DEVELOPING AN AUGMENTED REALITY APP IN SECWEPEMCTSÍN IN COLLABORATION WITH THE SPLATSIN TSM7AKSALTN (SPLATSIN TEACHING CENTRE) SOCIETY

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Abstract

In this thesis, I describe over two years of collaboration and engagement between Splatsin First Nation Elders, community members, staff that work at the Splatsin Tsm7aksaltn (Splatsin Teaching Centre) Society, and myself, a Master’s student at UBC Okanagan. In particular, I describe how we have developed an augmented reality app for language revitalization in Splatsin’s dialect of Secwepemctsín. In this project, I drew on Indigenous methodologies, the community-based language research model, and digital ethnography as theory to conduct my research. Specifically, this involved including community members as community research partners. By forming a research team that involves community members as researchers, this project respects community members’ knowledge, control, and ownership of the research project and approaches relationship and trust building as guiding the research process. This ensured that the Splatsin Tsm7aksaltn retained ownership and control of the project at all stages of the research.

Secwepemctsín is an endangered language. In total, there are less than one hundred speakers of the language. In addition, Splatsin’s dialect of Secwepemctsín only has a handful of speakers, most of whom are approaching ninety years old. The Splatsin Tsm7aksaltn (Splatsin Teaching Centre) Society, a registered not-for-profit organization for documenting and teaching Splatsin’s language and culture, often uses technology for language revitalization. As such, my community research partners and I developed an app in Secwepemctsín that draws on stories from a community play, called Tuwitames (she/he is growing up). These stories, called stsptakwla, convey important lessons and cultural knowledge and also draw attention to assimilation practices of Residential Schools and the Sixties Scoop. Through my participant observation in the community, interviews, community meetings, and online questionnaires, community research
partners and community members guided the direction and development of the app, and we tested the app in the community. Our shared research project highlights respect, relevance, reciprocity, and responsibility by establishing collaborative research goals, and can be a model for other research projects that involve developing digital technology for communities engaged in endangered language revitalization.
Lay Summary

This thesis describes my collaboration with members of the Splatsin Tsm7aksaltn (Splatsin Teaching Centre) Society. We have developed an augmented reality app that is narrated in the community’s ancestral and endangered language, SecwepemcTsín. In this thesis, I address my four research questions: 1) How did collaboration shape the development of an app? 2) How can the app’s design be most consistent with Splatsin cultural values? 3) How can an app be used to help learn SecwepemcTsín? 4) How does the process of collaborating on an app affect the “coolness” of the language and culture of SecwepemcTsín?
Preface

Portions of section 1.4 and section 2.2.1 appear in, and have been modified from Lacho, David Dennison, and Aaron Leon. 2017. “‘Please Mom? Can You Please Download It at Home?’: Video Games as a Symbol of Linguistic Survivance.” Transmotion 3 (1):70–89. I am the primary author of this co-authored publication. It is used in this thesis with permission from co-author Aaron Leon.

Rosalind Williams granted permission to conduct collaborative research at the Splatsin Tsm7aksaltn (see Appendix A: Letter of Collaboration). All research partners and participants signed consent forms. University of British Columbia Okanagan Behavioural Research Ethics Board approved the project (H15-02547).

The copyright of this thesis rests with David Lacho, save for portions that were previously published, where copyright is retained by both authors. Participants who are quoted in this thesis, as well as the Splatsin people retain ownership of, and claim first rights to, all stories and cultural information shared.

Copyright of all portions of the Tuwitames app (save for licensed assets), as well as the accompanying storybook, rests solely with the Splatsin Tsm7aksaltn (Splatsin Teaching Centre) Society.
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Glossary

Ac re qweqwelútn wl ma7 yaws (our language forever)

Kia7a: Grandmother

Kikia7a: Grandmothers

Kukwstalp: Thank you (plur.)

Kukwstamc: Thank you (sing.)

Kukwstsút-ka re xwexweitit stam: I am grateful/lucky for everything

La7 es e cwenwa: Today is a good morning

Lukllukamins re Kikia7a re tsltsítsla t’l alalkstns re samá7- The Kikia7a are thinking about the (continually) new tools (of the white man)

Ma7 lxlexcáyactlma: I’m going to report it to you (pl.)

Qwaqwatsín: To Pray

Samá7: White person

Secwepemc: Shuswap

Secwepemetsín: The language of the Secwepemc people

Secwepemcul'ecw: The land/territory of the Secwepemc people

Sek’lap: Coyote

Snina7: Owl

Splatsin: Mouth of the prairie

Stsptakwla: Traditional stories

T’enis: Highbush cranberries

Tqaltkukwpi7: The Creator

Tsi7: Deer
Tsm7aksaltn: Teaching Centre

Tsmakst tstsetes re cucwall: Show/Teach the correct road

Tstset: Correct

Waytk: Hello to you (sing.)

Wl ma7 yaws: Forever

X'l ma7 tsams re tstset - They taught me the correct way

Xwexwáytet re alálkstes t'n knucwatwácwes - We are working together to help each other

Yeri7 stsuks pyín: That’s all for now
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Kukwstsút-ka re xwexweitit stam.
Dedication

To the Splatsin First Nation community, and to the Future Speakers of Secwepemctsín
Chapter 1: Ma7 Lxlexcáyactlma (I'm Going to Report It to You (pl.))

1.1 Outline

In this chapter, I introduce my Master’s research and my research questions. I describe language endangerment, and I depict the strategies that researchers and communities take to address language endangerment (a practice called language revitalization). I describe the context of my research, including the Splatsin First Nation, the Splatsin Tsm7aksaltn1, and Secwepemctsín (the language of the Secwepemc people). I explain how this research was influenced by the field of Serious Games and Hyperlocal Media, and I conclude this chapter by detailing the layout of the chapters in my thesis.

1.2 Master’s Research and Research Questions

When a rainbow happens in the sky, all the conditions lined up for that rainbow to happen. So, this time we’re in, all the conditions have lined up for us to do this right now. When this time passes, it’s because it was meant to pass. In this time that we’re in right now, this last stretch that we’ve got, it’s what we need to talk about and plan for. (Rosalind Williams, quoted in “Splatsin Community Language Meeting September 24 2013 Pt 1” 2013)

Tswum (Rosalind Williams, a community research partner on this project) is a renowned and respected knowledge keeper of Secwepemc language and culture. Rosalind expresses the clear need for revitalizing Secwepemctsín, the language of the Secwepemc people. Her words are a call to action that something needs to be done to revitalize the language. By using augmented

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1 The ʔ is the orthographic representation of a glottal stop <ʔ> in Secwepemctsín. This sound is also found in English, for example, it is the stop in the throat that is found in between the word “uh-oh.”
reality² technology, my research partners, members of Splatsin First Nation, and I created an app³ narrated in the community’s ancestral and endangered language. All the conditions lined up to allow for this project to happen.

Recent innovations have put augmented reality technology in the hands of any person in the community who has a (albeit newer) smartphone. In addition, and at the time of writing this thesis document, the Splatsin First Nation is installing high-speed fiber optic Internet in community members’ homes. In a very short period, the conversation of re-thinking the “digital divide” in Indigenous communities and reflecting on how Indigenous people make new “spaces” online (Lewis and Fragnito 2005; McMahon 2014) has shifted to making new “coded territories” (Loft et al. 2014) by using digital media. Indigenous people are actively (and always have been) contributing to digital infrastructure and media.

The purpose of this project was to develop an app for the Splatsin First Nation to support the community’s language revitalization. By doing so, I wished to answer the following research questions:⁴

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² Augmented reality is technology in which “graphics, sounds, and touch feedback are added into our natural world. Unlike virtual reality, which requires you to inhabit an entirely virtual environment, augmented reality uses your existing natural environment and simply overlays virtual information on top of it” (Reality Technologies 2016).

³ According to the American Dialect Society, the definition of an app is “an abbreviated form of application, a software program for a computer or phone operating system” (American Dialect Society 2011).

⁴ As described in Chapter 4, this project has shifted from making a video game in Secwepemctsin to developing an app in the language. However, the development of the app drew on the literature from the field of serious games, as described later in this chapter.
1) How did collaboration shape the development of an app?

2) How can the app’s design be most consistent with Splatsin cultural values?

3) How can an app be used to help learn Secwepemctsín?

4) How does the process of collaborating on an app affect the “coolness” of the language and culture of Secwepemctsín?

In this thesis, I describe over two years of intensive collaboration between myself and members of the Splatsin First Nation. This collaboration has enabled us to develop an app that will be released to the community in the near future.\(^5\)

1.3 Language Revitalization

By collaboratively developing an interactive augmented reality app, my community research partners and I have used technology to engage youth and community through “high tech initiatives” that take advantage of “technologies that are ‘hot’ and ‘popular’ in today’s market” (Galla 2009, 173-175). Language revitalization is defined as “the development of programs that result in re-establishing a language which has ceased being the language of communication in the speech community and bringing it back into full use in all walks of life” (Hinton 2001a, 5). The loss of a language “does not occur in isolation, nor is it inevitable or in any way ‘natural’” (Pine and Turin 2017). Furthermore, language endangerment is often due to “duress and stressful circumstances, where there is no realistic choice but to give in. Many people stop speaking their languages out of self-defense as a survival strategy” (Nettle and Romaine 2000, 6). The Ethnologue, a reference publication in its 20\(^{th}\) edition (available in print and online), lists 7,099 known living languages in the world (Ethnologue 2017), yet the situation for most of these

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\(^5\) As outlined in section 5.3, the app is complete, yet it has not yet been distributed.
languages seems bleak, as language homogenization has left “over half of the world’s population speaking one of only 13 languages” (Pine and Turin 2017). In 1992, Krauss estimated that ninety percent of the world’s languages would be severely endangered or extinct by the year 2100. More recent conservative estimates put this number at fifty percent (Austin and Sallabank 2011; Crystal 2002; Nettle and Romaine 2000). Some researchers have measured the vitality of a language based on absolute number of speakers of a given language. They have suggested that in order for a language to be considered safe, it would require between 20,000 and 100,000 speakers (Ottenheimer 2013; Krauss 1992). However, measuring the vitality of a language based on the absolute number of speakers does not account for other factors that contribute to language endangerment. For example, there are some languages with a small number of speakers (such as Icelandic) that are considered safe (Nettle and Romaine 2000, 9). UNESCO (2003) provides a more accurate overview of factors by which to assess language endangerment in the document Language Vitality and Endangerment:

1) Intergenerational language transmission
2) Absolute number of speakers
3) Proportion of speakers existing within the total population
4) Trends in Existing Language Domains
5) Response to New Domains and Media
6) Materials for Language Education and Literacy
7) Governmental and Institutional Language Attitudes and Policies Including Official Status and Use
8) Community Members’ Attitudes toward their Own Language
9) Amount and Quality of Documentation (UNESCO 2003, 7)

For many communities, the loss of language signals the loss of culture. In fact, the United Nations’ website on International Mother Language Day states:
Languages, with their complex implications for identity, communication, social integration, education and development, are of strategic importance for people and planet. Yet, due to globalization processes, they are increasingly under threat, or disappearing altogether. When languages fade, so does the world's rich tapestry of cultural diversity. Opportunities, traditions, memory, unique modes of thinking and expression — valuable resources for ensuring a better future — are also lost. (United Nations 2017)

There is a connection between the loss of a language and the loss of cultural diversity. Many Indigenous groups who have, or who are, experiencing language loss have lost knowledge, including the knowledge about the uses of plants and traditional medicines, as well as the historical narratives associated with their culture (Cruikshank 1990; Crystal 2002; Hinton 2001a; Nettle and Romaine 2000; Noori 2009). Communities may employ different strategies to language revitalization based on the factors outlined by UNESCO (2013) and the community’s specific context. Hinton (2001a) points out five types of language revitalization strategies and programs:

1) School-based programs (for example, teachable subject in schools, bilingual education, immersion schools and classrooms);
2) Children’s programs outside the school (for example, summer camps, after-school programs);
3) Adult language programs (for example, immersion culture camps, “Master-Apprentice” program, “Breath of Life”); 6
4) Documentation and materials development (for example, publications such as a grammar or dictionary, books, audiotapes, videotapes, etc.);
5) Home-based programs (for example, raising children to be bilingual, “One Parent, One Language” method). 7 (Hinton 2001a)

Splatsin’s ancestral language, an Eastern dialect of Secwepemctsín (Shuswap) language is endangered. Ignace and Ignace (2017) have written that the many dialects of Secwepemctsín

6 The Master-Apprentice Program “teaches native speakers and young adults to work together intensively so that the younger members may develop conversation proficiency in the language” (Hinton 2001b, 217). The “Breath of Life” program introduces community members of an endangered language to resources available at institutions, such as university libraries, and gives participants training in linguistics to be able to understand and use these materials. Participants also learn how to use tools that will aid them in their research (Hinton 2001c, 419).

7 “One Parent, One Language” is a method where “one parent always [speaks] to the children in one language and the other parent always [speaks] in the other” (Hinton 2001a, 17).
spoken across Secwepemcul’ecw (Secwepemc Territory), including Splatsin’s dialect, can be considered “microdialects” due to the fact that “each community or geographic area … has unique speech patterns” (2017, 127-129). However, as the Splatsin community members use the term dialect, I will use this term throughout this thesis. As I will describe below, the Splatsin Tsm7aksaltn is actively engaged in revitalizing their dialect.

1.4 Context: Splatsin First Nation, Secwepemctsín, and the Splatsin Tsm7aksaltn

![Figure 1: Splatsin Territory and Three Reserves](image-url)
The Splatsin First Nation is the southernmost member of the Secwepemc (Shuswap) Nation in British Columbia, Canada. The main reserve is located next to Enderby, with reserve lands in Sicamous and in Salmon River. The earliest ethnographic accounts of the Splatsin people can be found in the publication *The Shuswap. The Shuswap* was published by James Alexander Teit in 1909 as part of the Jesup North Pacific Expedition (JNPE) directed by anthropologist Franz Boas (Teit 1909). The community’s traditional territory spans across the Eagle, Salmon, and Shuswap Rivers, and community members hunt, fish, and hold culture camps for sharing traditional knowledge along these waterways (Cooperman 2015, Morrison 2010). The Shuswap river, which spans through the main reserve in Enderby, is central to the community members’ lives, it

Provides a source of Splatsin identity... the Shuswap River forms a Splatsin social hub during many months of the year. Splatsin people gather at the Enderby Bridge, on river beaches, and at camps along the river. The river is a travel corridor, a place of spiritual activities and cleansing rituals, and where horses are watered. The Shuswap River is the aesthetic centre of Splatsin culture for it forms a central component of traditional stories and oral histories. (McIlwraith 2015, 172-173)

My conversations with Splatsin community members reinforces the idea that the river is central to their identity. One of my community research partners, Rosalind Williams, shared with me that in the morning she walks down to the river before her day starts and feels so thankful for being able to be on the land (Rosalind Williams, personal communication). Her brother, Randy Williams, expressed in a short documentary that he produced with Wapikoni Mobile that the river is a cleansing spirit (Wapikoni Mobile 2017).  

As mentioned above, the language of Splatsin is an Eastern dialect of the Secwepemetsin (Shuswap) language of the Interior Salish language family. The Secwepemetsin dialects are

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8 Wapikoni Mobile is a travelling media studio that teaches youth and community members skills in video production. Wapikoni stops in Indigenous communities across Canada and provides the resources for community members to produce short documentaries. In October 2017, Wapikoni made a stop-over in the Splatsin community. My community research partners Aaron Leon and Deanna Leon both produced films for Wapikoni.
endangered and, in total, the language has 1,190 semi-speakers (Ethnologue 2016), although Splatsin’s Secwepemctsin dialect is significantly more endangered. Less than 1% of over 800 band members are speakers (FirstVoices 2016). According to a community Language Needs Assessment, as posted on the First Peoples’ Heritage Language & Culture Council website, in 2014 there were 8 speakers that understood Secwepemctsín fluently, all of whom are over the age of 65. There were 14 speakers that understood and/or spoke Secwepemctsín somewhat, and there were 63 people that were learning Secwepemctsín. 835 band members at the time of the report did not speak or understand Secwepemctsín (First Peoples’ Heritage Language & Culture Council 2014). Since the publication of this report in 2014, some Elders who were fluent speakers of the language have passed away.

The earliest records of writing in Secwepemctsín were written in a shorthand system (Le Jeune 1896; Le Jeune, n.d.) called Chinook Shorthand, or “Chinuk pipa” and was widely distributed in the newspaper Kamloops Wawa (Ignace and Ignace 2017, 132). Ignace and Ignace (2017) describe the development of this writing system:

During the late nineteenth and early twentieth centuries, the Oblate missionary Father Jean-Marie-Raphaël Le Jeune (1855-1930), who spent more than forty year among the Secwépmc, taught many Secwépmc, Nlaka’pamux, and Okanagan people how to write Chinook Jargon – a lingua franca widely used at the time between Aboriginal peoples of different languages and among Aboriginal and white people – using Chinook shorthand. Chinook shorthand is based on the Duployé shorthand system, which uses symbols of lines and dots to write syllables, and Le Jeune had taught himself to write it fluently as a young seminarian. (131)

In the 1960s, linguist Aert Kuipers worked with several Secwepemc communities to develop a practical writing system that is still in use today. Kuipers worked with many community members in Secwepemcul'ecw (Secwepemc territory), including Kia7a Skapinek (Marie David), and published several grammars, texts, dictionaries, and reports on the Secwepemc language, Secwepemc narratives, and the Secwepemc people (Kuipers 1970; Kuipers 1974; Kuipers 1975;

Rosalind Williams maintained a regular correspondence with Kuipers until his death in 2012. I have heard stories from Elders in the community about Kuiper’s visits, including stories of how shocked they were that a samá7 (white man) could speak Secwepemctsín so well. Kuipers’ publications are indispensable for the Splatsin Tsm7aksaltn’s own work on language revitalization.

