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Making Foreign Language Education Accessible Through Spanish Animation

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MAKING FOREIGN LANGUAGE EDUCATION ACCESSIBLE THROUGH
SPANISH ANIMATION

by

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A Thesis Submitted in Partial Fulfillment of
the Requirements for a Degree with Honors
(Spanish)

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PURPOSE

The primary goal of this thesis is to design a second language acquisition Spanish YouTube series for young, English-speaking students in grades K-3, as well as to complete the animation of its pilot episode as a prototype. In order to achieve the final creative product, the preparation was threefold: I researched pedagogical strategies pertaining to language acquisition and the target age group, analyzed current early childhood foreign language resources, and demonstrated the importance and need for accessible, foreign language resources for young students through a review of academic studies.

The series is titled *¡Moxie!*, which focuses on the daily adventures of a small puppy named Moxie who only speaks Spanish. *¡Moxie!*'s goal is Spanish language acquisition for monolingual English speakers, so its structure aligns with pedagogical principles like Stephen Krashen's (Krashen) input hypothesis and other target language storytelling guides. However, this is a long-term goal, as it is important to recognize that the pilot episode is only a glimpse of what the entire series could achieve. Nevertheless, this journey of independent work and knowledge creation serves as a model for what an early childhood language acquisition YouTube resource could look like, as well as giving students the opportunity to explore the world of foreign language outside of the classroom.

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DISCUSSION

This project dovetails two passions of mine—foreign language policy and early foreign language education. Because of my own experience learning foreign languages in U.S. public schools, I have always been an advocate for starting the learning process as early as possible. Even though I did not choose to study early education in a formal manner, my background in foreign language policy and linguistic discrimination research was always intertwined with education in some regard; when I was learning about the history of foreign language education in the United States for my Center for Undergraduate Research (CUGR) project, I was devastated to see recent statistics on how few U.S. students are given the chance to learn a foreign language in school. A 2018 Pew Research report shows that only about 20% of U.S. K-12 students are enrolled in a language class (Devlin). More importantly, I was inspired to create a solution.

When I was in second grade at Jesse Boyd Elementary in upstate South Carolina, I started learning French through a pilot program at my elementary school. The following year I was able to choose between continuing French or starting Spanish and given that there were a lot of Spanish-speakers in my local area (including some of my classmates), I chose to learn Spanish. After reflecting on the structure of my own K-12 Spanish classes, my third grade class stood out to me as being an instrumental part of my language learning experience. I remember it vividly: we sang the alphabet song, learned the names of colors, how to tell time, days of the week, weather vocabulary, and more foundational basics that created a strong background for future language learning. We didn't explicitly learn grammar other than necessary present tense verbs, the teacher always spoke Spanish (using English

only when absolutely necessary), and used images and gestures to supplement her immersion-style teaching. It was slow and steady but built a great foundation for me to continue towards my goal of full fluency.

After I finished my third grade year, however, I moved to southern Maine where foreign language classes didn't begin until sixth grade. I moved again in the middle of sixth grade (consequently missing part of their year-long course) down to eastern North Carolina, where I had to choose between taking Spanish and playing in the concert band, as they were both considered elective courses until high school. I was homeschooled for a few years, during which time I studied using Rosetta Stone, but I re-entered the public school system back in southern Maine during my sophomore year. I was surprised to see how the high school classes were structured in comparison to my own elementary school class—there was a major focus on nailing down grammar concepts to score high on national exams rather than taking time to learn the alphabet for correct pronunciation. To me, it felt like class moved too quickly for solid language learning to take place and was only meant as a checkbox on the path to graduation.

I could see that there was a clear divide between taking foreign language classes and actually being interested in it from my own experience in K-12 courses, so I was motivated to create a resource that not only gives students the opportunity to learn another language, but to truly acquire it. Learning can be a challenging process, especially when starting in the late teenage years. I see language learning as the explicit instruction of vocabulary and grammar structures, often done in the native language (teaching Spanish in English), whereas acquisition is immersion in the target language, which allows for more emphasis on understanding and eases the pressure of having to explicitly learn rules and reproduce the language so quickly. Even though

they share the same end goal of mastering a language, language acquisition is regarded as a completely different process than language learning and requires a completely different set of guiding principles which I researched in order to design my creative product.

Although the initial conception of this project was a Spanish-language book series, I ultimately decided to take a risk and step out into the world of technology for a variety of reasons. This project is compelled by the fact that many students may not have access to a language class in elementary school, and it was demonstrated that school districts of lower socioeconomic status are less likely to provide foreign language courses (Pufahl and Rhodes). Knowing this, I wanted the resource I created to be free and easily accessible to anyone who is interested, and it would be more challenging to achieve that with a physical book. YouTube is a free platform that can be found on any device with internet access, whether it be at home or in a community library, and even provides a safe online space for younger viewers called YouTube Kids. In terms of overall interest, I felt that an animated video would be more engaging for young viewers who may not be able to read yet, more intriguing for older viewers who can connect the language with the visuals on screen, and overall, more exciting to connect with the characters and their personalities through a dynamic medium.

After I set my target age range as K-3 elementary students and settled on a video format, I researched what kinds of Spanish language videos were already available for young, English-speaking students—to my surprise, what was available was strictly one-dimensional in purpose. Most of the videos I could find were either English-Spanish vocabulary translations, English-Spanish songs, or kids' TV shows from Spanish-speaking countries, which are not designed with an English-speaking

viewer in mind. I could not find any show or series that was designed specifically for Spanish language acquisition or even teaching the language within a storyline context; however, the videos available already have hundreds of thousands, some even millions, of views—so I was confident that there is a clear and defined market for this type of content.

Even though I knew the creative avenue I wanted to take, I also wanted to be able to make an academic case for its importance. After completing linguistic discrimination research with CUGR, placing first in the Rezendes Ethics Essay competition for writing on the English Only Movement, and evaluating my own language learning experience, I believe that there are many outside factors that affect the lack of resources and interest in foreign language education in the United States. Since I am creating material to begin the language acquisition process, I find it important to not only address some of these factors but also to demonstrate the importance of giving young students the chance to experience other languages and the benefits of doing so. Although the creative portion of this thesis is the true focal point, I want it to be clear why it is needed and how it can be beneficial for young students.

LITERATURE REVIEW

Since this project required a lot of background research in different areas, the literature review is separated into three sections: the case for early foreign language education, pedagogy and educational YouTube, and children's educational TV models. They are in chronological order, as I started by reviewing studies on the benefits of an early start in both foreign language exposure and learning, which is by no means exhaustive, as well as the current situation of foreign language education in the United States. I then researched the pedagogical methods surrounding early language acquisition in addition to teaching strategies for storytelling in the target language to guide the structure of my product. Lastly, I conducted an informal review of popular children's TV programs I knew that either had elements of a foreign language or are generally well-renowned educational programs.

THE CASE FOR EARLY FOREIGN LANGUAGE EDUCATION

Because of my previous research in linguistic discrimination and foreign language policy, I started the literature review process by searching for papers that could speak to the pattern of unequal foreign language class offerings that I experienced in changing school systems over the years, as well as the current situation of foreign language education in the United States.

