic and allowed me to experience Spanish through cultural contexts.
- It was interactive, transformative, and allowed a moderate level of creativity.

2) What did you enjoy most about your experience at the Museum of the Valley?

- Practice listening.
- I liked learning and seeing the paintings. That was eye opening.
- Listening to the native speakers and learning about the civil war.
Finding out more about that mysterious painting

Browsing through the gallery. The video chats.

I enjoyed the entire role play

The videos → fun characters, funny, mysterious

I really enjoyed looking through gallery and adding tags and reading about the different artifacts.

Listening to natives in Spanish and trying to solve a real life case.

The personal aspect of the project. Real people.

3) What aspects of your experience at the Museum of the Valley would you change? Why?

Video clips are sometimes long. It can be hard even for 300 level students to listen to Spanish for so long.

I would change the video chat so that I would to speak and formulate questions.

Maybe mix answer orders so they have to really pick.

I wish I could actually visit this museum

Um… honestly I don’t know.

I liked it all! Just technology glitches

I would make the links to open up in a different tab so I don’t have to lose track of where I am. Also I would have a pause button on the videos and a rewind to make it easier to use the videos.

Maybe fix glitches. That’s all I believe.

4) What are the most valuable things you learned here at the Museum of the Valley that you didn't know beforehand?
About Civil War

I think the actual people and events from the Guerra Civilo.

I didn’t realize that even Spaniards don’t talk about it much.

Some of the maps were new to me

The fact that the Spanish Civil War is a neglected topic of study in Spain

My knowledge of the civil war increased

Didn’t have time to learn much 😞 I liked the gallery.

I didn’t realize that the Spanish Civil War was so misunderstood/not well known even in Spain.

Spanish Civil War history. How museum curators work.

I didn’t really learn anything this time because I skipped through the reading. It felt like a lot of reading all at once

5) Which aspects of your experience facilitated your learning and personal growth the most?

Listening, writing emails

I think the combination of reading, listening and communicating through different methods

The research/study portions

Being able to communicate with authentic speakers

The break out rooms where I was able to do my own research.

New history, vocab, almost authentic job.

The articles from other sites. The videos. The museum gallery.
References