Following Kuipers work, in the 1970s, there were a group of approximately twenty fluent speakers who came together and tasked Rosalind Williams (and what would later become the Splatsin Tsm7aksaltn) with preserving Splatsin’s dialect of Secwepemctsín. In doing so, this small group of fluent speakers mandated that Splatsin’s unique dialect needed to be documented and taught to the youth in the community. Today, as was the case then, there are only a small number of teaching resources available in Splatsin’s dialect, most of which has been produced by Rosalind Williams and the Splatsin Tsm7aksaltn (Rosalind Williams, personal communication).

As described by my community research partners, Rosalind Williams and Deanna Leon (Cook), One of the first steps that the Tsm7aksaltn took to revitalize Secwepemctsín was to “wrap the elders around the children” (Cook and Williams 2004). Kikia7a9 (grandmothers) of the community did this by developing a language nest named the Splatsin Childcare Facility (Cook and Williams 2004, 6).10 Created in New Zealand, a language nest program involves learning a language in immersion pre-schools. Internationally, these programs have been implemented within other Indigenous communities, such as Maori (King 2001), Hawaiian (Wilson and

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9 The reduplicated form “Kikia7a” is the plural form of the singular “Kia7a”. Reduplication in Secwepemctsín often marks plurality or diminutives.

10 In an attempt to recognize all learners from all walks of life in the community, the centre would later be called the Splatsin Tsm7aksaltn (Splatsin Teaching Centre) Society, as it is named today.
Kamanā 2001), and also Manx Gaelic (Wilson 2009; Nettle and Romaine 2000). There are four child care programs at the Splatsin Tsm7aksaltn for children of all ages up to 12 years old.

The staff of the Tsm7aksaltn worked with the Kikia7a to develop immersion programs with the goals of teaching and documenting Secwepemctsin (Cook and Williams 2004, 6-8). In the early days of the Tsm7aksaltn, immersion language learning with the Kikia7a occurred three days a week across various age groups (Williams 2007, 2). The language activities often involved Total Physical Response (TPR), where actions were performed in correspondence to learning the language to increase rates of retention (Cook and Williams 2004, 6-8). The program was not without its unique set of challenges, as many of the Kikia7a were elderly and some had health issues (Williams 2007, 3).

Lately, the number of fluent speakers that can work with the children has declined greatly. For that reason, the Kikia7a interact with the children only three or four days a month, from September until March. The Kikia7a focus on recording the language more so than teaching the language to children. In fact, when I began the working with the Splatsin Tsm7aksaltn, it had been several years since the Kikia7a were involved in child care, due to their health and age. Child care is the responsibility of program directors and staff of the four childcare programs. In fact, when I began my research in 2016, five Kikia7a would work on recording the language, three days a week; in 2017, this was reduced to two days a week, for only three to five hours.

I have seen firsthand how this work has become more and more demanding on the Kikia7a. Questions about the language and culture are followed by noticeably longer pauses, and they often need to take breaks or stop work completely because of headaches or not feeling well. Although rewarding, documenting the language is laborious, and the physical, mental, and emotional demands placed on the Kikia7a are increasing as they age. Yet, the Kikia7a are
enthusiastic about sharing the language, and recording sessions often involve joking in the language and having fun.

Language curriculum is now developed by program directors in each of the Splatsin Tsm7aksaltn programs. This presents a set of challenges, as the language teachers are often learning the language themselves. However, the staff at the Tsm7aksaltn is dedicated to teaching the language. In conversation with children, English words are often swapped out with Secwepemctsin equivalents. Staff members have described this process as a “trickling down” of language, since the recordings with the Kikia7a are then used as the basis for developing language material. Language is taught following a seasonal curriculum at the Splatsin Tsm7aksaltn. This has been likened to traditional ways of teaching within the community, as much of the language and culture was (and is) taught during harvesting practices on the land and waterways within the territory.

The Splatsin Tsm7aksaltn also takes advantage of emerging technology for their language revitalization. Staff at the Tsm7aksaltn attend workshops and conferences in order to improve their skills and to stay up to date with the most appropriate technologies for digitizing language material. In addition, the Tsm7aksaltn uses YouTube to share educational videos. The YouTube channel, Splatsin1, is a starting point for people to begin learning the language. These resources include a video of Secwepemctsin pronunciation that demonstrate the shapes the mouth makes in pronouncing each sound. There are also video resources related to cultural protocols, such as what to do when visiting the Kikia7a (“Splatsin1 - YouTube” 2017). Language learners can also access the FirstVoices community portal for Splatsin’s dialect of Secwepemctsin. The Tsm7aksaltn has contributed many of the audio recordings from their archive to this website. Using this resource, language learners can play games or listen to songs in the language.
Although there are quite a few audio resources available on the FirstVoices website, it is often difficult for community members to navigate the site to find the specific recordings they are searching for. However, FirstVoices is updating its system and will implement a version of Mother Tongues (formerly Waldayu), which is a dictionary software specifically designed for endangered languages (Littell, Pine, and Davis 2017; “Mother Tongues” 2017). Staff at the Tsm7aksaltn expressed that this will most likely improve the experience of using FirstVoices. These tools are nonetheless important for the community, and, as I describe in Chapter 3, there is a recognition within the community that “the future of Indigenous languages will depend partly on technology” (Galla 2009, 178).

At the Splatsin Tsm7aksaltn, the challenge is making the most out of the small pool of funding, staffing, and language resources that are available. Most projects depend on grant funding, as the society runs as a non-profit and does not receive band funding. Still, the staff that works at the Tsm7aksaltn have positive attitudes, are creative, and are dedicated to the continuance of Splatsin’s culture, and to Secwepemcitsin, their ancestral language.

1.5 Serious Games, Games for Change and Hyperlocal Media

I had originally anticipated developing a game as my research project but, as described in Chapter 4, my community research partners and I chose to develop an augmented reality storytelling app instead. Nonetheless, the app was very much influenced by the field of Serious Games, which are, by definition, “games that do not have entertainment, enjoyment, or fun as their primary purpose” (Michael and Chen 2006, 21). Although they can still be fun, that is not their central purpose, since Serious Games often simulate “real world(sic) effects and processes” (Michael and Chen 2006, 30). This genre of game can force players to view society from a
different perspective, or teach players about social activism. Serious Games may pose real-life problems for players to solve, while demanding some creative skill from the player. By learning new skills in-game, players are able to take new-found knowledge and apply it in novel circumstances (Ruggiero 2013, 597). As the original focus of the research was to build a video game for language revitalization, I was influenced by a subset of Serious Games called Games for Change. These games motivate players to engage with social issues and encourage social change through play (Swain 2007). As mentioned in section 1.3, language loss is most oftentimes due to social inequalities, and thus Games for Change seemed like a good way to engage people with the topic of language endangerment. Games for Change can be used for fostering individual and collective action and creating a space for the acknowledgement and discussion of social issues. These games can be used to introduce players to differing, unfamiliar worldviews in a safe environment, where the risk, and price, of failure is low. My community research partner, Tskwluwi7kn (Aaron Leon), expanded on this point in the early stages of this project:

I like that notion paired with language learning, because a lot of people they’re scared of learning the language because of failure … there’s this part of them that’s been taken away from them that they’re trying to learn. A lot of people have to recognize they don’t know their own language, which is very scary and maybe video games can be that place where …you can be put in a place where failure is not that big of a thing and they would want to learn the language. (Aaron Leon, interview, January 8, 2016)

Mitigating the risk that might accompany these types of experiences in ‘real-world’ contexts allows players to learn new ways of understanding the world – new critical lenses from which to analyze their interpretation of ‘reality’, and to explore ideas about the construction of, and potential to reimagine, identity (Stokes, Seggerman, and Rejeski 2010). Games such as these can allow players to experiment with different ideologies and explore and challenge their own moral and ethical frameworks (Swain 2007). This is especially important for Indigenous communities,
as videogames tend to represent Indigenous people and culture poorly. For example, games like *Turok* and *World of Warcraft* portray “‘savage’ and ‘animal’ representations of Aboriginals” (Dillon 2007, 235). Some games, such as *Custer’s Revenge* for Atari, where raping a captured Indigenous woman increases the player’s score, go beyond problematic representations and actually condone racist and violent acts towards Indigenous people. Since games have the power to change the way we see the world and to experiment with different worldviews, designers have an ethical and moral obligation to be aware of the worldview and culture they are portraying, as these representations influence social attitudes and behaviors outside of the game. Although Serious Games and Games for Change seemed like a good avenue for addressing language endangerment, as described in Chapter 4, we did not develop a video game. Nonetheless, we kept the ideas of game development in mind when developing the app, and we added smaller game mechanics, such as badges to reward users for using the app and engaging with the stories, to the app. The app is considered hyperlocal media, as it aimed at improving the livelihood of the local area, and fostering and reinforcing a sense of, and connection to, place and community at a grassroots level (Baines 2012; Dungen and Genest 2013; Hu et al. 2013; Radcliffe 2012).

1.6 Organization of Chapters

The naming of each chapter is in Secwepemetsin. The Kikia7a have graciously taken the time to think of the best words that describe each chapter. In particular, I would like to thank Kia7a Qaxam (Annie Cook), Kia7a Skapinek (Marie David), Kia7a Ntlola (Emmeline Felix), Kia7a Legwpétqw (Rita Major), Kia7a Cuscuscan (Florence Nicholas), Kia7a Tswum (Rosalind Williams), and Kia7a Tsli (Helen Duteau) for finding the most accurate titles for each chapter. As I expected, this was not an easy task, as the naming conventions found in a thesis document
do not translate well into Secwepemcstsin. To me, this is not a limitation of Secwepemcstsin, but rather it is a limitation produced by the institutionalized structure imposed on an otherwise non-linear process of knowledge production. Likewise, in King (2001), Māori terminology is used to signal support for the language, and to convey the most accurate meaning of a concept instead of relying on “a clumsy alternative in English” (King 2001, 119). My attempt to ground the names of each chapter in a way that is respectful to Secwepemc and Indigenous ways of knowing is not a solution to this issue. However, I believe that by doing so, I can make steps towards dismantling the structures that limit the expressions of Indigenous worldviews.

In this chapter, I have outlined language endangerment and revitalization, the Splatsin Tsm7aksaltn and Secwepemcstsin, Serious Games and Games for Change, and Hyperlocal Media. In Chapter 2, I present my choice of methodologies, theory, and methods for this research project. I discuss Indigenous methodologies, community-based language research, and digital ethnography as theory. In this chapter, I also outline the ethical considerations for this project. I describe my choice of methods: participant observation, interviews, community meetings, and online questionnaires. Finally, in this chapter, I state how the research data was analyzed and transcribed. Chapter 3 portrays the attitudes that community members have towards technology, as understanding these attitudes was necessary in order to develop an app in Secwepemcstsin. In this chapter, I foreground the insights that the Kikia7a shared with me, and how, for the Splatsin Tsm7aksaltn, using technology for language revitalization affords community members the opportunity to hear the voices of the last fluent speakers for themselves, regardless of where community members are located. Chapter 4 tells of how I came to know the Splatsin community and my community research partners. It also details the process of developing an app in Secwepemcstsin, including receiving community feedback, its technical development, and user
testing. I conclude in Chapter 5 by reflecting on my research questions, by identifying areas for future research, and by outlining my contributions to the Splatsin community and to the literature on language revitalization.
Chapter 2: X'l Ma7 Tsams Re Tstset (They Taught Me the Correct Way)

2.1 Outline

In this chapter, I describe the theory, methodology, and methods I used in my research. I first explain my framework for research, the theory and methodologies and how they relate to my research questions. In particular, I detail Indigenous methodologies and how they inform the development of an app relevant to the Splatsin community, as well as digital ethnography as theory in order to understand peoples’ relationships with technology. I outline the ethical considerations for this project, and, in particular, the struggles of reconciling a collaborative community-based project with the expectations of the Behavioural Research Ethics Board (BREB) at UBC Okanagan. I then describe the collaboration between myself and the Splatsin Tsm7aksaltn, the formation of our research partnership, and the community-based language research model (Czaykowska-Higgins 2009). Following that discussion, I describe my choice of methods: participant observation, interviews, community meetings, online questionnaire, and user testing and feedback. I then describe how the data from the research was transcribed, coded for themes, and analyzed.

2.2 Theory and Methodologies

In this section, I discuss the theoretical and methodological approaches that underpin my research. Indigenous methodologies, digital ethnography as theory, the establishment of research partners, and the community-based language research model provided important frameworks for addressing my research questions:
1) How did collaboration shape the development of an app? 2) How can the app’s design be most consistent with Splatsin cultural values? 3) How can an app be used to help learn Secwepemctsín? 4) How does the process of collaborating on an app affect the “coolness” of the language and culture of Secwepemctsín?

2.2.1 Indigenous Methodologies

This research is centered around, and critically engages with, Indigenous methodologies and also engages with collaborative research as a form of decolonization. My research is guided by the concept of relationality as a research process. Shawn Wilson (2008) describes the importance of the relationships, which lie “at the heart of what it means to be Indigenous” (2008, 80). Specifically, Wilson highlights the concept of relationality as the complex connections between people, land, the cosmos, and ideas. These relationships are sacred and critical to Indigenous methodologies for research and knowledge acquisition, for informing other relationships, pedagogical approaches to sharing knowledges, methods of connecting people to place, understanding humanity, and understanding that knowledge is cultural (Wilson 2008, 86-96). This relationality has been damaged by forced assimilation through the Indian Residential School System and the Sixties Scoop.¹¹ Reclaiming relationality is a process of decolonization which foregrounds Indigenous ways of knowing and embodies lived resistance to colonial ideologies that privilege Western paradigms, epistemologies, and ontological constructs. These movements

¹¹ The Sixties Scoop is a term first used by Johnston (1983) to describe the government process of forcibly removing Aboriginal children from their families and communities and placing them in the child welfare system and in the foster care of white families. In 2017, the Canadian government announced an “Agreement-in-Principle” for compensating victims of the Sixties Scoop (Indigenous and Northern Affairs Canada 2017). The Splatsin community was particularly affected by this process and has recently launched a lawsuit against the BC government for not upholding a community child welfare bylaw. This bylaw was passed in response to the Sixties Scoop to ensure that the Splatsin First Nation retains jurisdiction over the welfare of the community’s children (Helston 2016).
are spiritual and are “a culturally rooted social movement that transforms the whole society and a political action that seeks to remake the entire landscape of power and relationship to reflect a truly liberated post-imperial vision” (Alfred 2005, 30).

In order to embrace Indigenous methodologies, this research project put emphasis on forming partnerships and, as a result, many relationships were built during the research process. The research has been a personal journey for me, as well. The same month I started my graduate studies I received my Aboriginal status. I was (and am) excited and proud of being a Métis person. The serendipitous timing of this fact informed many of the early decisions I took in approaching this research, including my methodological choices. As an outsider to the Splatsin community, I became accountable to my research partners through the process of relationship building. Relationship building takes work and often involves having to step away from the institutionalized routine of academia and step into the values of community. At times, I felt that relationship building was oppositional to my life at the university. I felt emotionally exhausted navigating between these two structures throughout my research. Nevertheless, the process of building relationships with Splatsin community members was rewarding and brought me joy. In particular, in December of 2016, I helped with planning community events. For instance, I spent an afternoon with Rosalind Williams making bannock for Indian tacos in the Splatsin community centre kitchen. That moment came at the end of a very intense week of preparation for the event. Although we were tired and sweating over hot grease, we managed to spend a lot of time talking and sharing knowledge. I felt tremendous positive emotions from what can only be described as a power that comes from relationship building. I felt that power when I returned home that evening, and had an email from Rosalind wishing me a Merry Christmas and telling me to tell my family that I have a new family and even my own bed at her house. Another moment that
highlighted that power was when I returned to Splatsin after some time away in Manitoba. I had the opportunity to present the app to the board members of the Splatsin Tsm7aksaltm. When community members saw me, they hugged me and said, “welcome home.” Later, Gloria Morgan, a board member and very active community member, messaged me on Facebook to say welcome “home.” Through the relationships that I built I was able to understand that there was a double meaning behind this idea of “home,” as in welcome back to British Columbia, and, of course, welcome back to Splatsin. Although moments such as those do not contribute directly to developing an app for language revitalization, they do attend to the importance of relationships, a key component of this research and of the Indigenous methodologies highlighted in this chapter.

2.2.2 Research Partners and Community-Based Language Research

My project also followed a community-based language research model as a methodology. This methodology, as well as the one described above, put emphasis on collaboration as a central component to the research process. As a result, Splatsin community members were involved as research partners. According to Czaykowska-Higgins (2009), community-based language research emphasizes that “the linguist is only one of the experts in the research process, and that community members as well as linguists should be directors of and active partners in the research” (24). By definition, the community-based language research model is:

Research that is on a language, and that is conducted for, with, and by the language-speaking community within which the research takes place and which it affects. This kind of research involves a collaborative relationship, a partnership, between researchers and (members of) the community within which the research takes place. (Czaykowska-Higgins 2009, 24)

By its very nature, applying such a model to my project is to respect the cultural and political structures embedded in this process (Czaykowska-Higgins 2009; Shulist 2013; Yamada 2014).
As a community-based project, community members themselves are involved in their own language revitalization, and all those who are involved share an understanding of respect and reciprocity (Debenport 2010; Rice 2006; Speas 2009). Creating research partnerships with community members ensures that they are central to establishing their own needs in language revitalization based on the shared skillsets that they bring forward. As such, this model of research foregrounds the sharing of skills necessary to do language revitalization.