The first paper I came across was "A Double Dose of Disadvantage: Language Experiences for Low-Income Children in Home and School" (Neuman, Susan B., et. al), which is a 2018 study seeking to examine the quantity and quality of L1 language support in the schools and homes of both concentrated poverty and borderline poverty neighborhoods for 70 children transitioning into kindergarten. In

the beginning of the study, it is stated that research is beginning to show that a child's performance in school is not only dictated by their personal socioeconomic status, but by their school's socioeconomic status (102). By not receiving the necessary attention from adults in order to develop key language skills early on, children in poorer areas may struggle as the K-12 years continue. After observing the children in their home and school environments, it was found that language growth from preschool to kindergarten was highly influenced by the students' socioeconomic status. The children from the concentrated poverty neighborhoods did not have access to a rich language learning environment, and therefore did not perform as well on the assessments provided (Neuman, Susan B. et al.).

Although this research was done on the child's first language of English, I learned that children need to be exposed to complex sentence structures, varying content in daily conversation, and practice in distancing the past from the present in storytelling, as these are all key in acquiring language. I had initially thought that *¡Moxie!* would need to be limited in the sentence structures and grammatical tenses it presents since it is for a younger audience, but this study demonstrated the importance of exposure to a variety of language structures for younger kids. However, Neuman's study also highlighted the disparity between students of different socioeconomic classes, which influenced my project by ensuring it would be available to all students on a free platform.

Kathleen Stein-Smith's article titled "Foreign language classes becoming more scarce" was key in being able to envision the current foreign language education situation in the United States. One statistic that Stein-Smith included was particularly startling: "Knowledge of foreign languages is also vital to America's national security and diplomacy. Yet, according to the U.S Government Accountability Office, nearly

one in four Foreign Service officers do not meet the language proficiency requirements that they should meet to do their jobs.” The issue of lacking foreign language education extends into careers where these language skills are required, which has the potential to create many more problems. However, this isn’t a new concern—according to a 2017 Commission on Language Learning report that Stein-Smith referenced, only 58% of U.S. middle schools and 25% of elementary schools offered foreign language courses in 2008—which is lower than the 75% of middle schools and 31% of elementary schools that offered them in 1997, over 10 years earlier.

Stein-Smith also references research done by the Modern Language Association, which found that colleges lost 651 foreign language course offerings between 2013 and 2016. Only 20% of U.S. students study a second language at the K-12 level, but in college that percentage drops to 7.5%. Stein-Smith even compares the U.S. students’ language learning experience with that of European students, writing: “To put those statistics into perspective, consider the fact that in Europe, studying a foreign language is a ‘nearly ubiquitous experience.’ This is because most European countries – unlike the United States – have national-level mandates that require foreign language instruction.”

After finishing that article, I wanted to know more about why the U.S. schools, particularly elementary, do not implement language programs. I came across “Foreign Language Instruction in U.S. Schools: Results of a National Survey of Elementary and Secondary Schools” (Pufahl and Rhodes) which addressed my curiosity. This study seeks to answer the ultimate question of “How well are our schools preparing students to become global citizens who can communicate in languages other than English?” (258). The survey itself was done during the 2007-

2008 school year, where over 5,000 U.S. public and private schools were sent the two questionnaires developed by two Center for Applied Linguistics researchers. At the end of the data collection period, they received 3,670 valid and complete questionnaires.

The researchers' findings demonstrate a significant drop in elementary school foreign language instruction offerings which was referenced in Stein-Smith's article, as 31% of elementary schools in 1997 did have offerings compared to only 25% of elementary schools in 2008 did. This reversed the increase in foreign language programs that was present twenty years earlier from 1987 to 1997. However, a key detail that is presented in this study is that the significant drop was almost completely regarding public schools, dropping from 24% in 1997 to 15% in 2008, while private school offerings remained relatively the same at over 50% of schools having foreign language course offerings (261-262). The overall percentage of all secondary school offerings also fell, but mostly because of middle schools, not high schools. Whether schools even taught foreign languages in the first place was based on the following factors: metropolitan status, socioeconomic status, size, and geographic region. In general, the researchers recorded that rural schools, small middle and high schools, and elementary/middle schools with a low socioeconomic status were less likely to have foreign language course offerings (262).

I found that one of the most important sections of the survey was the section on future plans to offer foreign language instruction. They recorded that 5% of public and 25% of private schools had plans to offer foreign languages in the next 2 years (262). However, schools who were not planning to offer languages gave explanations for why, including the following (262-263):

- Lack of funding (e.g., "We do not have the financial resources.")

- Decision-making at the district level, not school level (e.g., “The decision is made by the central office.”)
- Languages not seen as a core component of an elementary school curriculum (e.g., “We don't teach foreign language, we're an elementary school.”)
- Previously existing program no longer feasible (e.g., “We used to teach foreign language, but we don't anymore.”)
- Shortage of language teachers (e.g., “[We don't offer foreign languages] because we don't have a teacher.”)
- Extracurricular foreign language instruction available (e.g., “After school, there's someone who comes and teaches Spanish for students who pay for it.”)

This survey enabled me to see beyond socioeconomic class as the sole reason for not implementing foreign language classes in elementary schools. In the same vein, it confirmed my impression that there is a mindset in the U.S. that foreign language doesn't belong as an elementary school subject, while places like Europe prioritize the learning of another language. I know that there are many complex factors that play into this thought process, so I decided to continue the literature review by challenging this mindset and showing how important it is to include foreign language as an elementary school subject.

The final two academic papers I reviewed addressed some of the benefits of introducing foreign language early on in childhood. Rocío Domínguez and Silvia Pessoa documented this in their 2005 study titled “Early Versus Late Start in Foreign Language Education: Documenting Achievements.” Previous research on the early-late foreign language education distinction was not only contradictory, but very limited in scope. Because of this, Dominguez and Pessoa designed a study to test the reading, writing, listening, and speaking skills of 27 early-start students and 5 late-start students; the study was completed during the 2002-2003 school year in a suburban school district in Pennsylvania, where Spanish was taught in grades K-6.

The sample size of this survey was quite small, but the findings demonstrated that it may be beneficial in “developing student’s oral skills and their confidence in using the target language...[and] students’ writing development” (Domínguez and

Pessoa 479). Other than the fact that this study confirmed the effectiveness of early-start foreign language learning, it highlighted the importance of self-confidence. Students who had more exposure to Spanish felt more comfortable expressing their feelings, talking about non-academic topics, and were more positive towards speaking Spanish in the classroom. Each of these elements contributes to the importance of starting education early and building confidence and positive attitudes around the language as early as possible, which is one of the main reasons I wish to contribute to the material available for early language learning.

On the other hand, I am aware that *¡Moxie!* is primarily a tool to begin the language acquisition process, which involves exposure to the target language. The last paper I encountered, titled “The Exposure Advantage: Early Exposure to a Multilingual Environment Promotes Effective Communication” (Fan, Samantha P., et al.) is a study that was designed to reveal how early multilingual exposure can affect the development of social-cognitive skills. Although the benefits of being fully bilingual are generally clear, the researchers hypothesize that exposure to other languages without being able to speak those languages brings a different set of skills than those who are simply monolingual:

Exposure to diverse linguistic environments provides experience not only in learning languages, but also in understanding other people’s perspectives: Children in multilingual environments routinely have the opportunity to track who speaks which language, who understands which content, and who can converse with whom. This raises the intriguing possibility that early multilingual exposure may facilitate the development of social-cognitive tools that are important for effective communication (Fan, et al. 1090).

The study included 72, 4- to 6-year-old children: 24 monolingual, 24 with multilingual exposure and 24 bilingual children. Children were considered monolingual if the parents reported that “they heard and spoke only English and had little experience with other languages,” multilingual exposure if the parent reported

that “they were primarily English speakers, but had some regular but limited exposure to another language,” and bilingual if the parent reported that “they were exposed to English and another language on a regular basis and were able to speak and understand both languages” (Fan, et al. 1091). The experiment itself consisted of a child (either monolingual, multilingual exposure, or bilingual) sitting in front of a 4x4 structure of cubes with various objects placed in some of the cubes. However, four of the grid’s squares were covered from the director’s viewpoint, who sat opposite the child, which was key in determining what perspective the child was taking: “The critical instruction in this case was, ‘I see a small car. Can you move the small car under the spoon?’ The director could not see the smallest car, which served as a distractor” (Fan, et al. 1092). Although the bilingual group demonstrated “cognitive advantages” (Fan, et al. 1095) over the others, the exposure group performed just as well as the bilingual group in the task itself, unlike the monolingual group.

This study was instrumental in me designing the show for students to use on their own. Even though I cannot physically assist the learner with the language on the other side of the screen, this study demonstrates that even consistent exposure to another language can be helpful in developing social and communication skills that stretch beyond just speaking the second language. Providing a child with awareness and exposure to a foreign language can help them in better understanding others and perspectives other than their own, and these types of developmental benefits are simply priceless.

PEDAGOGICAL RESOURCES AND EDUCATIONAL YOUTUBE

The central text for this section is Helena Curtain and Carol Ann Dahlberg’s *Languages & Learners: Making the Match World Language Instruction in K-8*

Classrooms and Beyond, which was recommended to me for this project. Before diving in, I reviewed the table of contents and selected chapters that align with my goals for *¡Moxie!*, so I read the following: Chapter 1: The Learner: Setting the Stage for Language; Chapter 3: Language Learning Fundamentals; Chapter 4: Strategies for Building Toward Proficiency; and Chapter 13: Meeting the Needs of Digital Learners.

Chapter 1 provided a strong background in the strategies and conditions that are necessary to bring secondary language learning into the classroom. Although *¡Moxie!* isn't designed to be primarily used in a classroom setting, my goal of directly engaging the viewer from the screen indirectly creates a similar setting at home. For example, the chapter discusses Stephen Krashen's second language acquisition theory and therefore emphasizes the importance of speaking in the target language and not just speaking about the target language, which was key for me deciding to take an immersive route for the show. It also aided in the design of the supplemental gestures and captions, as "being comprehensible is accomplished through several means, including creating contexts that support comprehension (gestures, examples, illustrations, experiences)..." (4).

Chapters 3 and 4 went more in-depth in terms of gathering strategies and tips on how to create an effective and "meaningful context" in which to present the new language. They write: "We know from research in second-language acquisition that extended listening is a crucial first step in developing skills in a new language, and at early stages this listening is highly interactive even though students do not have much language at their disposal..." (76). Although extended listening is important, the importance of communication is stressed throughout the chapters, along with tips on storytelling, which was useful in designing a story structure for Moxie and her friends to follow.

Chapter 13 was not as geared towards technology as I envisioned, but it was useful in understanding younger children who have never experienced life without technology. They expressed that children may be particularly bored or frustrated with worksheets these days because they are accustomed to the instant-gratification that technology provides. However, they did mention that videos can be helpful for in-class learning: “In class, when teaching a new concept or a vocabulary group, short videos can reinforce the practical use of these new concepts and recycle them for deeper learning” (387). This was a great confirmation for me to create supplementary material for a teacher to use as a guide; however, I knew I needed to search for sources that focused on YouTube specifically as an educational tool.

Even though there is not much literature available on YouTube itself, I encountered Michelle Neumann and Christothea Herodotou’s “Evaluating YouTube videos for young children.” It is very recent, as it was published in 2020, and has been instrumental in helping me structure *jMoxie!* to be educational and engaging for children. Since YouTube has become such a prominent platform for children’s entertainment, Neumann and Herodotou set out to review past research on “children’s interaction with screens” (4461) and past children's television shows, as well as evaluate YouTube videos targeted towards children using rubrics and criteria that they developed themselves.

They begin by analyzing popular video and show design features and their connection with early childhood learning; for example, they reviewed two *Sesame Street* episodes and their prominent design features, like the fact that “learning goals are orally and explicitly stated at the beginning of the episode” and “words in a storyline or a song are accompanied by images (representing words) as well as their written representation”. They also included a major study done by Linebarger and

Walker where it was identified that certain shows like *Dora the Explorer*, *Blue's Clues*, *Arthur*, *Clifford*, and *Dragon Tales* resulted in higher vocabulary scores and expressive language, whereas *Teletubbies* resulted in fewer vocabulary words and smaller expressive language scores, *Sesame Street* only resulted in smaller expressive language scores, and *Barney and Friends* related to fewer vocabulary words and more expressive language. The shows and their design are key in influencing children's behavior and shaping their linguistic output.

Using that information, Neumann and Herodotou organized a set of principles for creating an educational video, which boiled down to 4 major criteria that they used to evaluate current YouTube videos: age appropriateness, content quality, design features, and learning objectives. These categories were then divided into 17 sub-category questions, like "Are pictures/graphics/animations presented alongside words/narration?", "Are learning elements highlighted in the video?", "Does the video encourage children to repeat content?", and more (Neumann and Herodotou 4467). This rubric was used to evaluate five popular children's YouTube videos.

This study was absolutely instrumental in helping me design *Moxie!*. Their set of criteria they designed is thorough, and although every good educational show doesn't hit all the marks (for example, *Blue's Clues* doesn't usually have words on the screen) it is a vital guide. It reminded me to focus on the fact that every design aspect of the show should serve its own unique purpose towards the goal of being educational.

After reading Neumann and Herodotou's study, I wanted a source that spoke directly to language learning through YouTube, and I was able to find "Learning English from Youtubers: English L2 learners' self-regulated language learning on YouTube" (Wang and Chen). This study was also completed in 2020, which suggests

there is a more recent presence of YouTube in research and literature. The primary focus of the study was to research students' self-regulated English language learning through YouTube. A group of 20 university students from two Taiwanese universities were interviewed about their experiences and their responses were analyzed in order to determine "learner's attitudes toward this technology-enhanced learning strategy and its impact on their learning of English" (Wang and Chen 333). Results of the response analysis showed that 41.72% students generally watch English-teaching videos to find learning resources, 27.81% watch to increase the attraction of learning, and 14.57% watch to learn about other cultures (Wang and Chen 342).

Although this study was done on university students whose L2 is English, reading this study was helpful in beginning to understand what language learning through YouTube looks like for students. One of the most important findings of this study is that YouTube was regarded as a more flexible, interesting, and interactive means of learning the language than simply learning within the classroom. The informal language learning opportunity that YouTube offers was considered beneficial and useful by the students, and this positive feedback towards YouTube as a language learning platform was encouraging.

CHILDREN'S EDUCATIONAL TV MODELS

After reviewing Neumann and Herodotou's study on educational YouTube videos, I realized that since YouTube is relatively recent in the educational programming world, they started where most other studies on children's technology learning began—television. A lot of their references came from studies done on children's educational programming on television, and they even watched episodes themselves to determine what kinds of methods and strategies they employed to be so

successful. In order to fully understand how to successfully implement educational elements into a visual medium, I selected a set of six television programs to review on my own: *Dora the Explorer*, *Ni Hao, Kai-Lan*, *Pocoyó*, *Blue's Clues*, *Sesame Street*, and *Between the Lions*.