Community members initiated this project. In the development of an orthography for the Nabit language of Ghana, Giffen (2015) describes that “the community’s decision to initiate a language project, demonstrates something about their language ideologies, which is that the language is so strongly tied to their culture and identity that it is worth preserving” (Giffen 2015, 23). Giffen’s choice of a community-based methodology to orthography development was appropriate since she worked with community members in assisting them in choosing the best symbols to represent their language. Similarly, as Splatsin community members initiated this project, they were also demonstrating that their language and culture is worth preserving.

My goal in this research project was to emphasize collaboration as a central part of the development of the app. As noted above, I put a special emphasis on building relationships with community members. In the first phase of the research and throughout the entire research project, the relationships between myself and the community became a partnership and this partnership evolved over time as the project shifted in its various iterations. I worked very closely with Aaron Leon, Deanna Leon, and Rosalind Williams, who became “formal” research partners in this project and I list their contributions in section 4.2.1. They were closely involved in the app’s development and played a central role in overseeing its development. However, many other community members were involved in advising the direction of the research. For example, the
Kikia7a play a central role at the Tsm7aksaltn and ensure that all the research at the centre is correct. In discussing ethics with my community research partners in May 2016, Rosalind Williams stressed the fact that the Kikia7a ensure that research is done in a good way: “the Elders sitting here are an ethics board, not an ethics board you just visit once a year” (Rosalind Williams, personal communication). Although the Kikia7a did not participate in the community meetings and more formalized data collection involved in research, I consider them research partners, since without their involvement and willingness to share their knowledge and wisdom, this research could not have taken place.

As this project sought to highlight collaboration from concept to distribution of the app, I felt it was important to involve community members at every stage of the research project. This included sharing research proposals, Behavioural Research Ethics Review Board (BREB) applications, and observations and field notes with my research partners. Sharing these documents with my community research partners ensured the research was correct, was grounded in the community’s values, and also respected the spirit of openness and collaboration. During the research, my community research partners and I were able to receive feedback from other community members on the process of collaboration and the development of the app.

2.2.3 Digital Ethnography as Theory

This research uses digital ethnography as theory. I approach ethnography not only as a “family of methods involving direct and sustained social contact with agents and of richly writing up the encounter” (Willis and Trondman 2002, 394), but also as “a theory of describing that has always been controversial as to the what and how thus inspiring a dynamic intellectual process” (Nader 2011). My project entails applying digital ethnography as a theory of describing
the knowledge that is produced through the multitude of points of interaction that exist, that are
aided by, and that involve technology in people’s lives (Pink et al. 2016, 23); a process also
known as *virtuality*, or an acknowledgement that “interactions between technologies and social
action produce activity” (Nardi 2015, 17). I approach digital ethnography’s relationship to
knowledge production through an understanding of four defining factors outlined by Pink et al.
other social processes that may not necessarily involve technology; its *openness* (2016, 11) of
research goals, which are outlined by collaborators; as a *reflexive* (2016, 12) form of knowledge
production that involves examining my own relationship with technology; and an approach to
research that is *unorthodox* (2016, 13) by using multiple approaches to seeking out how others
understand the world and their relationships. In this sense, digital ethnography is a theory that is
“malleable … organic, evolving, and interpretive, examining complex social phenomena
personally and descriptively” (Martey and Shiflet 2012, 108). Digital ethnography can be viewed
as a theory that describes the blurred lines between the virtual and what some would call the
actual, offline, or “onground” (Cool 2012).

As mentioned in Chapter 1, the Tsm7aksaltn intertwines language revitalization and
technology in many ways. The Tsm7aksaltn has an ongoing digital archiving project with the
Kikia7a. In fact, Tskwluwi7kn (Aaron Leon), Mameltkwa (Brianna Leon) (Aaron’s cousin and
staff member at the Tsm7aksaltn), and I attended sessions on digitization of linguistic material in
June 2016 at a workshop held by Indigitization at UBC’s Vancouver campus. Indigitization is a
project that aids communities in “clarifying processes and identifying issues in the conservation,
digitization, and management of Indigenous community knowledge” (Indigitization 2016). We
attended this workshop to find out more about digitization practices and the best way to archive
material. Traveling to the workshop was a form of fieldwork, as I conducted participant observation. The idea of fieldwork in this sense was atypical, as we engaged in the sessions on digitization together outside of geographical boundaries of the Splatsin community, yet this fieldwork would ultimately benefit the existing language revitalization practices at the Tsm7aksaltn.

Over the course of my research, it became clear to me that technology enabled a form of relationship building that reconceptualised the notion of “the field,” typical in ethnographic description. Although there are countless examples, another that comes to mind: In winter, roads were often dangerous to travel due to slippery conditions. The Kikia7a, Rosalind Williams, Aaron Leon, and I would use Skype to talk to each other and to continue to work on language revitalization at the Tsm7aksaltn. Aaron Leon set up high quality microphones so that I would be able to hear the ejective consonants in Secwepemctsin since a laptop microphone would not be as clear as the Tsm7aksaltn’s microphones. These affordances that technology offered allowed us to continue ongoing work and allowed a level of participant observation that crossed geographic boundaries. Despite geographic distance, it felt like I was there.

Digital Ethnography as theory guided me in my descriptions of the data that arose through participant observation, interviews, community meetings, and online questionnaires. I am wary of establishing outcomes and impacts of this research, as Mortenson (2005) mentions that “[t]he Kia7as described the word ‘impact’ as colonial language that suggested some sort of collision, or aggressive contact at the very least. They urged me to find another way” (Mortenson 2005). Ethnography as a theory of description (Nader 2011), and more specifically digital ethnography

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12 Ejectives are sounds that are made by closing the vocal cords and using only the air that is in your mouth. In Secwepemctsin, these are [p’] <p’>; [t’] <t’>; [k’] <k’>; [q’] <q’>; [kʷ’] <kw’>; [gʷ’] <gw’>; [ʁ’] <gw’>; [m’] <m’>; [n’] <n’>; [ŋ’] <ŋ’>; [ʃ’] <ʃ’>; [w’] <w’>; [j’] <y’>; [l’] <l’>. [ ] indicates phonetic transcription of the sound in the International Phonetic Alphabet (IPA), and <> indicates orthographic representation.
as theory, allowed me to “find another way” by focusing on the narrative that emerges from our collaboration.

2.3 Ethical Considerations

This research was approved by the Behavioural Research Ethics Board (BREB) at UBC Okanagan. Yet, the ethics of this research project extended beyond the requirements of the Tri-Council Policy Statement for the Ethical Conduct for Research Involving Humans (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada 2014) and the BREB. Importantly, this project followed ethics established by my community research partners at the Tsm7aksaltn. As per the requirements of the BREB, I received written permission to conduct research from Rosalind Williams, Language and Cultural Coordinator of the Splatsin Tsm7aksaltn (see Appendix A: Letter of Collaboration). Community members consented to participate in interviews, community meetings, and questionnaires on an individual basis. For minors who participated in the research project, written assent was obtained from the parents or legal guardians (see Appendix B: Documents of Consent and Assent). In order to privilege the voices of interviewees and so that all knowledge could be attributed to the participant, participant names were not removed from the data. The option of having participant names removed from the research data was presented to all participants, however no person chose to do so, except in the online questionnaire described in section 4.3.5. As described by Debenport (2010), a potential risk was that community members who participated in the research may be viewed as language “experts”, which in turn might make others feel excluded from the project. Members who do not speak Secwepemctsín may not have felt included in the language revitalization
project. To address this, efforts were made to ensure that the community felt that the project was collaborative, and efforts were made to ensure that other groups, such as video game players, who also had valuable information to share, felt welcomed in participating in this project.

In my research, I valued the community’s own ethics alongside institutional policies. This often created tension for my community research partners and I. For example, my community research partners and I discussed that all linguistic material should be returned to the Tsm7aksaltn for storage in their archive. The BREB took issue with the fact that the Tsm7aksaltn’s data storage practices were not described in my ethics application, and insisted that I clarify the community’s data handling practices. This is but one example of how the ethical considerations suggested by the BREB created tension within the community. The process was frustrating for me and the community research partners. Such frustration revealed that the institutional review board privileged their own policies over community values. We were able to overcome these challenges through submitting written responses and several amendments detailing the community’s values regarding research and intellectual property. In addition, the BREB process only allowed for one amendment to be submitted at a time. My project involved submitting several amendments. The BREB amendment process was not efficient in accommodating a partnership-building form of research, which turned out to be quite fluid and changed often based on the shifting nature of including community members as researchers. I took issue with the terminology used by the BREB, since we were forced to use the standard research protocol terms and then adapt them to our project. For example, in our application we use the wording “focus groups” which would be better termed “community meetings”, but we used the term “focus group” to match the ethics protocols (see Appendix B: Documents of Consent and Assent; Appendix C: Interview and Community Meeting Scripts). I also found
myself having to explain to the research ethics review board that if the direction of research is
defined by the community members, the methods need to be flexible enough to allow for that.
However, throughout the research, we have continued to use the terminology that best suited the
needs articulated by the community.

I took issue with the fact that the institutional policies clashed with the spirit of relationship-
building that was vital to my project, since community members that wish to partner with
academic researchers may not, and most likely do not, have intentions to participate in the power
relationships between review boards and researchers (Carpenter 2007; Hemmings 2006). The
tension that my research partners and I felt stems from the fact that the review process intensifies
an asymmetry of power between academic researcher and community members, as it is the
researcher from the university, in this case, that must inherently embody the power dynamics of
the institutional review board, and propagate these power relationships to the community. I am
thankful that my research partners Rosalind Williams and Aaron Leon were patient throughout
the process and were not discouraged by the recommendations of the ethics review board. I
shared the application reviewer’s responses with them, and they aided me in crafting a respectful
response that highlighted the community’s values. As demonstrated by our dialogue with UBC’s
Institutional Review Board (IRB), the BREB, “it may be helpful to educate IRBs about other
ethical traditions, such as communitarian ethics” (Malone et al. 2006, 1919). Although my
research partners were frustrated with BREB, I believe that my transparency with the BREB’s
process contributed to stronger relationships with community members.
2.4 Methods

This research project proceeded in two phases and I used similar methods in both. As described in section 4.2, during Phase I, I focused on relationship building and understanding the role that technology played for language revitalization at the Splatsin Tsm7aksaltn. As described in section 4.3, during Phase II, my focus turned to finding ways to collaboratively build the app with the Splatsin Tsm7aksaltn. In both phases, I used participant observation, interviews, community meetings, online questionnaires, and user testing. By using a multimethod approach (Brewer and Hunter 2006) to my research, I was able to understand how to best approach building an app for the community. I was also able to apply these methods to establish relationships within the community, which was central to my methodologies.

2.4.1 Participant Observation

I used participant observation to establish relationships and partnerships with community members during Phase I of my research project, and to maintain these relationships throughout the research project. Participant observation is a method of ethnography, and is “one tool by which to be concurrently and reflexively attuned to the process and product of connection across time, space, and experience” (Elliot 2015, 133). Shah (2017) describes participant observation as “a long-term intimate engagement with a group of people that were once strangers to us in order to know and experience the world through their perspectives and actions in as holistic a way as possible” (Shah 2017, 51). Through a process of “living with and being a part of other people’s lives as fully as possible,” (Shah 2017, 47) participant observation “ensures that we explore all aspects of the lives of the people we are working with, [and] recognize their interconnections” (Shah 2017, 47). My approach to participant observation was to take part in activities that
community members invited me to, to take notes, and to later reflect on these activities. By doing so, community members and I were establishing rapport and trust.

Through participant observation, I came to understand the context in which the research was situated and became familiar with protocols in the community. In addition, I used participant observation to make note of comments related to language revitalization of Secwepemctsin that occurred at the Splatsin Tsm7aksaltn. Participant observation occurred in many forms; mostly I partook in events organized by the Splatsin Tsm7aksaltn, including the annual sunflower picnic, the winter feasts, the yearly release of salmon fry, and other events including film screenings and cultural performances held at the Splatsin community centre throughout the year.

This process was reflexive, since I wrote notes of things that were relevant to the research project in a notebook that I carried with me every day. As I would drive home to Kelowna from Splatsin, I would often take the time to audio record my own reflections on the day and would take note of what activities took place, what people said of language, and how my relationship with research partners and community members was growing and evolving over time. I would then type these notes out using Microsoft Word when I got home. I often participated in recording audio for the Tsm7aksaltn’s archive with Aaron Leon and Kia7a Qaxam (Annie Cook), Ntlola (Emmeline Felix), Cuscuscan (Florence Nicholas), Skapinek (Marie David), Legwpétqw (Rita Major), and Rosalind Williams. I used Secwepemctsin at any opportunity and, as I learned more, I asked questions in the language or about the language. In fact, when I was trying to understand verb conjugations, I would ask if a phrase could be said one way, and then shift the context in order to say it another way. Kia7a Qaxam joked with me by calling me a “lawyer” since I was tricky in my approach to learning Secwepemctsin. I also participated in
language learning by attending the NVIT accredited language course at the Tsm7aksaltn Monday mornings at 7:00 AM.

In Castleden et al. (2012), the authors describe how one researcher “spent the first year drinking tea” in order to form partnerships within the community:

I spent the first year drinking tea, you know? [laughter] Because it took several visits to the community, a lot of patience and sitting down and talking to people and deciding how would be the best way of going about doing this, getting them to a point where they trusted me to be a partner in doing [research] with them and to do it the right way, before we ever really even embarked on collecting any kind of data (Participant R7 quoted in Castleden et al. 2012, 168).

My use of participant observation was quite similar to that explained by the above researcher, as Rosalind Williams, Aaron Leon and I would spend quite a bit of time talking while drinking coffee. Many of my visits within the Splatsin territory involved a level of “deep hanging out” (Geertz 1998) where I would spend time with community members, listening to Elders tell stories, and helping serve tea. These interactions informed the research project as I gained a better understanding of the Tsm7aksaltn’s language revitalization practices, understanding relationships and history within the community, and understanding the factors that have contributed to Secwepemctsín’s endangerment. I established research partnerships and I was able to participate in activities in the language. This proved beneficial in working together to strategize the development of the app. In addition, “deep hanging out” gave me a better understanding of the protocols around visiting with Kikia7a, as well as being in and respecting the Splatsin territory and people. For example, all our days at the Tsm7aksaltn started with saying: “Waytk! La7 es e cwenwa!” (Hello, today is a good morning!) and we would qwaqwatsín (pray) before every meal. In relationship building, participant observation was beneficial for understanding the existing relationships I was entering into and for understanding where I fit in as a research partner.
2.4.2 Interviews

Semi-structured interviews occurred with key members of the Splatsin Tsm7aksaltn during all phases of the research project. A semi-structured interview is characterized as “open ended, but follows a general script and covers a list of topics” (Bernard 2011, 156). Semi-structured interviews were used in order to understand the role Secwepemcitsin plays in the community, how technology is used in people’s daily lives as well as at the Tsm7aksaltn, and also in gathering feedback for how the app should be developed (see Appendix C: Interview and Community Meeting Scripts).

Initially, these interviews were designed to play a crucial role in shaping the development of the app. However, as my relationships grew with the community, the emphasis that I originally put on the need for interviews diminished. This is because relationship building through participant observation and community meetings enabled me to gain a richer understanding of both the context of the language, as well as how people use technology in the community. In addition, finding time to conduct interviews with community members was difficult. In all, I conducted interviews with community research partners Tskwluwi7kn (Aaron Leon) and Tsicum (Rosalind Williams), and Kikia7a Qaxam (Annie Cook), Ntlola (Emmeline Felix), Cuscuscan (Florence Nicholas), Skapinek (Marie David), and Legwpétqw (Rita Major). As the Kikia7a play such an important role in directing the language and cultural programs at the Tsm7aksaltn, it was especially important to hear and understand their perspectives on language and technology.

Often, as is the case with semi-structured interviews, conversations extended beyond the interview script. For example, my initial interview with Aaron Leon extended well beyond the scripted set of questions. This interview happened early in the research project. In that way, the
interview served to not only shape the project, but also as a way for us to get to know each other and establish a trusting research relationship.

Often times, I felt frustrated that I was not able to achieve the number of interviews that I had outlined earlier in my research proposal. I mitigated my frustrations by reflecting on a conversation that I had with Shawn Wilson in a workshop I attended on Respectful Design.

Respectful Design is research methodology that presents the challenge of addressing natural systems by thinking more deeply, divergently, and connectively through design. The [Indigenous Knowledge] conception of Respectful Design is not based on what design is, what design does, or what design means; it is founded on how design positions itself in relation to natural systems and the social world. When informed by [Indigenous Knowledge], Respectful Design is an aspiration for a deeper situational awareness that generates many divergent spaces where innovation can contribute positively to the well-being of the whole. (Sheehan 2011, 69-70).

During that workshop, Shawn Wilson reminded participants that Respectful Design is a way to acknowledge that knowledge itself has agency. I believe now that the interview process may have been too closely aligned with an empirical form of validating knowledge all too common in western paradigms of data collection and knowledge production. Participant observation and “being there” played a much larger role in decision making and the research process than semi-structured interviews. This is not to diminish the views that community members expressed in the interviews, but rather to underscore that I initially put too much emphasis on semi-structured interviews as a form of data collection than was appropriate to the project.
2.4.3 Community Meetings

When I first met with Rosalind Williams and Aaron Leon to discuss the research project, we discussed ways in which we could engage the community. We decided that a good way to do so would be to host community meetings and to discuss the research project. In that way, we could include as many people from within the community as possible and have them contribute their own thoughts on the development of an app. Community meetings were used in both phases of the project. In the first phase, the meetings contributed to creating partnerships, establishing best practices for conducting research with the community, and building trust between research partners through return visits to the Splatsin community. In the second phase of the research, after a prototype of the app had been developed, community meetings were held in order to test the app with community members.