Although there was no particular method by which I selected shows, I wanted to first select popular children's shows that had elements of foreign language. *Dora the Explorer* was the first that came to mind, as it was not only a part of my childhood but has been popular for almost two decades. *Dora the Explorer* premiered on Nickelodeon in 2000 and ran until 2019, finishing with a total of 178 episodes spanning 8 seasons. One of the show's creators, Valerie Walsh Valdes, said that Nickelodeon was looking to put out another educational TV show for kids, like *Little Bear* and *Blue's Clues* (Dawidziak, Cleveland.com). Dora was not initially Latina, bilingual, or even female—Nickelodeon's desire for Latin American representation formed the character that we know as Dora today. The show also inspired other series like *Go, Diego, Go!* as well as Dora spin-offs, like *Dora and Friends: Into the City*.

Dora, a 5-year-old Latina girl, and Boots the Monkey go on adventures each episode following the same format. In order to get to Dora's destination, she asks the Map to show her how to get there. Each episode has a different map with three stops; for example, in S6 E4 "Baby Winky Comes Home," Dora had to travel through the Farmer's Market and across the Hopscotch Bridge to reach the Tallest Mountain. The order and names of the stops is emphasized through repetition, like when Dora asks the viewer where to go. Dora and Boots also make sure to ward off Swiper the Fox, the villainous thief, at least once per episode. Once Dora has completed her journey, Dora and Boots sing the "We Did It!" song to review the events of the show. At the

end of every episode, Dora asks the viewer what their favorite part of the trip was and gives time for the viewer to answer.

After reviewing a couple episodes, Dora's use of repetition and music throughout the show were important elements in keeping the storyline clear and direct. For example, whenever Dora asks to see the Map to know where to go, the Map has the audience repeat the three destinations ("Market, Bridge, Tallest Mountain" in S6 E4) and then tells the viewer to tell Dora where to go. However, as a show that presents a "bilingual" character, Dora speaks very little Spanish to the viewer and at times just says things in Spanish without an explanation or translation, which would not be useful for a viewer who does not already know the language. Although *Dora* has great structure for kids to learn other lessons, Spanish is not one of the main focuses of this show, which surprised me at first. However, after reviewing the episodes, it is clear that *Dora the Explorer* was not initially intended to be a language learning show.

Since I speak Spanish, I wanted to watch a children's show with a foreign language that was not a language I spoke so I could have a similar experience as a viewer with no experience. The American children's television program *Ni Hao, Kai-Lan* aired on Nick Jr. in 2008 and only ran for 2 seasons. The show focuses on Kai-Lan, a 6-year-old Chinese American girl, and her daily adventures with friends like Rintoo the Tiger, Tolee the Koala, Lulu the Rhino, and Hoho the Monkey. Kai-Lan lives with her grandfather, Ye-Ye, who helps Kai-Lan solve problems and shares cultural traditions with Kai-Lan and her friends.

Kai-Lan and her daily adventures have a very clear and similar story arc structure in each episode. For example, in S1 E1 "Dragonboat Festival," Kai-Lan and her friends were participating in the Dragonboat festival team boat races. Before the

race began, Kai-Lan's grandfather Ye-Ye said that "Rowing together makes the boat go faster!"; however, Rintoo the Tiger became very upset when he couldn't go faster to win by simply rowing faster, demonstrating the need for teamwork. When Kai-Lan recognizes that Rintoo was upset by not winning, Kai-Lan breaks the fourth wall and engages directly with the viewer to trace Rintoo's steps and discover why he feels upset. Kai-Lan helps Rintoo calm down and finish the next Dragonboat festival race together, and at the end of solving the problem, sings the "We Got It!" song, which is very reminiscent of *Dora the Explorer*.

I initially wanted to review *Ni Hao, Kai-Lan* because it involves teaching a foreign language (Mandarin Chinese). However, upon reviewing two episodes of *Ni Hao, Kai-Lan*, there is very little Mandarin introduced and arguably none of it is truly taught, which is very similar to *Dora the Explorer*. If I were looking at it from an acquisition perspective, it doesn't necessarily need to be taught but the context in which Kai-Lan presented the full Mandarin utterances was not conducive to the phrase. I could not deduce what she was trying to say. The few examples of spoken Mandarin that I recorded in S1 E1 "Dragonboat Festival" were when the viewer was asked to help count to three in Chinese, when Lulu the Rhino said a phrase in Mandarin that was translated by Hoho the Monkey as "We won! We won!", when Kai-Lan asked the viewer to tell Hoho to "跳!" ("Jump!"), and "谢谢" ("Thank you!"). I was disappointed in the way that Mandarin was presented in the show because using the language was a very trivial part of the show, and I feel that the only reason there is any Mandarin involved is to include some sort of diversity in television, which is again, like *Dora the Explorer*.

The last television show I reviewed that had clear foreign language elements was *Pocoyó*, a British-Spanish television series that initially aired in Spain and

England in 2005 but came to air in the United States on Nick Jr. in 2010. It is now available on YouTube, Netflix, Cartoon Network, Amazon Prime Video, and more. *Pocoyó* has four seasons available, with season 3 titled “Let’s Go, Pocoyó!” and was specifically intended to teach English to Spanish preschoolers, unlike the previous seasons. Although there is no foreign language element in the show directly, the show is available in both Spanish and English, but for this review I watched the British (and therefore English) version.

The show is centered around a little boy named Pocoyó and his two best friends, Pato (a yellow duck) and Elly (a pink elephant), but Pocoyó, Pato, and Elly have many other friends that pop up in various episodes. It is set in a 3D space with only a white background, which lends itself to an endless amount of fun and colorful educational scenarios. Each “episode” has three mini stories with an average 7-minute run time, and the narrator mainly speaks to Pocoyó, but also prompts the viewer to answer questions about what is happening on screen.

Pocoyó is by far my top source of inspiration for animation design and structure. I have always been a fan of the show and its versatility in design, as well as the communication style between the narrator and the characters. Listening to the narrator communicate directly with the characters aligns well with the extended listening that Curtain and Dahlberg mention is needed for language acquisition. *Pocoyó’s* transition to posting on YouTube was also interesting to observe, as its structure of mini stories along a main storyline worked well in both television and YouTube as platforms.

In reference to the earlier literature, I wanted to also include television shows that did not have a foreign language element but are highly regarded as great educational television programs for children. *Blue’s Clues* was one of my favorite TV

shows growing up and it was also mentioned several times in earlier literature with high praise, so I knew I had to include it. The show aired on Nick Jr. and ran for 6 seasons, bringing the total episode count to 141. After the push in the early '90s for children's educational television programming, Nickelodeon hired three producers to create and design a new kid's TV program: Angela Santomero, Traci Paige Johnson, and Todd Kessler. Using Santomero's background in child developmental psychology, they were able to design the show using strong educational techniques that made *Blue's Clues* stand out in television. Kessler had worked on *Sesame Street* and disliked the show's static format, so he wanted to design something more interactive. The *New York Times* noted that most TV characters were male at the time, but Blue was a girl puppy who "would never wear a bow" (Onstad, NY Times).

Each episode of *Blue's Clues* follows the same format. Blue, the animated puppy, has a puzzle for Steve and the audience to solve using a series of clues she leaves behind; for example, in S2 E11 "What Does Blue Want to Do On a Rainy Day?" Blue leaves clues around the house about what she wants to do since it is raining outdoors. Steve walks around the house (and outside, when it is not raining) to interact with characters, find Blue's pawprints, and document the clues in his "Handy-Dandy Notebook." At the end of the show, Steve returns to his "Thinking Chair" and with help from the audience, solves the puzzle.