Hosting community meetings served several purposes: First, they helped establish the goals of the research project and outlined the community’s expectation regarding an app that incorporated Splatsin cultural values and the Secwepemc language. Second, hosting community meetings also created opportunities to engage youth and their parents in decision-making and to have their voices included in the discussion. Third, having community meetings helped build my partnership and relationship with community members and helped to raise awareness of the project.

Community meetings were advertised on the Splatsin Tsm7aksaltn’s Facebook page as well as in their community newsletter (see Appendix E: Recruitment Letter for Facebook). During the community meetings in Phase I, we held two similar community meetings: the first in April 2016 and the second in November 2016. During these meetings, we played video games on several consoles. We also shared a meal. We wanted to engage all participants of the community
meetings in playing video games. To do so, Aaron Leon and I tried our best to imitate a LAN (Local Area Network) party, where video gamers come together to play video games over local area network, by having food that video gamers typically ate while playing. Jansz and Martens (2005) have demonstrated increased player engagement with video games at LAN parties, and they also found that LAN parties are social in nature and allowed participants to find out more about gaming and gaming culture. They also found that gaming as a group is more enjoyable and rewarding than gaming in solitude. As well, they showed that video games are not just an “activity enjoyed by an isolated adolescent” (350). As we were seeking player engagement, we decided that imitating LAN parties would be a good way to do so. After game play, we broke out into a discussion of the video games, what we liked and didn’t like, and we let children and parents talk about whatever topics the video games brought to mind. The first community meeting was recorded, transcribed, and coded as described in section 2.5. During the second community meeting, however, both audio recorders failed. To ensure that we gathered all thoughts and feedback from community members, Aaron Leon and I met after the meeting and wrote down the comments that were shared with us. We managed to partially mitigate the loss of the research data by recording our observations of the meeting in this way.

2.4.4 Online Questionnaires

We used online questionnaires throughout the project in order to gather community input for developing the app. Once the app was in the final stages of development, we wanted to get community feedback and input before the app was completed. In discussing the platform on which the questionnaire would be hosted, we decided to use Google Forms. Because of privacy concerns, UBC’s ethics board prefers that we use UBC’s survey system. In speaking to Aaron
Leon and Rosalind Williams, Google Forms seemed more suitable because of its accessibility and ease of use. Aaron was also interested in Google Forms because the Ts7maksaltn may use that platform in the future for their own research purposes outside of the scope of this research project. We agreed to use Google Forms instead of a system that belongs to UBC. For this reason, there were additional ethical considerations regarding hosting the questionnaire with a web company located in the USA as the data was subject to U.S. laws. This was explained to all participants clearly in the questionnaire’s consent page (see Appendix D: Online Questionnaires).

2.4.4.1 Initial Questionnaire

Through our discussions of who would be involved in the research project, the research team noted that we might not be reaching as many community members as we had originally anticipated. In order to reach more community members, for example those who may not live on the reserve or who may not wish to or were unable to participate in community meetings and interview, we developed an online questionnaire. The questionnaire asked participants to discuss their thoughts on technology, and to detail the type of devices they own, the quality of their internet connection, their views on language, culture, and video gaming. We also asked questions regarding personality traits of characters such as superheroes, as we were trying to formulate what personality traits of video game characters that community members would like to see in an app or game (see Appendix D1: Online Questionnaire Version 1). A link to the questionnaire was provided on the Splatsin Ts7maksaltn's Facebook page, asking individuals to participate (see Appendix E: Recruitment Letter for Facebook).
The questionnaire proved to be only somewhat beneficial because we received little feedback from the community members that we were trying to reach. Participants were able to access the online questionnaire at any time at their own convenience, yet there were only three responses. Therefore, the questionnaire neither provided insight into the best ways to develop an app, nor helped the research team outline the technological limitations the research team had to consider since we did not get an accurate picture of the devices that are used in the community. In sum, we did not receive enough feedback to confidently apply this feedback to the design of the app. We may have benefited from more online feedback if we gave community members more incentive to respond, such as a draw for a gift card. As described in section 2.4.4.1, we decided to do a draw for a gift card for our user testing. When the prototype of the app was complete, we used online questionnaires in user testing.

2.4.4.1 User Testing and Feedback Questionnaire

The research team’s approach to user testing involved both participant observation and the use of an online questionnaire. When the prototype of the app was complete, it was important to get the feedback from the community to ensure that it was developed in a way that was appropriate to the Splatsin culture and language; to ensure that the community continued to have a say in the development of the app; to see if the app supported language learning and if there were any suggestions on further supporting language learning; and to see if there were any suggestions for improvements to the app. User testing and feedback involved community members testing the prototype on a device during a board meeting of the Splatsin Tsm7aksaltn and at a subsequent community meeting. Continuing with participant observation, Aaron Leon and I observed and listened to anything that was said about the app and to provide support if necessary. When the
community member was finished with using the app, we asked if they would participate in an online questionnaire and we provided a tablet device so that they could do so. We also provided the opportunity for the community member to fill out the questionnaire on their own time by sharing the link to the webpage. The questionnaire allowed community members to express their opinions and suggestions about the app. An amendment was made to the online questionnaire outlined in section 2.4.4 in order to receive this feedback (see Appendix D2: Online Questionnaire Version 2). In total, thirteen community members participated in the user testing questionnaire.

We chose to do an online questionnaire instead of conducting oral interviews for practical reasons. We foresaw that during user testing, many people would want to try the app out at once and that it would be difficult to ask these questions in person. We wanted to focus our attention on listening to the comments of community members while they were directly using the app. In addition, by having an online questionnaire the community member could choose to respond at a later time, giving them time to reflect on their experiences. User testing with community members proved to be a rewarding experience for everyone involved, since those who have been following the project since the initial stages were able to see how the app had been developed.

2.5 Analysis: Transcription and Coding

I transcribed all semi-structured interviews in full and returned the transcriptions to the community participants to ensure accuracy and correct representation of the person’s voice in the transcription. Interview participants were given the option of removing anything that they shared during the interview process. As noted above, due to technical difficulties with recorders at the community meeting on November 1st 2016, community research partner Aaron Leon and I
promptly held a discussion of the points that were raised by participants and we documented all the views that were shared with the research team. Community meetings were also transcribed, although not in full, due to the fact that many people were speaking at the same time or engaged in other activities such as playing video games or testing the app. Therefore, only portions specifically relating to the research project and the app’s development were transcribed. I also transcribed all field note recordings from my participant observation.

Although I had initially planned on coding the interviews using open-source software, due to the smaller number of interviews and community meetings, I coded for themes manually using the highlight feature in Microsoft Word, rather than using a coding software. I coded interviews under the headers:

1. Secwepemetsín (such as where the language can be heard or how important the language is to community members),
2. Collaboration (such as how to collaborate or the importance of collaboration),
3. Technology (such as attitudes towards technology),
4. Ideas to consider for future research.

After publication of my thesis, all transcribed documents and field notes will be stored in the Splatsin Tsm7aksaltn’s digital archive. This is to ensure that the community retains any knowledge and has access to any linguistic or cultural knowledge that was shared during the research project and also follows the community’s own best practices set out for language documentation and conservation.
2.6 Summary

I chose my theoretical and methodological frameworks because they enabled me to better understand the relationship that people have with technology, as well as the ways in which an app could be built in a way that highlights respect, relevance, reciprocity, and responsibility (Kirkness and Barnhardt 1991) by establishing collaborative research goals. By applying Indigenous methodologies, the project encourages community members to be involved in their own language revitalization, as well as respects cultural and political structures involved in language revitalization research (Debenport 2010, Rice 2006, Speas 2009, Truong and Garcez 2012). This was further established through the involvement of community members as research partners in a community-based language research model (Czaykowska-Higgins 2009; Shulist 2013; Yamada 2014). By forming a research team that involves community members as researchers, this project respects community members’ knowledge, control, and ownership of the research project and approaches relationship and trust building as a guiding methodology (Kovach 2010). In combination with digital ethnography as a theoretical tool, I was able to better understand the relationships that people had with technology and I was able to share that information with community research partners, which in turn informed the decisions taken in the development of the app. In the next chapter, I describe how the Tsm7aksaltn uses technology for language revitalization, the attitudes community members have towards technology, and why the development of an app for language and cultural revitalization was chosen as a shared research project.
Chapter 3: Lukllukamins Re Kikia7a Re Tsltsitsla T'Il Alálkstns Re Samá7 (The Kikia7a Are Thinking About the (Continually) New Tools (of the White Man))

3.1 Outline

This chapter describes how the Splatsin Tsm7aksaltn currently uses technology for language revitalization. I begin by describing language endangerment and revitalization at the Splatsin Tsm7aksaltn, with an emphasis on the insights and stories that the Kikia7a have shared with me regarding the endangerment of Splatsin’s dialect of Secwepemctsin. I then describe the initial discussions that contributed to the formation of our collaborative research partnership and that emphasized the need to develop an app in Secwepemctsín. The section that follows describes the attitudes held by community members towards the use of technology for language learning.

The goal of this chapter is to explore the crucial role that community members played in the initial stages of the research project and to specifically highlight the voices and the insights that the Kikia7a shared in directing this project. As the keepers of language and culture at Splatsin, the Kikia7a play an important and leading role in directing and contributing to all projects that occur at the Splatsin Tsm7aksaltn.

3.2 An App for Language and Cultural Revitalization

When I began my Master’s degree in September 2015, my research goal was to work on a highly collaborative project with a community to build an app for language revitalization. My supervisor, Dr. Christine Schreyer, and I made a series of visits to the Splatsin Tsm7aksaltn in September 2015 to have conversations with Rosalind Williams, director of the language and culture program at the Splatsin Tsm7aksaltn, and Rosalind’s grandson Aaron Leon, president of the Splatsin Tsm7aksaltn. The conversations were to see if my research goals aligned with the
community’s own goals in language revitalization. We decided that we could form a research partnership, and the decision to make an app for language revitalization arose from several subsequent visits that I made to the Splatsin Tsm7aksaltn.

The initial meeting that I had with Rosalind Williams and Aaron Leon identified a need within the community to develop digital language tools that would be of benefit to the community. This initial conversation identified that, whatever the project would be, it should be accessible to the community and that the Tsm7aksaltn would retain copyright over the digital product. We agreed that an app would be a project initiated by the Tsm7aksaltn and that I would be invited to work on that project.

In the subsequent visits to Splatsin between September and December 2015, we discussed ways in which technology could be used to support language learning. Since it began language revitalization, the Tsm7aksaltn has relied on technology for documentation and conservation of Secwepemcitsín, and distributing the language using YouTube and FirstVoices. In the early phases of the research, conversations with Rosalind and Aaron reinforced that building an app was a good course of action to take, considering our shared research goals and the direction the Tsm7aksaltn wanted to take with distributing the language to community members. In addition, this direction matched my own personal goals of acquiring skills related to software development throughout my Master’s work.

Through a process of relationship building from participant observation, which involved visiting with Rosalind, Aaron, the staff at the Tsm7aksaltn, and the Kikia7a, and through initial interviews, by January 2016, we had established that an app based on the community play,
Tuwitames, was the best option for our joint project and aligned well with the goals of providing access to language and culture to community members.\textsuperscript{13}

3.3 Perspectives on Language Endangerment and Revitalization of the Kikia7a

This section serves to highlight the importance of language revitalization from the perspective of the Kikia7a, who shared their insights with me on the use of Secwepemcitsin in the Splatsin community. In particular, this chapter highlights the multitude of reasons why embarking on such a language revitalization project is important within the Splatsin community. The insights that are shared below point to the importance of Secwepemcitsin for a child’s development, for a person’s identity as a Splatsin person, for lessons on how to be an adult, for a sense of wellbeing, and for a connection to Splatsin ancestors.

Splatsin’s Secwepemcitsin is endangered because of the various colonial projects of the Canadian government. These include the Indian Residential Schools and the Sixties Scoop. During these colonial projects, young Secwepemcitsin speakers were subjected to violent punishment when they spoke their Indigenous language. Kia7a Legwpétqw, a speaker of Nsyilxcn (Okanagan) and Secwepemcitsin, shared with me her experience of speaking Secwepemcitsin, highlighting that when she was young she was told that the language had little importance:

\textsuperscript{13} Tuwitames is described in more detail in section 4.3
I learnt my language when I was a little girl, you know just us… After we went to residential school that’s where I lost my language, because it’s all English. They wouldn’t let us talk our language. I spent eight years in there, working … You were taught to speak English in there, not their language. I tried taking my sister out and talking to her in my language. I get slapped around. So we had to forget about it there you know, but I learnt it when I was growing up. I often wish my mother would teach me Shuswap because she’s got two languages: Okanagan and Shuswap. I told her when I was growing up, why didn’t you teach me Shuswap? “Ah, you don’t need it. Okanagan is good enough for you.” I sure need it now! Yeah. It’s important. My granddaughter now, I try to teach her, but she’s not interested in it. She’s fourteen now and they all talk English, her friends. She would rather speak English. (Legwpétqw (Rita Major), Interview, November 14, 2016)

Kia7a Legwpétqw’s story, within Splatsin, and many other Indigenous communities, is an all too common narrative when describing the factors that contribute to language endangerment. Her experience points not only to the dehumanizing treatment in residential school, but also to broader historic language shift from Indigenous languages to English. Today, her granddaughter, like many youth in Indigenous communities, see English as more important than their ancestral Indigenous languages.

Alongside language loss, there is a loss in the ways in which the language was traditionally transmitted in the past, signaling also the loss of knowledge important to the community. Kia7a Skapinek shared with me that she left school early to take care of her mother, who spoke Secwepemctsín, after her mother had had an operation. Because of this, she learned the language alongside other important lessons. Kia7a Skapinek said that many of the youth in the community are not learning the language, and therefore not learning important lessons:

“When they grow up, how are they going to know when they grown up like us? Except maybe their parents didn’t care to give them advice. That they don’t know, they will never know nothing. There’s somebody that’s got to tell them what to do. Like I did. I learned from my mom only. I mean I didn’t go far in school and then I had to look after the home when mom turned sick and she had a big operation here (Kia7a Skapinek (Marie David), Interview, November 14, 2016).

At one time, the Kikia7a were able to share the language and important lessons with the children in the community. The Tsm7aksalt'n’s response to the endangerment of Secwepemctsín
and Splatsin cultural values was to “wrap the elders around the children” (Cook and Williams 2004). In the past, the children would visit the Kikia7a for cultural activities and to spend time with Splatsin Elders. Yet today, these activities are too taxing for the remaining Kikia7a due to aging and health issues. Nevertheless, the importance of having the language included in a plan for a child’s development is still important for the Kikia7a. In an interview with Kia7a Qaxam, she stressed that hearing the language is important for a child’s development, “I think it’s important for the children to hear the language because they are creating their brain, they’re growing their own brain, so if they hear the language you know, then the language will come alive instead of being lost” (Kia7a Qaxam (Annie Cook), Interview, November 14, 2016).

Secwepemctsín is also important to being a Splatsin person. Kia7a Ntlola shared that the language is integral to what it means to be a Secwepemc person. When asked why children should learn Secwepemctsín, she connected the language to land and identity, “because that’s their identity. It’s our identity forever … That goes with our land, the name of our land, you know. Shuswap … ac re qweqwelútn wl ma7 yaws (our language forever)” (Kia7a Ntlola (Emmeline Felix), Interview, November 14, 2016). The idea that language spans through time is apparent in discussions with Rosalind Williams. She provided a very personal account to how the language connects her to her ancestors and thus contributes to her sense of wellbeing:

And for myself, it’s like medicine. It’s like knowing and understanding the language creates a feeling of wellbeing. So it’s like being able to connect with our ancestors through the language. That connection creates a sense of wellbeing for me … And also that language, we don’t really know how old it is … But it’s like it’s a connection to my inheritance as a Secwepemc person. It’s, yeah, it’s that connection that creates a sense of wellbeing. (Rosalind Williams, Interview, November 14, 2016)

I’m forever grateful for the insights that the Kikia7a have shared with me regarding their Splatsin language and culture. Their insights outlined here have contributed to the development
of the app as they have stressed that knowing Secwepemctsín extends beyond the simple fact of knowing how to speak. For Kia7a Cuscuscan, having Secwepemctsín included in technology is important, since “they got everything in there but the language. I don’t think they got it in there” (Cuscuscan (Florence Nicholas), Interview, November 14, 2016). Including the language in technology is important for community members from all stages of life: from childhood to adulthood, and beyond. The Kikia7a’s narratives point to a wholistic view of the importance of Secwepemctsín within the community and individually. I raise my hands to the Kikia7a for sharing their insights. Kukwstalp (thank you all)!