Although the entire show is very well designed, I was particularly drawn to the use of music and sounds in the show. Blue never speaks, and only makes sounds to convey her message; however, you can generally tell what kind of message Blue is trying to communicate by the downward or upward chord progression of her sounds. Steve also uses gestures while he is speaking; for example, when Steve says the words "Blue's Clues," he makes the same motion with his hands, which is accompanied by

background sound effects. *Blue's Clues* also has some very memorable theme songs, some that I have remembered for my entire life—the “Thinking Chair” song, the “Mail Time” song, the “So-Long” song, and more. It is a phenomenal example of engaging directly with the audience by breaking the fourth wall, as well as maintaining key educational elements like the use of music, repetition, and gestures.

Another show that was mentioned with high praise was the iconic *Sesame Street*. Premiering in 1969 on PBS and still running through HBOMax, the show has 52 seasons and a total of 4,591 episodes. Since 1972, more than 30 countries have launched international productions of *Sesame Street*, beginning with “Vila Sésamo” in Brazil (Chiwaya, NBC News). *Sesame Street* involves a whole cast of puppet characters who live close by on Sesame Street in a tight-knit New York community. Each episode of the show features a letter and number of the day and has different segments of the show where these features are highlighted. For example, Count von Count is a vampire puppet who always pops up in the show to count objects (which always turn out to be the number of the day). In S35 E4067 “Elmo’s New Band,” the Count finds four bats and declares that the number of the day. Although there is a main storyline that ties in throughout the episode, like Elmo looking for band members, the segments do not always necessarily tie in directly. In Bert and Ernie’s segment, Ernie was playing his bugle horn so he would get tired and go to sleep, but it kept waking up Bert. The theme of the segment was thinking through actions and their consequences, which didn’t necessarily tie into any other elements of the show. However, the episode did have an overarching theme of family, which was present in several parts of the Elmo’s World segment and the main storyline.

Sesame Street has been beloved for generations, so it was at the top of my list to watch and review. I particularly enjoyed the segment format because it provides

various opportunities to keep the storyline moving and better integrate the learning foci (letter of the day, number of the day, overarching theme) into the show. I like that the learning goals are clearly stated in the show (“The number of the day is 4!”) and are repeated throughout the episode, even in short, 30-second segments between the characters’ parts. After reviewing an episode, I was highly impressed at how much learning *Sesame Street* fit into under an hour.

Once I finished watching *Sesame Street*, I was reminded of another show that I truly loved as a child. *Between the Lions* premiered in April of 2000, as a sequel or sister series to *Sesame Street*. Although *Sesame Street* was a highly successful series, PBS wanted to put out a program that was designed to teach kids to read, and so *Between the Lions* was born. The show’s producer, Judith Stoia, explained it as the next step for kids—*Sesame Street* teaches the letters and numbers, and *Between the Lions* goes the extra step to start reading (DefunctTV). The show was initially produced by WGHB Boston, one of PBS’s affiliated stations, but after high production costs the show was starting to fade out of the spotlight. It was then picked up by Mississippi Public Broadcasting, where it cost much less to produce than in Boston, because of the benefits *Between the Lions* made in the educational experiences for low-income children (DefunctTV). The show won 7 Daytime Emmy Awards throughout its 10 seasons, totaling 130 episodes.

It is similar in style to *Sesame Street*, involving both puppets and real people in the episodes, and has various segments that have different main characters. Each episode has some sort of focus, whether it be on a certain word and words that rhyme with it (i.e. rock, sock, clock) or a certain sound. In S2 E18, “Why the Baboon’s Balloon Went Kaboom!”, the sound focus for the show was the double “oo” vowel sound. In each segment and throughout the main plot line of the show, the “oo” was

used and highlighted across the screen. Since the show is designed to teach its viewers how to read, it provides captions with every story and highlights the words as the narrator reads them. The repetition of the sound throughout the show was extremely effective and clever, as it wove the “oo” into different parts of the show, making it much more interesting to watch.

METHODOLOGY

The final creative product of this thesis was the pilot episode of *¡Moxie!*, which was designed, animated, and published for K-3 monolingual, English students. The primary goal of the pilot episode is to expose the viewer to hearing Spanish within a meaningful context, but there are also two clearly stated learning goals in this episode: the word of the day, *pelota* (ball), and the letter of the day (M). It is important to recognize that the pilot episode is only a snapshot of the show as a whole. Language acquisition is a process, and this episode is a small part of what the show as a series would aim to accomplish.

In order to best formulate the storyline and elements of this episode, I completed background research in both children's educational TV programs and various academic papers to fully understand how to create effective and educational material. This section will briefly explain the background research for both the creative and the academic processes, the pedagogy and script design, the animation process, and the additional elements included in the episode.

BACKGROUND RESEARCH

When I was in the process of deciding whether to use video as my medium, I immediately started doing research into animation tablets, apps, and techniques to see whether it would be feasible for me to animate it myself. Although I have always had an interest in art and character design, I had no experience in digital art or animation; but, with the vast number of resources available on YouTube and across the internet, I felt confident that I could learn how to animate simple actions the summer before the fall semester began. After narrowing down the range of technology to a couple

devices and software programs, I realized that my personal budget would severely limit the potential of this project. Soon thereafter, I was introduced to the McGillicuddy Humanities Center's (MHC) fellowship program, which offered me the opportunity to take this project to the next level.

After receiving my acceptance to the MHC, I was able to get a head start by ordering an iPad Pro, Apple Pencil, and a couple drawing programs over the summer. Before deciding on a program to use for the show, I watched tutorial videos, user reviews, and got in touch with a couple people through the University that had recommendations on where to start and what to include. After gathering all that information, I decided to purchase Procreate, Apple's primary drawing program, and Callipeg, a relatively new animation program designed for iOS users. Procreate is complete with intricate brush settings and great color palettes, but its Animation Assist feature only allows for frame-by-frame animation which is an extremely time-consuming process. Callipeg, on the other hand, provides a "keyframe" feature, which are set frames that define the beginning and end points of an object's transformation. Keyframe animation not only saves a lot of time but keeps the animation looking smooth since redrawing frames lends itself to slight changes and differences that are made obvious when the picture begins moving. In the end, I decided to use Callipeg for the final product and Procreate for the concept art.

Once I decided on which program to use, I began to research academic material that surrounds the field of early childhood language development and technology. I soon realized that there are not many recent studies on the intersection of these two subjects; however, I collected information from earlier studies using television, a few more recent studies involving YouTube, and general studies on the

benefits of early start foreign language education (see LITERATURE REVIEW: THE CASE FOR EARLY FOREIGN LANGUAGE EDUCATION).

PEDAGOGY AND SCRIPT DESIGN

The pedagogical principles of second language acquisition are central to the design of *jMoxie!* as a series. Curtain and Dahlberg's book, *Languages & Learners: Making the Match World Language Instruction in K-8 Classrooms and Beyond*, introduced me to the world of second language acquisition theory and largely informed my pedagogic approach for this project.

One of the major contributions to second language acquisition theory that is discussed in *Making the Match* is the work of Stephen Krashen. Although parts of his work have raised controversy, it is true that he introduced some of the foundational basics of modern language instruction that are still referenced today (2). His overall theory consists of five hypotheses: the Acquisition-Learning, the Monitor, the Input, the Affective Filter, and the Natural Order hypothesis. Curtain and Dahlberg's review first tackles the Learning-Acquisition hypothesis, which Krashen determines that there are two systems to learn a language: the learned (conscious) system and the acquisition (unconscious) system. Although Krashen deems the systems as independent of each other, Curtain and Dahlberg point to recent literature that demonstrate conscious learning can play a major role in language development; for example, there has been demonstrated progress when learners are provided with the opportunity to reflect and discuss the "formal properties" of a language (2), and Curtain and Dahlberg argue that it may be beneficial to consider the two as "supporting each other" rather than completely independent like Krashen (3).