3.4 Attitudes towards Technology for Language Revitalization

In this section, I describe how the Splatsin community identified a need for using technology for language revitalization long before my partnership with the Tsm7aksaltn began. I also identify community members’ attitudes towards using technology for language revitalization. As mentioned in Chapter 1, the Splatsin Tsm7aksaltn uses technology in their daily language revitalization work. Many of the discussions I had at the Tsm7aksaltn involved comments on how my research partners have used new technology for documentation. For instance, Aaron Leon would enthusiastically share with me the new recording technology the Tsm7aksaltn had acquired. In addition, my research partners have paired with other researchers to use technology for language revitalization. For example, they used ultrasound overlays to see places and manner of articulation of Secwepemctsín sounds (Bliss et al. 2016). The Splatsin Tsm7aksaltn’s YouTube page hosts a video of a community language meeting that occurred before this research project began. In this video, Rosalind Williams explains that technology is key for the work at the Splatsin Tsm7aksaltn and for future language revitalization:
I personally feel so fortunate that I was able to participate and to hear our language to the degree that I have been able to hear it. I’m hearing it live in my own ears, and I see it coming out of the fluent speakers’ mouths, and I see the laughter. And for all of us that are Splatsin, that have that gift, to hear our language. It truly is a gift. 20, 30 years from now when our ones coming behind us go to listen to the language, they’ll be listening to it from a machine. Today we have the benefit to hear that right from our speakers’ mouths with our own ears. It’s such a gift, you know. It’s such a gift. It’s like gold in our pocket and gold in our hearts. You know, we look outside for someway to get rich. But we’re rich! We’re rich in here (holds hand to heart) because we’re living in this time right now … It’s true in today’s age, in today’s time our young people are busy people, and maybe the only way that they can hear the language already is through machines. They’re too busy. So we need to make a way to transmit it through machines, if that’s the way they need to hear it. (Rosalind Williams, quoted in “Splatsin Community Language Meeting September 24 2013 Pt 1” 2013)

Despite the fact that we were developing an app, Rosalind Williams and the Kikia7a stressed the importance of hearing the language from a fluent speaker’s mouth over that of a recording or from technology. In an interview, Rosalind expressed that technology is familiar to youth and that it might be a way to transmit the language but stressed that it should never replace a fluent speaker:

I think that it’s a medium that’s comfortable to the younger generation, it’s what they can relate to. It’s their comfort zone. So we need to get language to them by whatever means is comfortable to them. So if technology you know is comfortable to them, then we have to utilize it… I always tried to encourage them though that as long as there’s speakers available to try and experience it first-hand because the day will come where they will only be able to get it through a machine. But right now, they still have the golden opportunity to hear it with their own ears. Right from the speaker’s mouth. Someday soon… they won’t be able to hear that direct transmission anymore. (Rosalind Williams, Interview, November 14, 2016)

As the last fluent speakers of Secwepemcts’in are elderly, Rosalind expressed that using technology is vital in documenting, conserving, and teaching Secwepemcts’in:

Now we have access to online computers. When we wanted to learn something, we had to go to the library. So, all of these, all the collected works will be like that. We’ll have to go to that collection to learn. And the kids coming behind us, they’ll have to go to that collection to learn. (Rosalind Williams, Interview, November 14, 2016)
In an interview, Kia7a Qaxam echoed the sentiment that technology will play a role in teaching the language after the last fluent speaker has passed away: “I think after we’re all gone we’ll still have, you know, the living words of the Secwepemcs” (Kia7a Qaxam (Annie Cook), Interview, November 14, 2016). Although there are benefits to using technology for language revitalization, Kia7a Ntlola expressed some concerns over its general use, “I don’t know… to me it’s kind of dangerous … Computers are good for finding jobs, isn’t it? And it’s good for like if your relations somewhere is sick or something, and you want to find out how they are doing” (Kia7a Ntlola (Emmeline Felix), Interview, November 14, 2016); although computers have certain functions that are practical for communication, we should be wary of it for privacy reasons, “I don’t know … to me it’s kind of dangerous. The computer to be talking about anything. Like politics, you know. People shouldn’t be talking into it … they can track you down in your footsteps” (Kia7a Ntlola (Emmeline Felix), Interview, November 14, 2016). Kia7a Ntlola’s comments do not pertain to language learning specifically, nevertheless it is important to keep safety and privacy in mind when using technology.

Using technology for language revitalization is one of the Tsm7aksaltn’s goals. In documentation and archiving, the Tsm7aksaltn has been able to use technology to overcome practical issues, such as storage and degradation of cassette tape recordings of fluent speakers. In other ways, as detailed in Chapter 1, technology has played a key role in transmitting knowledge in a digital medium through the use of YouTube and FirstVoices. These instructional resources allow the Tsm7aksaltn to distribute language material to a wider audience, including members of Splatsin who may not live on reserve or who may not be able to visit with a fluent speaker. As the majority of the fluent speakers are approaching 90 years old, the attitudes the Kikia7a hold towards technology foregrounds a sense of urgency that the last fluent speakers, who are the
resource people in the community, may pass away soon. Although there is a stress on learning the language directly from a fluent speaker’s mouth, there is also a recognition that those resource people will not be around forever. When it comes to technology, the Kikia7a shared that they had concerns about privacy. Yet, they also acknowledge that the future of learning Splatsin’s Secwepemctsín will be digital as, in the future, people wanting to hear the voices of fluent speakers will need to seek out recordings produced by the Tsm7aksaltn in a digital archive.

3.5 Summary

This chapter described establishing the research partnership between myself and the Splatsin Tsm7aksaltn. It highlighted the perspectives that community members have on language endangerment and the importance of revitalizing Secwepemctsín. Through a series of consecutive visits with Rosalind Williams, Aaron Leon, and Deanna Leon we formed a collaborative research partnership and decided that an app would be an appropriate project considering the goals of the Tsm7aksaltn. This chapter also foregrounds the perspectives that the Kikia7a shared with me in explaining why it is important for Splatsin community members to learn the language: for a child’s development, for a person’s identity as a Splatsin person, for lessons on how to be an adult, for a sense of wellbeing, and for a connection to Splatsin ancestors. In addition, this chapter outlined the Kikia7a’s attitudes towards using technology for language revitalization. For the Splatsin Tsm7aksaltn, using technology for language revitalization is key, but it is also important that community members hear the voices for themselves from the last fluent speakers while they are still alive.
Chapter 4: Xwexwáytet Re Alálkstes T'n Knucwatwácwes (We Are Working Together to Help Each Other)

4.1 Outline

This chapter details the collaboration between myself and the Splatsin Tsm7aksaltn. In particular, it details two phases of the research project. Phase I, which involved establishing research partnerships, was an important step in identifying who would be involved in the project and at what capacity. In describing Phase I, I list the research partners in this project, and outline the role they played. I also detail my experience learning Secwepemctsin, which was important so that I could better understand the context of the Tsm7aksaltn’s language revitalization. Phase II involved discussions about the use of a community play, Tuwitames, as a framework for developing an app. This second phase also involved drawing on information from participant observation field notes, interviews, an online questionnaire, and community meetings to develop the app. As described in section 4.3.3, this phase was also iterative in that decisions that I made in the app’s development were brought back to the community for approval and revision before moving to other stages of the research project. I must note that imposing a two-stage framework on the entire research process creates the illusion that my research followed a linear timeline of relationship building. In reality, at all times throughout my research, I was forming relationships with community members and strengthening existing ones.

This chapter also outlines the process of recording the narration for Tuwitames with Kia7a Qaxam. In particular, it highlights a highly collaborative process of translating a script between English and Secwepemctsín. I detail some technical considerations that were taken in order to turn the script into an augmented reality app. Finally, I explain how the community played a role in the final stages of the app’s development and how we received feedback to ensure that the
The project was done in a way that aligned with the Splatsin Tsm7aksaltn’s goals of language revitalization, and that also respected Splatsin cultural values.

4.2 Phase I: Establishing Research Partnerships

4.2.1 Research Partners

My “formal” research partners for this project were Tskwluwi7kn (Aaron Leon), Tswum (Rosalind Williams), and Smukaca (Deanna Leon). In reality, many community members contributed their time to this project and therefore played a role as “informal” research partners. I would like to specifically acknowledge the Kikia7a: Qaxam (Annie Cook), Skapinek (Marie David), Ntlola (Emmeline Felix), Legwpétqw (Rita Major), and Cuscuscan (Florence Nicholas) who, as mentioned, are the Splatsin knowledge keepers and who also inform all research that takes place at the Tsm7aksaltn. I would also like to acknowledge the staff at the Tsm7aksaltn as “informal” research partners too, as many of the activities involved getting to know staff members. They have supported this research along the way.

Aaron Leon played a critical role in conducting this research. Aaron, being very skilled with technology, played a principal role in this project by recording audio, helping conduct interviews, and holding community meetings, amongst many other countless tasks. Aaron also advised me during the development stage of the app. Despite his busy schedule, Aaron was always available to meet in person or over Skype, and he would make time to answer text messages and emails relating to this project. Aaron also provided critical insights in shaping the research agenda and focusing the project on community. Aaron ensured that the way that I was addressing the language and culture in my writing and presentations was respectful and appropriate. I am reminded of one such example when we presented at the International
Conference for Language Documentation and Conservation held in Hawaii. Aaron cautioned me against using hyperbolic expressions in our conference presentation by explaining to me that it would be more culturally appropriate to be humble. Kukwstamc (thank you!)

Rosalind Williams also played a major role in this research project. Rosalind is Aaron Leon’s grandmother. Many of the questions that I had regarding culture and language were directed to Rosalind, as she is a renowned knowledge keeper in the community. She also advised me on the ways to formulate questions when speaking to the Kikia7a in order to remove my own assumptions and to also privilege the knowledge of the grandmothers. Rosalind also spent countless hours ensuring that my grasp of the language was correct before moving to more complicated words or phrases. She also made sure that I respected the protocols of the community, reminding me to shake hands and greet every person in the room, hone in on the vibrations of those people to assess where they are at that specific day, and ensured that I said goodbye when I was leaving (in the language, of course). Rosalind introduced me to community members, and invited me to stay at her house on nights that I had stayed at Splatsin quite late. Rosalind also provided critical insights regarding the translations that we used for the app, and she explicitly shared the important lessons of each story that we used to ensure that these lessons would make it into the app. Rosalind has dedicated an incredible amount of time and passion to this project and ensuring that I had a respectful approach to the Splatsin community, language, and culture. Words cannot express how grateful I am. Kukwstamc (thank you!)

Deanna Leon became a formal research partner later in the research project. Deanna is Rosalind Williams’ daughter, and Aaron Leon’s mother. Deanna played a key role in raising awareness of our research. Deanna enthusiastically shared the news of our events with the Splatsin community and made time to share posters and photos of our project on the Splatsin
Tsm7aksaltn’s Facebook page. Deanna also made time at community events so that Aaron and I could promote community meetings and the final user testing that we did with the community. Along with Aaron and Rosalind, Deanna provided key cultural insights that would inform the development of the app. Above all else, Deanna has been incredibly supportive since this research began and has always made an effort to make me feel welcome at the Tsm7aksaltn. Kukwstamc (thank you)!

4.2.2 Visiting the Tsm7aksaltn and Splatsin Territory

I made several visits to the Splatsin Tsm7aksaltn in my research in order to observe how language revitalization was already occurring in the community. In my initial visits, I took note of where I saw the language in the Splatsin territory, and noticed that language was written on street signs and on buildings throughout the territory. Schreyer (2016) describes how in Taku River Tlingit territory, such signs play a role in signifying stewardship over the land and serve to “assert indigenous authority in the area” (17-18). I also wanted to gain an understanding of how the language was currently being used. I noticed that the language was used in greetings in the community, in prayers, and in songs. I often arrived at the Tsm7aksaltn to simply listen to the Kikia7a speak Secwepemctsin and I would serve tea and coffee. I would visit as much as I could, but as I was also completing coursework for my Master’s I could not visit as often as I wanted to. At times, I found that my obligations to coursework interfered with attending to my relationships with the community, since I found my visits to be few and far between. However, I was always welcomed at the Tsm7aksaltn and Rosalind Williams and Aaron Leon always ensured that there was some role that I could play in the day’s plans for language revitalization based on my existing skillset. Some activities involved creating curriculum material such as flashcards in the
language, helping in fundraising for the centre, creating the website for the Tsm7aksaltln, or cooking and serving food at community events.
Figure 2: Secwepemcetsin on Carving in Splatsin's Gas Station

(Lacho, October 8, 2015)

Figure 3: Cooking Bannock with Rosalind Williams

(Deanna Leon, December 14, 2016)
4.2.3 Establishing the Research Agenda and Being Tstset

Building trust was important for this research project. In order to accomplish this, I ensured that establishing the research agenda was done in collaboration. As mentioned in Chapter 2, I chose to be transparent about UBC’s requirements for research and I shared all university documents, such as the BREB application, with Rosalind Williams and Aaron Leon. I was committed to ensuring that the decisions that I took in this phase, especially in regard to handling data that belongs to the community, was transparent.

At this time, Aaron Leon and I would often talk about Indigenous methodologies and respecting Indigenous knowledge. In an attempt to avoid a pan-Indigenous approach to my research, I wanted to ensure that my choice of methodologies for this project provided a framework for conducting research that reflected the community’s own ways of knowing. My conversations with Aaron and Rosalind contributed to how we approached the concept of conducting research together as a partnership. I was originally inspired by Indigenous researchers who use a symbolic framework for interpreting their research (Lavallée 2009; LaPensée 2014; Larson 2017) and I had thought of using a similar symbol that represented my own Métis identity and the collective identity of Splatsin. However, in the end, this approach was abandoned since Rosalind Williams articulated that this was not a framework that was clear to her and it did not reflect a Splatsin way of knowledge production. This conversation, however, was significant in that it lead to a discussion of the word tstset, loosely translated to “correct.” Rosalind Williams assured me that the Kikia7a, who are knowledge keepers of Splatsin culture, ensure that research is done in a good way. She assured me also that the Kikia7a act as the Tsm7aksaltn’s research board and that the Kikia7a do not hesitate speak out when something is not tstset.
4.2.4 Learning Secwepemctsín and Attending Cultural Events

I spent time listening and taking notes on the Secwepemctsín language and offering my skills in language documentation to the Tsm7aksaltn. Learning the language was very much a part of participant observation in the community. Since the language is taught in all programs, I felt as though learning the language was very much a part of understanding the context of my fieldwork. In addition, learning the language provided me with an amazing opportunity to sit with the fluent speakers of Secwepemctsín and learn more about the community. Many days, I sat with Rosalind Williams, Aaron Leon, and the Kikia7a. As the Tsm7aksaltn was developing curriculum based on the seasons, the Kikia7a shared with me knowledge relating to cultural practices, uses of plants and medicines, hunting and harvesting, and cultural protocols surrounding life events such as births, marriages, and deaths. I learned to write in Secwepemctsín by sitting in the corner and writing down all the words that I heard. I would later sit with Rosalind and confirm that the spelling of certain words was set. I learned to listen for certain sounds that can often be missed in documentation, such as final [p]. Sometimes, if there was time at the end of our day, we would leave to harvest berries to use in lessons at the Tsm7aksaltn. I learned key words to ask for items at the dinner table, how to greet people, how to show appreciation, and how to pray. I also enrolled in a university accredited community-run course on introductory Secwepemctsín, and helped Dr. Christine Schreyer run a course on Secwepemctsín phonology.

I partook in cultural activities organized by the Splatsin Tsm7aksaltn, such as the winter feast, sunflower picnic, salmon release event, and other cultural outings. Attending these events often led to memorable moments in building research partnerships. For example, after the sunflower picnic in May 2016, Aaron Leon, his cousin Orin Cardinal, and I went out on the territory to see
the winter house. We spent quite some time here in silence just taking the day in. Through attending these events, I made meaningful relationships that extended beyond the scope of the project. As I will mention in §4.3.3, these experiences also had an influence on the design considerations of the app.
Figure 4: Collecting T'enis (Highbush Cranberries) with Rosalind Williams and Aaron Leon

(Lacho September 12, 2016)

Figure 5: Visiting the Winter House

(Lacho, May 5, 2016)
4.2.5 Community Input During Phase I

Phase I of the research also involved a process of finding out what the community expected of this research. In particular, our original goals were to create a video game in Secwepemctsin. I put a lot of emphasis on developing a game, and my line of questioning in community meetings and in the online questionnaire reflects this fact.

Aaron and I held our first community meeting at the Tsm7aksaltn in May of 2016. Children and parents played video games and we enjoyed a meal together, as mentioned in Chapter 2. At this point of the research, we thought that a video game may be the best route to take for sharing the language with the community. For that reason, we spent time trying to get an idea of what kind of video games children liked, and what their favourite characters were. Most importantly, this community meeting provided insights into how children and parents engaged with Indigenous content in video games. During the meeting, we played the video game Never Alone (Kisima Ingitchuna), which is a video game narrated in Inupiaq, and created by a team from the Cook Inlet Tribal Council. Never Alone is unique in that it is a video game that presents Indigenous ways of life in the arctic, and intertwines gameplay with videos of Elders and community members discussing Inupiaq cultural insights. As we played Never Alone, children noted and identified with the Indigenous content of the game, including the moral that through the journey you are “never alone.” As such, this “demonstrates the potential that videogames hold in creating digital spaces for redefining damaging Indigenous stereotypes found in gaming narratives and resetting the cross-cultural capacities of videogaming as a medium of social sharing and adventure” (Longboat 2017, 179). This fact can be demonstrated by the comments of one child who attended the meeting:
I know my favourite game (David Lacho: What game is that?) Never Alone. (Lacho: Never Alone is your favourite game? Why’s that?) It actually shows what happens in the Arctic. It’s like you have to learn about how the Inuit live and getting chased by a polar bear or something like that (David Lacho: So you like the cultural stuff in video games?) Mhmm. (David Lacho: Do you wish you could see more cultural stuff in Video games?) Yeah. (Anonymous child, community meeting, May 4, 2016)

Children and parents identified strongly with the game and enjoyed seeing cultural content. In reflecting on the evening, I wrote in my field notes:

The kids really liked Never Alone. It was interesting to see that they like the values and morals of the game, and the fact that the characters never let the other characters die, and that they continued the journey together. It looks like the kids like stories with culture and language, and they thought that was the coolest game out of all of them we brought, the narrative is super well developed, and they liked figuring out the puzzles. They also liked the cultural videos in between clips. (David Lacho, field notes, May 4, 2016)

Equally as important was that these nights provided an opportunity for parents and children to break away from their busy schedules and come together to enjoy an activity. One parent described this during the community meeting:

These kind of nights are really good for the kids and the families, just for like, sometimes space is kind of a problem, and for communities to get together, this was a really nice night (David Lacho: So more nights like this in general?) Yeah, that would be really good. (Parent in community meeting, May 4, 2016)

This early meeting set the tone of our future research, as we started to see that video games were never played in isolation, but rather as a community. I commented on this in my field notes, “It was fun seeing that parents played games with their kids or watched them play and asked them questions. I think this would be something that we could emphasize in our work” (David Lacho, field notes, May 4, 2016). These meetings also provided a space for me to get to know community members. Throughout my research, many of the parents who came that evening would say hello when they saw me in the community and would ask for updates on the project.