The next part of Krashen’s theory that informed the development of the pilot episode script was the Input hypothesis, where Krashen discusses the importance of “comprehensible input.” Curtain and Dahlberg write as follows:

Comprehensible input is defined as the amount or level of language that the students can fully understand, plus new language that is slightly beyond their abilities but made comprehensible through context and embedding new language in previously learned language. Krashen refers to this process of comprehension of new language forms in the context of previously learned forms as $i + 1$ (3).

This part of the theory is so important because it sets a clear example of what needs to be achieved. Curtain and Dahlberg explain that it is so significant because the input theory has demonstrated the importance of “speaking in the target language rather than just speaking about the target language” (3). Even though immersion was an approach I was already considering because of my own experience in K-12 classes, there are several elements that can be extrapolated from Krashen’s Input hypothesis for this thesis. First, the pilot episode must be comprehensible for the viewer. This is where meaningful context comes into play—even though every word may not be completely recognized by the viewer, the context in which the language is presented must be interesting, relatable, and understood using gestures, imagery, examples, etc. However, it is important to keep in mind the level at which the target language is presented; for example, the language used must be adjusted to the viewer in order to avoid creating feelings of failure or mindsets that they are not good at learning the language (4). Since *iMoxie!* is meant to spark interest in learning a foreign language for young students, I made sure to select a context that lends itself to engaging characters and relatable scenes with language that can be understood with the visuals and gestures demonstrated on screen.

Curtain and Dahlberg (2016) also provide their own list of strategies to employ when using the target language during instruction. They include: a somewhat

slower rate of speech; more distinct pronunciation; shorter, less complex sentences; more rephrasing and repetition; more frequent comprehension checks; use of gesture and visual reinforcement; greater use of concrete referents; and interactive supports (5). Although I recognize each of these are important, some are not possible to accomplish through animated video, such as the frequent comprehension checks with the viewer. I also recognize Merrill Swain's 1985 argument that learners also need to produce comprehensible output, which are opportunities for the learner to produce the target language within meaningful contexts (Curtain and Dahlberg 5). However, since I am unable to measure or facilitate output directly, I decided to focus on Krashen's Input hypothesis.

Since *¡Moxie!* is centered around a storyline, another pedagogical approach I found particularly useful was Curtain and Dahlberg's storytelling criteria for stories in the target language. The steps are outlined in Chapter 4:

1. The story is highly predictable, or familiar [...]. In early stages, it is especially helpful to choose stories that include vocabulary representing the home and school environments of children.
2. The story is repetitive, making use of formulas and patterns that occur regularly and predictably [...].
3. The storyline lends itself to dramatization and pantomime.
4. The story lends itself to heavy use of visuals and realia to illustrate its content and progress.

Stories that meet these criteria can be presented without the use of English, relying entirely on visuals, pantomime, and the learners' existing knowledge of the story or the situation to make the meaning clear (127).

These four points, the discussion on Krashen's Language-Acquisition hypothesis, and Krashen's Input hypothesis provided me with a solid foundation on which to build the script for *¡Moxie!*'s pilot episode. However, I also wanted to see these strategies in action, so I turned to technology that has successfully produced children's visual educational programs for years—television.

Inspired by Neumann and Herodotou's background research in their study "Evaluating YouTube Videos for Young Children," I selected a set of six television shows to review and take notes on: *Between the Lions*; *Blue's Clues*; *Dora the Explorer*; *Ni Hao, Kai-Lan!*; *Pocoyó*; and *Sesame Street*. Depending on the length, I reviewed one or two episodes of each show and took note of their design elements, content, and learning objectives that connected with Curtain and Dahlberg's storytelling techniques. Although *¡Moxie!* borrows different elements and techniques from several TV shows, the one that I was fully inspired by design-wise was *Pocoyó*. The show has three main characters that go on adventures together and a narrator to mediate their conversation, which is different from all of the other shows I reviewed. I decided to incorporate this narrator-character relationship for several reasons: first, it creates an environment where the viewer is not pressured to speak. The goal of *¡Moxie!* is simply to begin the process of language acquisition by extended listening, which means that the viewer may have no previous experience with Spanish at all. If that is, in fact, the case, I did not want to implement a direct narrator-viewer relationship like *Dora the Explorer* where the viewer is consistently asked to repeat words and communicate with Dora directly. Secondly, it gives the viewer the experience of Spanish conversational structure without having to be directly involved. For example, in *Pocoyó*, the narrator asks Pocoyó all the questions, so the viewer is able to listen to the narrator's question and visually see the character's response. Lastly, Pocoyó and his friends do not speak (except for the occasional word), and since I did not feel confident in correctly animating an on-screen narrator's mouth movements, Moxie and her friends also do not speak but rather make instrumental noises that express emotion through different chord progressions.

For the pilot episode of *¡Moxie!* I needed to create characters that were both expressive, relatable, and easily recognizable animals since the episode is almost completely in Spanish. I decided on Moxie, a small schnoodle puppy; George, a medium orange cat; and Beans, a large teddy bear. After I had finished designing the characters, I began the process of drafting a script. I mainly framed the episode using strategies and elements from Curtain and Dahlberg's book *Making the Match*, but I also relied on strategies I saw implemented in the television shows I reviewed.

S1, PILOT: "Los amigos de Moxie"

TITLE SEQUENCE: *Moxie is sleeping in front of a window inside the house while the moon and stars are twinkling in the sky. The moon then moves across the sky, disappearing off screen. It is dark for a moment, but the sun begins rising to the center of the sky, casting sunlight onto Moxie and into the entire room waking her up. She blinks a few times, and then smiles, and the title "¡Moxie!" appears across the screen.*

The title screen appears

The word of the day is: ¡pelota! *the large tennis ball appears, word is said 2x, sounded out 2x*

The letter of the day is: ¡M! *the letter M appears on screen, letter is sounded out 3x*

CAPTIONS BEGIN WHEN THE NARRATOR SWITCHES TO SPANISH

AMIGOS DE MOXIE

N = narrator

M = Moxie

G = George

B = Beans

Moxie is on screen, looking through her toys.

N: Good morning, Moxie!

Moxie does not respond. She continues looking through her toy box.

N: Hmm, maybe Moxie didn't hear us. Let's try saying it louder—good morning, Moxie!

Moxie looks up out of her toy box. She looks at the screen, blinks a few times, and tilts her head showing confusion.

N: It looks like Moxie doesn't understand us.

...Oh, I remember! Moxie doesn't understand because she only speaks Spanish. We need to speak with Moxie in Spanish.

¡Buenos días, Moxie! ***subtitles appear***

Moxie makes happy sound and wags tail.

N: Fantastic! Moxie speaks Spanish. From now on, we will need to speak to Moxie in Spanish, or she won't be able to understand us.

Moxie, ¿qué estás haciendo?

Moxie just backed up and dropped her ball on the ground, but she wags her tail and makes an upbeat sound.

N: Oh! Moxie quiere jugar con su pelota.

Moxie wags her tail again, then picks up her ball.

N: ¡Moxie! ¿A dónde vas?

Moxie points with her paw towards stage right.

N: ¿Vas a jugar con su pelota?

Moxie smiles and makes an affirmative sound.

N: ¡Bien, vamos a jugar con la pelota!

Moxie goes off screen and the scene changes from the intro scene to the living room scene, where Moxie encounters George the cat, resting in the sunshine. Moxie walks over to George and drops her ball, then wags her tail.