Aaron and I held another community meeting in November 2016. We followed the same format of the first meeting and we were pleased to hear a few new perspectives that would later
inform the development of the app. In this meeting, children explicitly shared with us some of the mechanics they liked about video games, which I took into consideration during the app’s development. They shared with us that the mechanics of the game that we were developing needed to be well thought out, such as game physics (i.e. the gravitation and animations of game elements). They shared that they played games with parents and with their family, and they shared that they mostly used cell phones or tablets to play games.

As described in Chapter 2, in Phase I of the research, we were also conducting an online questionnaire to find out more about how community members used technology, so that we could plan how we would develop the app. Despite being promoted on Facebook and at the community meeting, we only received three responses to this questionnaire. Although we did not achieve a high number of responses to the questionnaire, one person said they would like to see more language and to learn their language in a video game. Another person mentioned that they would like to see animals in the game, namely eagles, bears, and snina7 (owl) (this person used the Secwepemcitsin word for owl in their response, perhaps because of their familiarity with snina7 in stsptakwla). These animals do make an appearance in the app, since we based it on the community play, Tuwitames.

4.3 Phase II: App of Tuwitames: A Community Play

As time passed, and with subsequent visits to Splatsin, the research team and I discussed what stories we could use for the app. We discussed using Tuwitames, a community play, as a model for the app. Tuwitames was a play written by Rosalind Williams, James Fagan Tait, and Cathy Stubington. The meaning of Tuwitames is “she/he is growing up.” It was performed in 2014 at the Splatsin Tsm7aksaltn and many of the actors were from the community. Although the play
was filmed for distribution within the community, the Tsm7aksaltn has not been able to
distribute the film for reasons relating to consent from the actors in the film. However, Rosalind
Williams and Aaron Leon expressed that building an app based on those stories would be a good
way to distribute the story to the community. When we began our discussions of using
Tuwitames, we transitioned into Phase II of the research, which involved developing the app
based on the stories from Tuwitames.

4.3.1 Discussing Collective Memory and the Lessons and Morals of Tuwitames

To begin, Rosalind Williams and Aaron Leon sat with me to make sure that I understood the
messages and morals that each story in Tuwitames portrayed. Aaron Leon acted in the play as
Kyle, the protagonist. The play follows Kyle through a journey of self-discovery and connection
to his Splatsin community. Kyle, having been adopted out to a non-Indigenous home, finds out
that he is in fact Indigenous and his relations are at Splatsin. He travels back to the place of his
ancestors and meets his Secwepemc relations. By intertwining different periods of time, the story
details the experience of many Splatsin people returning to the community from residential
schools or the 60’s scoop. Aaron highlighted why such a story is important to community
members:

It’s a pretty common story, it’s one that I can kind of relate to, a lot of people can relate to
because of feelings of separation from the community. And coming back to it and trying to
be a part of the community. And trying to figure themselves out and their history. (Aaron
Leon, interview, October 4, 2016)

In our conversations, Rosalind highlighted that the stories in the play are a reflection of
collective knowledge, that that knowledge serves a purpose in giving context to the things that
are happening presently, and that that knowledge serves a purpose at a particular time:
it’s important for us to understand that our, that this what we see, what we’re experiencing now isn’t all there is. That part of our story comes from generation to generation and will go on … And there’s a reason for all of us, there’s a reason that we can only look back so far. That it’s as things transform, the memory for that only needs to be so long. I think. Otherwise it wouldn’t be there … For some reason, the way that we are designed is only to know things for a certain amount of time and then that’s it, the rest of it is a guessing game. Like you can’t say tomorrow what it’s going to be. And looking back, you can only look back so far … if we were one of those young people that had no clue, that can’t even go back one generation, it must be pretty tough. For those young people that can’t even go back two generations, they have no clue. Or they have been presented a very really dark picture of what that might have been. A really negative picture, you know. Where we can say, well we know, we know our line where we came from. We know our stories, and we know our, you know we can go back this many generations. But for those young people that were taken away, you know scooped away in the 60s and they can’t go back even one or two generations, that must be hell. But not even just here, I mean any place. Any foster child. (Rosalind Williams, interview, October 4, 2016)

In reflecting on the importance of the play, Rosalind and Aaron stressed that the play is a way in which people can connect with their past. This is also important to note, since these comments relate strongly with the process of returning to relationality that has been damaged by colonial projects. 

Rosalind Williams also shared with me the morals of each stsptakwla. In doing so, I was able to understand the context of each of the stories. This would prove to be important for later stages of the app’s development, as I needed to make sure that these morals were accurately depicted in the app. In the play, the concept of “light and darkness” is important. Rosalind shared with me that this occurs in a scene with grizzly and coyote:

That story about grizzly and sek’lap (coyote) and that’s based on the stsptakwla (traditional story), that’s based on the old stories handed down from generation to generation on how night and day was made. But it’s the basis, the lesson that it teaches is what we also wanted to get across. Was that in spite of the darkness, it was made to be that light would always come. And that’s the lesson that this story teaches. So that, we were hoping that for the young people who consider suicide or who turn to addictions and who turn to all the dark things that this story would have an impact on them, you know. They believe in the formula, things will get better. And they’ll get bad again, and they’ll get better again. It doesn’t just stay one way. (Rosalind Williams, interview, October 4, 2016)
Rosalind’s statements also illustrate that the story of grizzly and coyote are relevant today, since many people in the community are feeling the effects of colonial projects and the stories can be an inspiration for hope.

The stories in Tuwitames also tell of historical trauma in the community. For example, there is a story with snina7 (owl), who takes children who are being too loud in the bush away to her nest. In Tuwitames, there are parallels between the owl and the social workers who took children away during the 60’s scoop (in the play, the social worker who takes the children away is named Ms. Owl). In addition, this story also provides practical lessons for being safe on the land:

And that’s another stsptakwla, and then in the play like in the traditional story, the children were taught to be quiet when you are in the bush, or the owl will come and take you and the practical reason for that was because when you’re in the bush or if you’re traveling through near enemy territory, your children, you have to be able to quiet them or they are the ones that will draw the attention of the enemy or whatever right? So the practical side of that story was that. (Rosalind Williams, interview, October 4, 2016)

Other stories teach that there are repercussions for your actions. There is a story in Tuwitames that explains that giant mosquitos had a role in protecting people from “the dark things.” This story deals with consequences, as the mosquitos kill a man and are punished by being turned into the size they are today:

Back in the time of creation the mosquitos were like sentries, there are a bunch of different landmarks where they were stationed and they were supposed to be guarding. And they got bored and they started killing the people instead of watching out for enemies, and so their punishment was that they got transformed into little mosquitos that the people could then kill. But then the lesson in that again is consequences so in that story, like all the stories, always have, you know, some kind of something right. (Rosalind Williams, interview, October 4, 2016)

Other stories tell of believing in others and also the power of Tqaltkukwpi7 (the Creator). In one story, the tsi7 (deer) jump from mountaintop to mountaintop. The hunters in the story are unable to shoot the deer with their arrows. It is a little girl who, through the power of prayer, brings the deer down to the height that they jump today:
All those hunters couldn’t do it. And this little helpless little girl who believed in the power of her prayer, she prayed for help. So then it teaches the power of prayer to perform the unthinkable. She was able to bring the deer down to feed the people and that was one of the main food sources for our people. (Rosalind Williams, interview, October 4, 2016)

Another story communicates important lessons relating to land stewardship. Porcupine was able to stop a war between two chiefs, and he was awarded his quills for his bravery:

That story is really important because it speaks to the first kind of almost like treaties for management of land and the resources. How people had to actually make treaties and agreements with each other not to fight over this place. And to his bravery, again the least likely person to succeed through the harshest conditions right? No coat, deep snow, you know he was really vulnerable. Slow moving. And he’s the one who succeeded. (Rosalind Williams, interview, October 4, 2016)

I kept Rosalind’s words in mind as I worked on the technical development of the app. The morals and lessons play an important role in the mechanics of the app, as the objective of the user is to gain knowledge from the lessons and morals passed through the stories. Aaron Leon explained how through traversing several periods of time in stories, you learn important lessons, “those little interludes where you go back in time, when you come back from that, you come back with this knowledge and this skill that you can better yourself in the current timeline” (Aaron Leon, interview, October 4, 2016). These factors are important in the app. As I will explain in 4.3.3 App Development, I was able to apply these comments to designing the mechanics of the app.

4.3.2 Recording Narration for Tuwitames

Rosalind Williams expressed that, if we were to use the play Tuwitames as a framework for our app, we would need to do the recordings with the Kikia7a quickly. Rosalind stressed that, because the last fluent speakers of the language are frail, all the work to document the language is a race against time. Rosalind, Aaron, and I discussed the required audio for the project, and considered working with the Kikia7a for the narration. However, Rosalind shared that we also
needed to have good audio and that the speaker would have to have a loud enough voice for the app. We all agreed that Kia7a Qaxam would make an excellent narrator of the app, since she is a gifted and renowned storyteller. In the community meeting to review the app, Rosalind Williams commented on Kia7a Qaxam’s gift of storytelling:

There’s a real gift in the way that Annie speaks. Just a speaker that doesn’t have that cadence, you wouldn’t get that. It would be just words. But she captures the real, yeah. Because she really does, she’s really dramatic. And the traditional storytellers had to be like that. You know, that is what distinguished them as a storyteller. She has that gift for sure. And even if people don’t understand, it’s depositing the language in the bank. We’re lucky, because we have Annie translating. And she has the way the speakers tell stories. (Rosalind Williams, community meeting, October 4, 2017)

In terms of the technical requirements of the audio files, we required high quality audio without background interference. Since we were working out of the Tsm7aksaltn, which operates as a childcare facility, we needed to make sure that the recordings were done when the children were taking naps. Aaron and I created an anechoic chamber out of a recycled box and purchased foam. This was done to further reduce ambient sound that could interfere with the recording, such as objects falling and electromagnetic waves from lighting in the room. Aaron and I spent a Friday morning building the box so that we could record the audio the following week.

The script of Tuwitames is in English and although the stories are based on the community’s stsptakwla, they required translation from English into Secwepemctsín. This was done by working line-by-line through the script. While Aaron was recording, I would sit with Kia7a Qaxam and read the script out loud. Kia7a Qaxam would then take time to find the best translation considering the situation and speak it into the microphone. The other Kikia7a listened to Kia7a Qaxam’s translations and would make recommendations and corrections to ensure the translations were tstset. The recording of the script was done in two sessions.
After the recordings were complete, I reviewed the audio files and took note of the time stamps of each recording so that, later, I could make a unique audio clip of each line of the script and correspond it to its English translation. This proved to be useful later in the development of the app, as each audio clip corresponds to a page in the app’s accompanying storybook.

The process of translation between English and Secwepemctsin required Kia7a Qaxam to not only translate the words, but to translate the context of the story. Luckily, she was familiar with Tuwitames, as she had played the role of coyote in the play. Working with Kia7a Qaxam was an amazing and inspiring opportunity. I am so very grateful for the time that she has dedicated to this project and to the continuance of Secwepemctsin. Kia7a Qaxam has always made time to speak to me in Secwepemctsin, and when I think of words or phrases that I have learned, I often hear her voice. Kia7a Qaxam is a great language teacher. Without her input and help this project would not have happened. Kukwstamc! Kukwstsút-ka re xwexweitit stam (I am grateful/lucky for everything).
Figure 6: Recording with Kia7a Qaxam (Annie Cook) and the Kikia7a
(Lacho, October 26, 2016)

Figure 7: Anechoic Chamber
(Lacho, October 14, 2016)
4.3.3 App Development

In June of 2017, I wrote out a plan for developing an app that incorporated the recordings of Tuwitames. After some time reflecting on developing a video game based on Tuwitames, I decided that I would not be able to create a game within the timeline of a graduate project. I also lacked the technical skills required for game design that would lead to successful mechanics, dynamics and aesthetics of a game (known as the MDA framework). The MDA Framework “is a formal approach to understanding games - one which attempts to bridge the gap between game design and development, game criticism, and technical game research” (Hunicke et al. 2004, 1).

The MDA framework functions by breaking games “into their distinct components: Rules → System → ‘Fun’ … and establishing their design counterparts: Mechanics → Dynamics → Aesthetics” (Hunicke et al. 2004, 2). As a tool for analysis, the MDA framework constructs an understanding of the perspectives of designers and players as “[i]t helps us observe how even small changes in one layer can cascade into others. In addition, thinking about the player encourages experience-driven (as opposed to feature-driven) design” (Hunicke et al. 2004, 2).

What I learned from researching the process of developing a video game is that a full-time team of art directors, level designers, game designers, technical artists, environmental artists, character artists, sound designers, and marketers are required to make a successful video game. Unfortunately, I do not have the resources to organize such a team. However, I saw an opportunity of applying my technical skills to developing an app and did try to utilize what I had learned about the MDA framework in the development of the app.

I met with Aaron Leon over Skype to discuss a new plan on how to use the recordings and to work collaboratively in coming up with a new direction for the project. Although we were not creating a video game, we discussed that the most important goal would still be to create an
immersive environment that showcases the language. I began developing the app in Unity, a
game development platform, and I experimented with creating immersive environments in Unity.
Augmented reality was a good option, since it was becoming more mainstream due to events
such as the Apple Worldwide Developers Conference (WWDC) (Apple 2017). I decided that
augmented reality would be a good fit for the app. At earlier stages of this project, Aaron Leon
and I discussed using augmented reality for other language revitalization projects, such as
embedding QR codes that link to recordings from FirstVoices around the Splatsin territory so
community members and visitors could use their mobile phones to hear the language. Similar
projects have been done in grocery stores in Indigenous communities (Dacey 2017; Thomson
2017; Trudeau 2017). Although we did not use QR codes in this project, Dr. Christine Schreyer
and her ANTH473: Endangered Languages students have worked with the Tsm7aksaltn on
making QR codes using the FirstVoices website. Since we had already discussed uses for
augmented reality, I decided to develop the app using this emerging technology. Later, Aaron
Leon agreed it was a good fit considering the needs of the project.

The final Tuwitames project consists of two parts: an app and a paper storybook. Users of the
app hold a mobile device, such as an iPhone or an iPad, to the page. When the mobile device
registers the page, 3D models appear and are animated. The recording of Kia7a Qaxam narrating
the story in Secwepemctsin plays and there are corresponding English subtitles. Users of the app
can turn the subtitles off, if they wish. One such case where we imagined this happening is if a
language learner is sitting with a fluent speaker and they would like to discuss the language in
the story. Another reason why a language learner may want to turn off subtitles is that they could
challenge themselves at understanding what is said in the Secwepemctsin narration in an
immersive environment where the use of English is limited. Similar to the Master-Apprentice
program, where there is a rule that no English is spoken (Hinton 2001), this challenge can promote language learning by transforming the app into a game. By establishing a “no English” rule (the mechanics) to the app, it can change how the system (the dynamics of the game) functions, which thus in turn translates to a fun (the aesthetics of the game) way of learning language (Hunicke, LeBlanc, and Zubek 2004; Schreyer 2011b).

The app is also programmed for Secwepemctsin subtitles, however at this stage of app development these subtitles are not available. The app is developed for iOS 8.0 and above and it will be made available for Android devices in the future. Aaron and I made observations that many people in the community use both operating systems, therefore we thought it would be necessary to develop for the devices that people already owned in the community. However, due to the technical requirements with augmented reality, many of the app’s functions do not work or are slow on older devices that are found in the community. Although I have optimized the app to the best of my ability, some devices will not run the app. Admittedly, there are barriers for using such a high-tech medium for storytelling. As Holton (2011) suggests, using technology can be a barrier for people who do not have economic access to it. In addition, it can put additional barrier between generations, which is “especially poignant, for a break in intergenerational transmission already separates the older language speakers from the younger non-speakers and language learners” (Holton 2011, 373). However, one of the future goals of the Tsm7aksaltn is to develop a digital library where community members could borrow iPads and they could use the storybook available at the centre. Finally, I must also note that the Splatsin Tsm7aksaltn retains copyright over the app and storybook. They have expressed that they would like to have the storybook professionally published in the future.
I did not have the skills to create all the 3D models for the project from scratch, therefore I mostly used free and paid assets for the game from the Unity Asset Store or from other game art suppliers. There are a few location-specific 3D models that I had to create, such as the Secwepemc winter house, since assets such as these most likely do not exist. I drew on my memory of visiting the winter house with Aaron and his cousin Orin to build this 3D model. I also created the 3D human characters using Adobe Fuse (a program for creating 3D models), and I rigged the characters (the process of adding a skeleton to the 3D characters so Unity can animate the character) using Adobe Mixamo. I chose to use these programs because human characters on asset stores were often hypersexualized and had white skin. I wanted to ensure that I was accurately and respectfully reflecting a diversity of skin tones and dress for the app’s characters. In deciding on the art style of the app, I referenced Aaron Leon’s photographs from the performance. I was able to make design decisions based on these images. For example, the clothing that I created for the 3D character models referenced the clothing that the actors were wearing during the play. I also designed the environment of the scenes in a similar fashion to those in the play. Since the play often references events that happen in the forest, I created scenes with detailed trees, bushes, rocks, and grasses.

As mentioned in section 4.3.1, Aaron Leon noted that there are lessons to be learned from each story. I wanted to represent this fact visually in the app. When users of the app complete a story, they are awarded a “badge,” which is an icon on the app’s loading screen. When the user has completed all nine stories (thus learning the lessons from the stories), the user is awarded a new loading screen. The first loading screen shows a dark scene and mysterious music plays to create an ambience of uncertainty. When the user has completed all nine stories, the loading screen changes to a daylight scene. In this scene, I included references to the stories. Adding the
badges is a way to enhance learning through employing the mechanics of gamification, as players need to be able to track their progress and skills gained throughout using the app in order to learn (Baltra 1990, 449). For example, Chief Elk and Chief Swan are found close together in a field (referencing the story about porcupine), and there is a pictograph (referencing the story about the little girl and the deer). Upbeat music plays, and there are signs of daybreak, creating an ambience of hope. I chose to add these features to the app to reference the lessons that Rosalind Williams shared with me, such as the fact that Tuwitames plays with the themes of day/night, dark/light, and uncertainty/hope.

In early August 2017, I met with Aaron Leon over Skype to share the progress on the app that had been made to date. I showed Aaron a prototype of the app, and he was thrilled with the results. Aaron commented, "As it stands, this is phenomenal. I’ve been trying to wrap my head around how this could be done. I think this does it justice. Yeah! It looks awesome" (Aaron Leon, personal communication, August 11, 2017). During that meeting, I discussed that I did not want to continue developing the app without his approval on the prototype. Aaron commented that he trusted the decisions that I made since I was familiar with the work that is done at the Tsm7aksaltn. Aaron’s comment was touching, since it was a testament to the trusting relationships that I have with community members.
Figure 8: Hunters in Tuwitames Play
(Aaron Leon, August 6, 2014 Available online at http://www.runawaymoon.org/tuwitames-photos.html)

Figure 9: Hunters in Tuwitames App
(David Lacho, October 17, 2017)
Figure 10: Man Attacked by Mosquitos in Tuwitames Play

Figure 11: Man Attacked by Mosquitos in Tuwitames App
(David Lacho, October 27, 2017)
Figure 12: Woman with a Ball of String in Tuwitames Play


Figure 13: Woman with a Ball of String in Tuwitames App

(David Lacho, October 27, 2017)
Figure 15: Darkness Loading Screen
(David Lacho, October 17, 2017)

Figure 14: Lightness Loading Screen
(David Lacho, October 17, 2017)
4.3.5 Community Feedback of the App

In September 2017, I met with the Splatsin Tsm7aksaltn’s Board of Directors to discuss the research project and the development of the app. As there were new members on the board, I thought it would be a good opportunity to share the app and to discuss future plans, such as a community meeting to test the app. As well, in October 2017 my research partners and I held a community meeting at the Tsm7aksaltn. Community members tried the app and shared their views during the meeting. I emphasized to community members that we would like constructive feedback, since this would be one of the last opportunities to make changes in the app. However, I was delighted to hear that community members felt that there were no major improvements that needed to be made. In fact, community members enjoyed the app greatly. At the meeting, Rosalind Williams commented on how the app is a medium for the continuance of Secwepemc ancestors’ stories:

We are very fortunate … It’s nice to see that all the stories in Tuwitames carry on in a different format. It was beautiful out there, you know (referring to the play that took place outside the Tsm7aksaltn). But the thing that really strikes me about it is that these stories of our ancestors are still with us today, you know, in this technology. It would blow their minds away just to see! To see this, you know. But the fact that their stories have continued down through all the generations to today and their stories are still alive. That’s simply amazing. Thank you, all of you that did this. (Rosalind Williams, community meeting, October 4, 2017).

Rosalind’s comments highlight that even through the medium of an app, Indigenous stories can be told in a way that is “inclusive of the past, present, and future, as well as the current or contemporary moment and the story reality, without losing context and coherence while maintaining the drama” (Armstrong 1998, 194). The app therefore serves as a way to “shift and adapt traditional narratives in new contexts and mediums without sacrificing meaning or faithfulness to the past” (Gaertner 2016).

Throughout the night, many people commented on how the traditional stories were able to
continue in the new medium of the app, but that with augmented reality, “the story comes alive” (Daniel Joe, community meeting, October 4, 2017). Deanna Leon expanded on Rosalind Williams’ comments, and thanked us for our work in the community:

I would like to go further than what my mom said, and just on behalf of the board of directors and the kids in the community. Like, Kukwstame! This is such a forward application for our community to have something like this that kids and youth and you are all wondering how are we going to engage the youth? How are we going to engage the kids in wanting to do something? That is amazing, beyond amazing. So thank you! (Deanna Leon, community meeting, October 4, 2017)

Many community members and friends of community members who attended the community meeting answered an online questionnaire after the app was complete. Salena Webb, Deanna Leon, Dawn Schreiner, Daniel Joe, and Kristen Kornienko and five anonymous people participated in the online questionnaire. In their comments, many highlighted that having an app in Secwepemctsín makes them feel proud. For example, Daniel Joe commented that the app made him feel “proud and want to learn more of my language” (Daniel Joe, online questionnaire). He commented, “love the work and dedication of everyone involved in this” (Daniel Joe, online questionnaire). Other people responded that it was a good tool for learning the language. Community members liked seeing the 3D animations, having subtitles in English, liked the interactive nature of the app, and how users can hear an entire story. They enjoyed that with the app you could learn more about the culture and language. An anonymous respondent said, “this is a great interactive app that can be used as a great learning tool” (Anonymous respondent, online questionnaire). Another anonymous respondent said that one of the best parts about the app is that it can be used for “learning culture and pronunciation” (Anonymous respondent, online questionnaire). Although the app is in Splatsin’s dialect of Secwepemctsín,

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14 Participants were presented the option to include their name in the questionnaire.
Deanna Leon shared in the questionnaire that the app should be used by all in the Secwepemc nation. From these comments, I am confident that community members are proud to have an app in their own language and that reflects their own culture.

4.4 Summary

My role in the app’s development involved drawing on observation field notes, interviews, online questionnaires, and community meetings in order to develop an app that would be relevant to the Splatsin community. At many points throughout the project, community members expressed that the work that we (my community research partners and I) were doing was fantastic and a great way to engage community members. At times, the entire project felt overwhelming, but I am thankful and overjoyed that my research partners put in countless hours in sharing their comments and dedicating themselves to seeing this project come to light. We took on a big task, and I thoroughly believe we succeeded in seeing it through. Once again, kukwstsút-ka re xwexweitit stam (I am grateful/lucky for everything).

In this chapter, I outlined how I came to know the Splatsin community and how I formed research partnerships. I detailed some of the important lessons that I learned in the community, especially the idea of tstset. I also demonstrated how my research partners and I gathered different perspectives for developing the app. In particular, Rosalind Williams shared important lessons from the stsptakwla (traditional stories) that would later inform the development of the app. I brought to light the critical role that Kia7a Qaxam played in narrating the app, highlighting her renowned gift of storytelling. I also explained some of the design considerations for the app and how they reflect Splatsin culture. Finally, I shared the feedback I received on the app, emphasizing that the app made people feel proud and that they wanted to learn their language,
Secwepemctsín. In the next chapter, I conclude by reflecting on how this project addresses my research questions that I presented in Chapter 1, and I also explain how my research contributes to the field of language revitalization as well as possible future directions for research.
Chapter 5: Yeri7 Re Stsukws Pyin (That’s All for Now)

5.1 Outline

In my Master’s research I have worked with the Splatsin Tsm7aksaltn to develop an app that would complement the centre’s language and revitalizations strategies. Together with my research partners, we have developed an augmented reality app that is narrated by Kia7a Qaxam in the Secwepemc language. The app draws on the stories from the play Tuwitames, which was a community performance that members of the Splatsin band acted in, in 2014. At many points in the research project, my community research partners Aaron Leon, Deanna Leon, and Rosalind Williams expressed that the next generation will need to take advantage of technology in order to learn the Secwepemc language and culture. It was for that reason that I was invited to do this project, as my interests aligned with my research partners’ goals. I was able to answer my research questions by drawing on and applying Indigenous methodologies, specifically through a process of relationship building and attending to my relations, especially in my new home at Splatsin (Wilson 2008). I also approached this project using a Community-Based Language Research methodology (Czaykowska-Higgins 2009), which involved forming research partnerships with Splatsin community members. Finally, digital ethnography as theory (Pink et al. 2016; Nader 2011) has provided a framework for describing how my community research partners and I have developed an app. Throughout this thesis, I have described how community research partners and I have developed an augmented reality app in Secwepemcitsin. I will now explain how I answered each of my research questions: 1) How did collaboration shape the development of an app? 2) How can the app’s design be most consistent with Splatsin cultural values? 3) How can an app be used to help learn Secwepemcitsin? 4) How does the process of collaborating on an app affect the “coolness” of the language and culture of Secwepemcitsin?
5.2 Reflecting on Research Questions

First, I address how my research answered the question 1) How did collaboration shape the development of an app? In this project, I worked very closely with my community research partners in the development of the app. Without the direct input of community members, and without my community research partners, I would not have been able to complete this project on my own. This project was collaborative in that, by following a community-based language research model (Czaykowska-Higgins 2009), all research partners brought skills to the table. For example, Rosalind Williams guided the research and made sure it was tested, and was involved directly in establishing research protocols. She contributed vast amounts of cultural knowledge that can now be found in the app. Rosalind Williams instructed me on the lessons that needed to be communicated in the app, and ensured that I understood the context and protocols in the community. Her creativity, dedication, and wisdom are found throughout this research project and within the app. Aaron Leon contributed greatly to the technical development of the app. His expertise in holding community meetings, audio recording, technology, language documentation, art, and cultural knowledge enabled us to streamline the development process and ensure that it was done in a way that was consistent with the input that we received from community members throughout the project. In addition, Aaron has turned out to be a good friend and has helped me greatly in forming and maintaining relationships in the community. Likewise, Deanna Leon played a leading role in promoting our app, contributing insights, and making space for us at meetings and the Tsm7aksaltn’s events to tell community members about the app. Deanna saw the potential of this app in the early stages of the research and ensured that we had the time and daycare space to be able to hold community meetings. She promoted our events and the app greatly across the community, and our research team would not have been able to reach as many
people without her work. The Kikia7a and other community members provided us with comments and feedback. As such, community members were involved at all stages of the research project, and they played a very important role in determining the direction for research, in conducting research, and in technical development. Those who I worked closely with were not “informants,” or “consultants,” but rather they were truly community researchers, dedicated to bringing forward the knowledge that exists within their community for future generations.

Collaboration ensured that we built the app within the context of the community’s needs and it ensured that community members themselves were involved in their own language revitalization, underlining respect and reciprocity (Debenport 2010, Rice 2006, Speas 2009, Truong and Garcez 2012).

This research answered the question 2) How can the app’s design be most consistent with Splatsin cultural values? The design of the app was consistent with Splatsin cultural values because the content and design were greatly directed by community members, themselves. Although I worked on programming the app and I chose the game assets, I drew on images of the performance of Tuwitames to guide the art style of the app. In addition, the stories found in the app are the community’s stories and the translations were done by community member Kia7a Qaxam. The design also draws on motifs found within the Secwepemc territory, and on cultural items that are important to Secwepemc people, such as the design of the kekuli winter house. In addition, I ensured that the way that I designed the game assets, such as the human characters in the app, was respectful and consistent to the community’s direction and feedback. Once again, collaboration allowed for the design to be most consistent with Splatsin cultural values, as my community research partners and community members guided the design decisions. However, there were times where I had to make design decisions without the guidance of my research.
partners. In these cases, I made sure that when I had completed the designs, I would check with Aaron Leon to ensure that these were done in a respectful way. I am grateful that my community research partners trusted me to make decisions that were test. In similar projects, where researchers have created video games, they have demonstrated that collaborating and co-developing a game ensures that the community is properly represented:

By involving a group in the design of a game that reflects their culture, we help ensure that the underlying norms of that culture are embodied within. Co-developing a game with a cultural focus, i.e. a game that focuses on the culture of a given group, avoids the problem of stereotypical representation in the larger non-indigenous society. (Hardy et al. 2016, 560)

Similarly, my collaboration with my community research partners ensured that the representations of Secwepemc language and culture in the app was test.

The hardest research question to answer is 3) How can an app be used to help learn Secwepemcts? This is the hardest research question to answer since the app has not been distributed to the wider community yet. However, from my observations of the app being used, I can imagine that the app will continue to be used in certain ways. The app will be used within programs at the Splatsin Tsm7aksaltn. As the Kikia7a are aging, they are not able to spend as much time with children as they once did, and thus it is harder to transmit the language and culture from these respected knowledge keepers. Despite this, presently, children and other language learners, are able to hear a living Elder’s voice through the app. However, Rosalind Williams’ earlier statements regarding technology alludes to the reality that language learning, in the future, will have to be done through the digital form. The app on its own may not produce a fluent speaker, but it is another tool in a language learner’s toolbox. Another potential of this app is that it may create a community of interested language learners. Noori (2011) mentions that “[t]heories of collective intelligence and gaming provide new ways for students to co-create a
new community of speakers” (2011, 19). In section 4.3.1, I discussed how collective memory, drawn from the stsptakwla, was the basis of the app. In terms of community building, Corbett and Kulchyski (2009) state in their discussion of web-based technologies for language revitalization that “these tools can contribute to helping create community, particularly a community that is interested in language-learning” (2009, 58). Although the app is not web-based, it could play a role in community building, as it could serve to peak community members’ interest in the revitalization of Secwépemctsin and the Splatsin culture and encourage people to come together over this fact. In fact, I would argue that the app is already doing this, since community members have stated that the app makes them proud of their language and culture. In describing the development of an online Taku River Tlingit First Nation place name map, Schreyer et al. (2014) expand on a critique of using technology for language revitalization, raised by Corbett and Kulchyski (2009). The concern is that technology may decrease connections to Elders in the community. They state that they mitigate this by using language material and voices from community members whenever possible. As such, community members can use the information they learn on their site to spark conversation with Elders in the community. Comparably, since the Elder who narrates the app, Kia7a Qaxam, is actively teaching language at the Splatsin Tsm7aksalt'n, community members can visit the Tsm7aksalt'n to learn more about the culture and language and ask questions. Language and culture found in the app could be used as “conversation starters with Elders” (Schreyer et al. 2014, 119). As community members get older, and busier, they will be able to return to the stories in this digital form. For now, the children are able to (on occasion) hear the language directly from the fluent speakers’ mouths. Secondly, the app can help a community member learn Secwépemctsin by hearing the language in the storytelling genre. As mentioned in Chapter 4, Kia7a Qaxam has the gift of
storytelling that has been passed on by Secwepemc ancestors. Community members may be used
to hearing Secwepemctsín in spontaneous speech and hearing the language in this genre may
interest advanced learners of the language. Thirdly, users of the app can revisit the recordings as
many times as they would like, therefore putting the agency of language learning in the hands of
the learner. The stories are broken into smaller units of speech. Language learners can focus on
learning one or two sentences at a time. From my personal experience of having worked with the
recordings and listening to clips in the app many times, I am able to repeat some of the sentences
without the aid of the app. My hope is that community members will have the same experience
as they interact with the stories and, as Rosalind Williams says, will contribute to “depositing the
language in the bank” (Rosalind Williams, community meeting, October 4, 2017). My
community research partners have plans to create a publishable book that contains many of the
root words alongside the augmented reality targets. This may help language learners by helping
them distinguish more complex words or forms of the language. However, at this time these
plans are in their infancy.

My last research question is 4) How does the process of collaborating on an app affect the
“coolness” of the language and culture of Secwepemctsín? As I have not attempted to establish a
metric to measure the “coolness” of Secwepemctsín, this question is difficult to answer.
However, throughout this research, community members shared comments with me related to the
“coolness” of the app. Haarman (1990) argues that in language planning, prestige is “a force in
its own right” (Haarman 1990, 105). The “coolness” or “cool factor” are important factors for
raising the prestige of a language (Buszard-Welcher 2000; Schreyer 2011b). In fact, in
discussing websites for language revitalization, Buszard-Welcher (2000) indicates that “the
commotion raised by a cool site can have the important function of increasing the language’s
prestige” (Buszard-Welcher 2000, 337). Another related factor that can raise the prestige of an endangered language is seeing and hearing the language in the domain of technology. This is particularly important for raising the prestige amongst youth, as they are most familiar with using technology (Galla 2016; Wagner 2017; Ward and Genabith 2003; Schreyer 2011b). Relatedly, it was a conscious choice to develop an augmented reality app, as we were wishing to take advantage of proliferation of this technology and do something that was cutting-edge and innovative. Aaron Leon expressed his excitement that very few other communities are taking advantage of augmented reality for storytelling.\footnote{Augmented reality has been used for describing Sami placenames (Dyson, Grant, and Hendriks 2016); the Blackfoot language has card games in augmented reality (Goff et al. 2017); and augmented reality has been used for visualizing linguistic archival records of the Pacific and Regional Archive for Digital Sources in Endangered Cultures (PARADISEC) (Thieberger 2017).} To Aaron, and to many other community members, being a community that is early in adopting this technology is meaningful, and contributes greatly to the “coolness” of Secwepemctsín. From the data that we collected during user testing of the app, we can see that it does contribute to community members’ pride in the language. Likewise, we hoped to increase “coolness” by creating new domains for Secwepemctsín that have been specifically dominated by the English language. The app puts Secwepemctsín “on par” with English, which has dominated the domain of technology (Nettle and Romaine 2002). By focusing on creating new domains for Secwepemctsín, we want community members “to engage in or at least feel that the language is a necessary part of their Indigenous well-being and the contemporary world” (Galla 2016, 1143). In many ways, having an app in Secwepemctsín is a way to “engage younger people in the community and combat damaging stereotypes of Indigenous languages being ‘antiquated’ or incompatible with modern technology” (Pine and Turin 2017). As we have not yet released the app to the community, I can only speculate that the app will contribute to the “coolness” of the language. However, I can state
that from the comments of my community research partner Aaron, and from the user testing that we have completed, community members are proud to see and hear their language on screen.