N: ¡Oh! Moxie quiere jugar con George, el gato. ¡Hello, George!

George does not respond. He continues sleeping.

N: Hmmm, George is sleeping...oh! George also speaks Spanish, just like Moxie. We have to speak with George in Spanish, too.

¡Buenos días, George!

George blinks a few times and then smiles.

N: Ah, now George is awake! Remember, we need to speak to Moxie and George in Spanish for them to be able to understand us.

George makes a happy, upbeat sound and Moxie smiles and wags her tail.

N: George, Moxie quiere jugar con su pelota. ¿Quieres jugar con Moxie?

George smiles and makes an affirmative noise.

N: ¡Fantástico! Moxie y George van a jugar con la pelota.

Moxie picks up her ball to leave.

N: Moxie, ¿a dónde vas?

Moxie points with one paw up towards stage right.

N: ¡Bien, vamos a jugar con la pelota!

Moxie and George go off screen and the scene changes from the living room scene to the patio, where Moxie and George find Beans the bear, on his scooter. Moxie and George see Beans on his scooter and they see Beans zoom past.

N: Wow! Moxie y George quieren jugar con Beans, el oso. ¡Hello Beans!

Beans cannot hear, as he is still going back and forth on his scooter.

N: Hmmm, Beans is playing with his scooter, but we need to get his attention. Oh! Beans speaks Spanish just like

Moxie and George, so we will have to speak to Beans in Spanish too.

¡Buenos días, Beans!

Beans stops on his scooter next to Moxie and George and makes a happy sound.

N: Beans: Moxie y George quieren jugar con la pelota. ¿Quieres jugar con Moxie y George?

Beans thinks about it, he shakes his head no, making negative sound.

Moxie and George both make inquisitive sounds.

N: Hmm. Beans no quiere jugar con la pelota. Beans, ¿por qué no quieres jugar con la pelota?

Beans goes back and forth on his scooter.

N: Ah, Beans quiere jugar con su patinete pero Moxie & George quieren jugar con la pelota. ¿Qué vamos a hacer?

The three of them appear to be thinking of a solution. Moxie has an idea; lightbulb appears over her head.

N: ¡Moxie! ¿Tienes una idea?

Moxie makes an affirmative sound.

N: ¿Cuál es tu idea?

Moxie smiles and pushes the ball towards Beans' scooter.

N: ¡Fantástico! Moxie quiere jugar con la pelota y el patinete. ¡Moxie, George y Beans van a jugar con la pelota y el patinete!

Moxie, George, and Beans all rejoice.

The scene fades to black, and then the narrator reviews the letter of the day and the word of the day, going through the same process at the beginning of the episode at the end.

ANIMATION PROCESS

I started the journey into animation during the summer of 2021, where I watched countless tutorials on Callipeg and Procreate to prepare for creating a longer animation. My first attempt involved drawing a bouncing tennis ball, and then I tried my hand at making Moxie walk using the keyframe animation. I spent the fall semester of the thesis project focused on the structure and design of the show, so over winter break, I refreshed my memory on how to use the programs while I was in the process of creating my reading list.

I started animating the intro scene by designing the background and selecting the color palette on Procreate, and then recreating those same details in Callipeg. Procreate has many more options for design than Callipeg does, so I even spent time creating a new Callipeg brush to mimic the one I use in Procreate. After I completed the background, I spent several days animating and replicating the small details of the introduction, like Moxie breathing and the stars around the moon twinkling. Then, I was able to make the moon move across the sky and make the sun appear and rise to the center of the sky with keyframe animation. The most challenging aspect of the introduction was making the color palette shift from night to morning; however, the introduction scene was one that I had envisioned since the beginning of the thesis planning process, so I was determined to execute my mental vision for the show.

Each scene was similar in the way that they were illustrated. First, the background color was selected, a cream white, then the background was layered on top of the color. I layered the color and minimal shading needed for the background, then began to set the objects needed in the scene. For example, in Scene 1, I layered Moxie's toy box and toys on top of the background before I drew in Moxie. After setting all the background elements and the props needed for the scene, I drew in the

main character. However, the main character also needs to move, so once the initial drawing was completed, I added a transformation layer on top. Transformation layers allow me to set the keyframes necessary for Moxie, or any other character or object, to move freely around the scene. After the transformation layer is created, no more drawing adjustments can be made on the layer that is being transformed unless you remove it from underneath the transformation layer, which is highly time consuming. Once I drew in Moxie's different facial expressions and features, I completed all the transformations needed for the scene and continued this process for each of the following scenes. Since the audio wasn't lined up with the video at this point, I left each transformation as a general number of frames, which was adjusted once my voice and music overlay were added in. The subtitles were added last through YouTube.

ADDITIONAL FEATURES

The animation process was important in bringing the characters and story to life, but the little details help to provide depth. After reviewing the children's television programs earlier on in the process, I recognized the importance of music and sound in assisting the characters and storyline. For instance, *Dora the Explorer* and *Blue's Clues* both have fairly rigid structures in terms of storyline design, and they have key song moments, like Dora's "We Did It!" or "I'm the Map!" song and Steve's "Mail Time" and "Thinking Chair" songs. While I did not have the time nor the means to animate and compose a full score, I did find background music and scored some sound effects for Moxie and her friends. I play the flute backgrounds in the show, but I also invited two additional musicians to feature on other instruments for the other characters: Aiden Pike on alto saxophone and Nicholas Aiello on

trumpet. Assigning each character an instrument not only helped develop their personalities but added to the expression that each character can demonstrate.

CRITICAL ANALYSIS OF WORK

Throughout this process of knowledge creation, I learned a substantial amount about second language acquisition and animation, but I was also able to assess and reflect on my work as a viewer. After completing the pilot episode, I identified various aspects of the episode that I would like to change or things I would like to add that could improve the presentation of the language and overall quality of learning. This section will address those details as well as serve as a critique for the choices I did make for the pilot episode.

My initial claim was to create a product that would give young students the chance to explore a second language outside of the classroom that would be a part of a language acquisition series. Overall, I achieved the goal of creating a model to fill a hole in the YouTube market for young language learners, and my main goals are driven and aligned with the basic principles of second language acquisition that I outlined in the methodology section. However, I did set out on this project with the intention of solely approaching the language from an acquisition perspective (immersive exposure to the target language in the target language), but in the end I did include some language learning as well (explicit teaching of the target language in the native language). Just as Curtain and Dahlberg mentioned in their discussion of Krashen's Language-Acquisition hypothesis, language learning and acquisition can be used in conjunction with each other. My decision to include the learning goals (word of the day *pelota* and letter of the day *M*) reflects this; however, it is important to note that the learning goals are small takeaways that are part of the larger process of language acquisition that *jMoxie!* has to offer.

Producing the animation itself became so time consuming that I was unable to incorporate several elements that, in hindsight, would truly improve the episode's

quality. Since I did not have any animation experience going into this project, my abilities severely limited the potential of what could be presented on screen. For instance, I would have included a human character in the main cast if I were able to animate a human speaking on screen. Although I am confident that children are still able to relate to the characters and context that I chose, not every child may have personal experience with pets, so a human character would be more directly relatable. In the end, I decided against including a human character because I would want them to have the ability to speak on screen, which I do not have the ability to animate accurately without further instruction or assistance. Having a more relatable character that could demonstrate the language in front of the viewer would align more directly with delivering comprehensible input in a meaningful context like Krashen's Input hypothesis demonstrates.

If I had more time to animate this project, I would have animated and incorporated various segments into the episode; after reviewing the children's educational TV programs, I wanted to reformulate a storyline that left room for different segments that relate to the main story. I recognized that this would be an effective means by which to introduce language, particularly in different contexts, and two strong examples of this are *Between the Lions* and *Sesame Street*. Although each show entertains a main storyline in each episode, they also present engaging and related segments that tie into the primary story. For example, in *Between the Lions*, there is always the "The Adventures of Cliff Hanger" segment, where a man named Cliff Hanger has to use his trusty Survival Manual to get off of the cliff he is hanging from. Even though the segment always ends in Cliff Hanger still hanging from the cliff, the story changes to fit the theme of the show, like the -oo sound in "Why the Baboon's Balloon Went Kaboom!" where Cliff Hanger encounters balloons floating

near the cliff. *Sesame Street* also has many different segments in their episodes, such as the Count von Count's counting and Elmo's World. However, I was not able to devote time to anything that branched off of the main storyline, as the animation and editing process alone was overwhelmingly difficult to learn.

It is also important to note that the script on its own cannot be considered comprehensible input—it was designed to be presented in accordance with the visuals and gestures only. For example, the questions in the script are not necessarily intuitive to what is happening on screen. When the narrator asks Moxie “Moxie, what are you doing?” the exact meaning of the question is simply not clear, and no amount of visuals can solve that within one YouTube video—this is where a native speaker or Spanish teacher would have to be present with the viewer to clarify the meaning in the moment. They would be able to rephrase the question or demonstrate its use in different contexts, but I made choices with the assumption that the viewer is watching alone, so the alternative to that would be to provide a translation to make the meaning clear; however, I set a goal of language acquisition, and providing a translation would completely defeat the purpose. The question “Moxie, what are you doing?” will eventually make itself clear over the viewing of multiple episodes that present various contexts in which Moxie is asked what she is doing.

I put heavy emphasis on building a meaningful context around the main character because I started with Moxie, who is a full representation of my own dog, and it meant a lot to me for her to be the main character. Starting with the concept for the main character wasn't detrimental to the design of the show, but it certainly limited the contexts I could construct and the meaning I could extrapolate from that. For example, the language I chose to use needed to align with a storyline that made sense for a dog, so when selecting target language, I chose *pelota* (ball) as the word of

the day because it appears frequently, is recognizable for children, and is easy to illustrate. However, *pelota* is arguably not the most useful word to know when starting to acquire a second language—so I made sure to include high frequency words and phrases like *buenos días* (good morning) and even the verb *jugar* (to play) as seeds for the Spanish acquisition process throughout the script. These phrases and words are repeated throughout the pilot episode and would also be repeated throughout future episodes in order to support the acquisition of greetings and common verbs like *jugar*.

The reason I selected *M* as the letter of the day is because Moxie's name begins with M; however, the letter M in Spanish is also an important letter to start learning the alphabet with because of its similarity to the English letter M. Their pronunciations are different, but it is not an overwhelming change, so it would still be recognizable to the English viewer. The letter of the day is also reflected in the picture frame on the left wall in the introduction scene, which would change along with each episode so the viewer can look for the new letter at the beginning of the show each time.

Since the pilot episode is meant to be part of a series, the patterns and repetition would become clearer over multiple episodes; because of this, I intended to create two episodes but the time required to animate two episodes would extend beyond this project. Since the patterns across episodes would not be visible, I designed each of the scenes within the episode to mimic the same pattern—the narrator speaks in English, then makes the viewer aware that the character only speaks Spanish, so it becomes imperative to use the target language to communicate with the character, and then the character is asked a similar series of questions (Where are you going? Do you want to play with the ball? etc.). Although there are patterns within the

episode, I would also want to incorporate patterns that span the series—like each episode would start with the letter and word of the day, there would be a clear pattern of side segments, the story always ends with a review of the initial letter and word of the day goals, the same questions are asked but in different contexts (such as “Where are you going?”) so the learner can acquire its meaning without it needing to be explained, and more.

Although I did not have the opportunity to fully design the next episode, I do know of some language patterns that I would still include in order to continue fueling the acquisition of Spanish. For example, the word of the day *pelota* would be a recurring object in the show, along with a review of the letter *M* at the beginning of the show before introducing the next letter of the day. The high frequency greetings (*buenos días*) would also continue to appear at the appearance of every character.

I am confident that learning outside of the classroom provides an invaluable space for second language education. *¡Moxie!* is meant as a pre-acquisition resource, by starting the process of extended listening to instill familiarity with the sounds and structure of Spanish. It is open and provides a space for the viewer to practice speaking the words on the screen or not if they don't feel comfortable—in fact, Curtain and Dahlberg write that it takes over 40 hearings for an individual to even recognize a sound that is not in their native language, so premature drilling of pronunciation or constant correction in classrooms can cause feelings of frustration for students (113). *¡Moxie!* is ultimately created to be used at the level of the viewer's comfort because it is simply an opportunity to experience the language, whereas the series presents the long-term goal of acquisition. In order to be engaging, however, it is driven by the needs and interests of the learner; Moxie enjoys playing with toys, going outside, and inviting her friends to join her, which are all scenarios that are

familiar and relatable to young children. But it is important to note that the narrator makes it clear that in order to communicate with Moxie and her friends, Spanish must be spoken. It makes the target language a necessary component of communication, and in order for the viewer to talk to Moxie they must learn Moxie's native language of Spanish. I find this to be an invaluable component of the show—learning how to communicate with the characters expands the viewer's perspective and sense of awareness. Not everyone in the world speaks the same language, and it is important to recognize that to become a more involved global citizen. In order to understand and have a relationship with Moxie, Spanish is the means of accomplishing that.

¡Moxie!'s design foundationally echoes that of second language acquisition theory, but looking back, there are several details that can be improved for it to be most successful as a resource. There are several other aspects of creating a show that need further consideration, such as coordinating keys of background music with musical effects, developing more cohesive color schemes, investing time in larger captions that can be color-coded, etc. but in order to accomplish that I would need a team of animators and experts in each of these categories. Television shows and movies have teams of artists and editors in order to carry out their goals, and I would be interested in collaborating with more people to take this to a greater level. However, on my own I believe that I have created a prototype of a product that has great potential, and I hope to one day see *¡Moxie!* be a pioneer for technology-based second language acquisition.

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AUTHOR'S BIOGRAPHY

Stephanie Tillotson was born in Charlotte, North Carolina and has moved a total of 9 times between the states of North Carolina, South Carolina, and Maine. After being homeschooled in North Carolina her freshman year, Stephanie moved back to Maine and in 2019, graduated cum laude from Greely High School in Cumberland, Maine. She began attending the University of Maine in the fall of 2019 and will be finishing in three years as a May 2022 graduate.

While at the University of Maine, Stephanie majored in Spanish with a minor in Legal Studies. She was invited to be a Center for Undergraduate Research (CUGR) Fellow in 2020 where she completed research on systemic linguistic discrimination in the United States, was awarded a McGillicuddy Humanities Center Fellowship for her thesis project, and was recognized as the first-place winner of the 2021 Rezendes Ethics Essay Competition for writing on the English-only Movement. Stephanie was a member of the UMaine Marching Band for all three years and was elected the Alto Saxophone Section Leader for the 2020-2021 season. She was selected as the 2022 Outstanding Graduating Senior for the Modern Languages and Classics Department and is also a member of Sigma Delta Pi: Collegiate Hispanic Honor Society, Phi Kappa Phi, and Phi Beta Kappa.

After graduation, Stephanie will be applying to graduate schools for the fall of 2023 and is looking forward to spending more time with family in southern Maine for the coming year.