5.3 Areas for Future Research

Now that a working version of the app is completed, there are several areas for future research on developing digital tools, and on the app specifically. Firstly, there is more work to do on the app. The app is very appealing to younger audiences and can be used in the form that it is currently in. However, community members have expressed that they would like it to be more interactive. As the original purpose of the app was to be a game, the app could benefit from further research regarding interactivity and gamification of storytelling. In addition, the app is lacking Secwepemctsin subtitles. I developed the app with the expectation that subtitles would be added later on, however this work requires the work of someone with the expertise of accurately writing in Secwepemctsin, a skill that not many currently hold, but which they are learning through university accredited programs. Furthermore, more research can be done to incorporate other Secwepemc stories in the app. I wrote the algorithms for the app in a way that it would take little time to include new stories and recordings. However, the process of recording a story for the app is laborious and taxing, especially on the fluent speakers who must work on not only the voice over recordings but also the translations.

Community members have expressed a desire to see the app distributed as soon as possible. Many have expressed that they would like to get their hands on the app and begin learning the language through the stories. Corbett and Kulchyski (2009) raise concerns in their discussion of sharing Hul’q’umi’num’-speaking communities’ intellectual property on the Internet using web 2.0 technologies, stating that “[r]eleasing this knowledge onto the Internet might devalue the
significance of the knowledge to the status of information” (58). Similarly, my community research partners have expressed hesitation in rushing distribution, since this app could end up in the wrong hands.

There is a real (and valid) concern that the stories found in the app will be appropriated (without the consent of the Splatsin Tsm7aksaltn) by public schools in order to fulfill the curriculum requirements regarding Indigenous content, set out by the British Columbia government (British Columbia Ministry of Education 2017). My community research partners have repeated this concern throughout the entire project, as educators have stolen cultural material in the past, or have requested material produced by the Splatsin Tsm7aksaltn with the expectation that the material was free for all to use. This relates to the concerns that Hill (2002) and Debenport (2010) raise in relation to the concept of the “universal ownership of language,” which views endangered languages as a “resource” (Hill 2002, 122) that is “owned by all humankind, as opposed to members of a specific language group or community” (Debenport 2010). Future research could look at ways to create respectful dialogue that addresses the community’s concerns regarding intellectual property and ownership of linguistic resources. One area of future research could be the application of Traditional Knowledge (TK) labels on the community’s intellectual property that is circulating in the public sphere (“Traditional Knowledge (TK) Labels - Local Contexts” 2017).

5.4 Contributions to Knowledge

Our project provides a model for doing collaborative partnership research for developing an app with an Indigenous community. Our research is an application of Indigenous methodologies that emphasize relationality (Wilson 2008) and trust building (Kovach 2010), and also a community-based language research methodology (Czaykowska-Higgins 2009) that involved
working with community members as research partners to create an app that was well received within the community. As such, it foremost highlights the benefits of the process of relationship building in app development. The relationships I built with members of the Splatsin First Nation were done through subsequent visits to Splatsin and elsewhere (such as the Indigitization workshop). Also, this research emphasized the importance of conducting research that is grounded in the community’s understanding of what is correct (tstset), and it follows the goals set out by the community, specifically using technology for language revitalization.


New areas for language use may emerge as community living conditions change. While some language communities do succeed in expanding their own language into new domains, most do not. Schools, new work environments and new media, including broadcast media and the Internet, usually serve only to expand the scope and power of a dominant language at the expense of endangered languages. (UNESCO 2013, 11)

Through this project, my community research partners and I have contributed to expanding the domains of Secwepemctsin into a media form that typically would reinforce the dominance
of English. Additionally, as shown by the community comments in section 4.3.5, the community was incredibly receptive to the language being included in this domain.

5.5 Conclusion

If Nanabozhoo\textsuperscript{16} were among us (and he might be) working to keep the language alive, he would be a hacker, a gamer, a half-human, half shape-shifting avatar. And he would be interested in collective intelligence, game theory, and digital media. (Noori 2011)

Many Indigenous communities, including the Splatsin First Nation, are turning to technology to support and revitalize their languages. I have high hopes for the app that we have developed, and so do community members. By focusing on storytelling in a way that takes into account the collective memory of Secwepemc people, draws on game theory, and presents the stories in a new medium, our project brings language into technology in a way that would be of interest to Nanabozhoo, as per the quote above. Community members eagerly await the release of the app, and I hope to have it in community members’ hands in the near future. I am overwhelmed with the positive words that community members have shared with me. Astonishingly, it seems as though news of our project has reached far corners of Turtle Island, as I have had people tell me that they heard about it in Vancouver and in Toronto. We plan on sharing this app with more people, as Aaron Leon and I plan on showcasing the app at conferences and events in the future. Deanna Leon has joked that we should go on a worldwide tour to demonstrate the app. Her words are important for highlighting the enthusiasm this project has garnered.

As I reflect on over two years of collaboration, I see the faces of all my friends at Splatsin. I am reminded of the journey that we had together throughout this research, and I eagerly await

\textsuperscript{16} Nanabozhoo often features in Anishinaabe aadizookaan (traditional storytelling).
what the future will bring for all of us. I have had the chance to see children in the community grow and learn more and more of the language. I have also seen some children speak in the language with near perfect pronunciation, as if they had been speaking the language their whole lives. Throughout this collaboration, I felt (and still do feel) an intense momentum of the language coming forward. I am grateful that I get to see this in the community that I have come to care so deeply for over the years.

As I have tried to convey throughout my thesis, relationality was at the heart of everything that I did. The most difficult part of putting my thoughts into words was that I always felt as though I was only skimming the surface in describing deep and heartfelt relationships that I have made with community members. The people at Splatsin will always hold a special place in my heart, w1 ma7 yaws (forever).
References


*Splatsin Community Language Meeting September 24 2013 Pt 1. 2013.*
https://www.youtube.com/watch?v=9cRuNjl4Sk8.


http://hdl.handle.net/10125/41966.


https://doi.org/10.1177/153270860200200309.


Appendices

Appendix A: Letter of Collaboration

October 18, 2015

To Whom It May Concern:

With this letter, I confirm that David Lacho, graduate student from the University of British Columbia’s Okanagan campus, will be helping us in developing a digital product, such as a game or mobile app, to help with language revitalization in the community.

David will be collaborating with our community members, such as Aaron Leon, an employee of the Splatsin Tsm7aksaltn and myself, Rosalind Williams. Within this project, we aim to develop the fluency levels of many different types of Secwepemctsin speakers through the development of a video game or app for language learning. Currently, very few fluent Secwepemctsin speakers remain in the Splatsin community. At the Splatsin Tsm7aksaltn, we work with children to teach Secwepemctsin. To strengthen collaboration, David Lacho will be sharing the knowledge of conducting research and designing a digital product with interested community members.

Community members will, with the help of David Lacho, participate in the research and development of a digital product. This will involve establishing relationships and partnerships in our community in order to determine community needs regarding language revitalization and digital technology. The information collected will influence decisions taken in the future stages of the research, where David Lacho will work with community members in developing the final digital product for this project.

David Lacho will work in the Splatsin Tsm7aksaltn and interested community members will be invited to form focus groups at the Splatsin Tsm7aksaltn Center. David Lacho will also be conducting individual interviews at the Splatsin Tsm7aksaltn. During the initial stages of the research project, members of the Splatsin community will have the opportunity to express how they feel about the use of technology and the role it plays in language revitalization, and what they would like to see in a digital product. Community members will also have the opportunity to test the product during development before the final release of the product.

As part of the academic side of this project, David Lacho will audio record interviews with community members, as well as community meetings. Lacho will also be documenting the collaboration that forms between community members and himself as a researcher, as this project aims to be collaborative and may be useful as a “best practices” model for other community collaboration.
As our project progresses, David may also be asked to help us organize our digital language archive, which may be used in the digital product, and also help the language revitalization efforts in other ways, and we support his academic interest in this project, which will be included in his Master’s thesis, and we are pleased to be working with him and developing this project together.

Sincerely,

Rosalind Williams

Rosalind Williams, Language & Cultural Coordinator
Splatsin Tsimshain
Appendix B: Documents of Consent and Assent

Appendix B1: Interview Consent Form

Interview Consent Form
Developing Digital Language Tools with Splitsin First Nation

Principal Investigator:
Dr. Christine Schreyer
Associate Professor
Phone: (250) 807-9314
Email: christine.schreyer@ubc.ca

Co-Investigator:
David Lacho
Graduate Researcher
Phone: (250) 718-5235
Email: david.lacho@gmail.com

Purpose:
Thank you for taking the time to participate in this project. This project explores new ways in which language revitalization can take place, such as the use of digital software and/or mobile applications. As well, this research aims to follow an empowerment model through creating partnerships and establishing relationships between the Splitsin First Nation community and the research team, as well as by working directly with community members in identifying and achieving the goals of language revitalization. Data from this research will contribute to David Lacho’s Master’s thesis and other publications.

Study Procedures:
You will be asked to provide information about language learning, technology, and the Secwepemcts’in language in general. This interview should take about 30 minutes to complete and will be audio recorded.

Potential Risks:
If you participate in this study, there are no risks greater than what you would experience in your daily life.

Potential Benefits:
Your involvement will contribute to a collaborative project that aims to develop fluent speakers of the Secwepemcts’in language. The project will benefit participants, since it can increase language awareness and pride in Secwepemcts’in language use, and it will create more tools in language learning. Another benefit is that this research aims to establish best practices for working in collaboration and establishing partnerships in research projects and development of new technology and language tools.
Confidentiality:
Your confidentiality will be respected. You do not have to answer a question if you do not wish to. This interview will be transcribed and you will have the opportunity to review the transcript of this interview for accuracy. Data records kept on a computer hard disk will be password protected and stored alongside the documents under lock and key at UBC Okanagan for a minimum of 5 years after publication, and recordings will be transcribed and returned for storage at the Splat'tn Tsm'yiłx̱alt. If you wish to not have your name associated with the materials, your name can be removed from associated data. You may also request a copy of the recording and transcription. If you choose to withdraw from the study, the data will be destroyed. Data from this research will contribute to David Laché's Master's thesis and other publications, which may be public documents and available on the Internet.

Contact for information about the study:
If you have any questions or desire further information with respect to this study, you may contact Christine Schreyer at (250) 807-9314 or via email at christine.schreyer@ubc.ca or David Laché at david.lacho@gmail.com.

Contact for concerns about the rights of research participants:
If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics toll free at 1-877-822-8598 or the UBC Okanagan Research Services Office at 250-807-8832. It is also possible to contact the Research Complaint Line by email (RPSL@ors.ubc.ca).

Consent:
Your participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time until publication of material, without jeopardy to you.

OPTIONAL:
☐ I do not wish to have my name associated with materials.

Your signature below indicates that you have received a copy of this consent form for your own records. Your signature indicates that you consent to participate in this study, and that this interview will be audio recorded and you consent to have your name included in this study (unless otherwise stated above). You will receive a copy of the recording and transcription to review for accuracy.

________________________________________   _________________________
Participant Signature                      Date

________________________________________
Printed Name of the Participant signing above

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Appendix B2: Community Meeting Consent Form

Focus Group Consent Form
Developing Digital Language Tools with Splatsin First Nation

Principal Investigator:
Dr. Christine Schreyer
Associate Professor
Phone: (250) 807-9314
Email: christine.schreyer@ubc.ca

Co-Investigator:
David Lacho
Graduate Researcher
Phone: (250) 718-5235
Email: david.lacho@gmail.com

Purpose:
Thank you for taking the time to participate in this project. This project explores new ways in which language revitalization can take place, such as the use of digital software and/or mobile applications and the development of a video game for language learning. As well, this research aims to follow an empowerment model through creating partnerships and establishing relationships between the Splatsin First Nation community and the research team, as well as by working directly with community members in identifying and achieving the goals of language revitalization. Data from this research will contribute to David Lacho’s Master’s thesis and may be used for future publications.

Study Procedures:
You will be asked participate in a focus group about language learning, technology, and the Secwepemctsin language in general. This focus group will take approximately 2 to 3 hours. The focus group will be audio recorded.

Potential Risks:
Your name will be included on the data. If you participate in this study, there are no risks greater than what you would experience in your daily life.

Potential Benefits:
Your involvement will contribute to a collaborative project that aims to develop fluent speakers of the Secwepemctsin language. The project will benefit participants, since it can increase language awareness and pride in Secwepemctsin language use, and it will create more tools in language learning such as a video game. Another benefit is that this research aims to establish best practices for working in collaboration and establishing partnerships in research projects and development of new technology and language tools.
Confidentiality:
During the focus group, your confidentiality cannot be guaranteed because we will be discussing information as a group. If you feel uncomfortable with any of your statements being shared with others in or outside the group, please do not share them during the process. Data records kept on a computer hard disk will be password protected and stored alongside the documents under lock and key at UBC Okanagan for a minimum of 5 years after publication, and recordings will be transcribed and returned and stored at the Splatmin Tsm7aksaltm. Your name will be added to the data. If you do not wish to have your name added to the data, please do not participate. Data from this research will contribute to David Lacho's Master's thesis and other publications, which may be public documents and available on the Internet. Participants will not be able to withdraw from the study after they have participated in this focus group discussion since it is generally not possible, given the nature of group discussions to identify individual speakers from recordings. They will be able to withdraw until the discussion begins.

Contact for information about the study:
If you have any questions or desire further information with respect to this study, you may contact Christine Schreyer at (250) 807-9314 or via email at christine.schreyer@ubc.ca or David Lacho at david.lacho@gmail.com.

Contact for concerns about the rights of research participants:
If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics toll free at 1-877-822-8598 or the UBC Okanagan Research Services Office at 250-807-8832. It is also possible to contact the Research Complaint Line by email (RSIL@ors.ubc.ca).

Consent:
Your participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time until publication, without jeopardy to you. All individuals in the focus group will receive a copy of the transcriptions. Your signature indicates that you consent to participate in this study, you consent to be audio-recorded and you consent to have your name included in this study. You will receive a copy of the recording and transcription to review for accuracy.

Your signature below indicates that you have received a copy of this consent form for your own records. Your signature indicates that you consent to participate in this study.

Participant Signature ___________________________ Date ____________

Printed Name of the Participant signing above ___________________________
Appendix B3: Community Meeting Consent Form for Minors

LETTER OF CONSENT FOR PARENT/GUARDIAN FOR VIDEO GAMER FOCUS GROUP

Dear Parents/Legal Guardians,

Research Description: This letter asks for consent for you and/or your child to participate in focus groups for a research project, which plans to look at ways to build digital language tools for the Splatsin First Nation. The information about the project is as follows:

Project Name: Splatsin First Nation Digital Language Tools

Principal Investigator: Dr. Christine Schreyer, Anthropology, UBC Okanagan, telephone 250-807-9314, email christine.schreyer@ubc.ca

Co-Investigators: Rosalind Williams; Aaron Leon; David Lacho, Master’s Student, Interdisciplinary Graduate Studies, UBC Okanagan, telephone 778-215-5235, email david.lacho@gmail.com.

This project explores new ways in which language revitalization can take place, such as the use of digital software and/or mobile applications. As well, this research aims to follow an empowerment model through creating partnerships and establishing relationships between the Splatsin First Nation community and the research team, as well as by working directly with community members in identifying and achieving the goals of language revitalization. Data from this research will contribute to David Lacho’s Master’s thesis and other publications. David Lacho’s Thesis will be published openly on the internet on cIRcle, UBC’s digital repository for research and teaching materials.

Study Procedures:

In the first phase of the research, the research team is holding focus groups about language learning, technology, and the Secwepemctsin language in general. Focus groups will take approximately 2 to 3 hours. The focus group will be audio recorded. Parents/legal guardians who agree to have their child participate in focus groups must sign and return the focus group consent form. If you agree to your child’s participation in focus groups for this project, please sign the consent form and return it to the research team. Your child will be asked to sign a Letter of Assent.
indicating that s/he does wish to participate in the study, since participation is voluntary. The focus group will be audio recorded. Each focus group will take 2 to 3 hours and will be held at the Splatsin Tsm7aksaltn. The focus group will take approximately 2 to 3 hours. Focus group participants will be asked questions about video games and language learning. They will also be asked about the Aboriginal language and cultural activities that children experience in the Splatsin Tsm7aksaltn. The focus groups will be transcribed into written format and reviewed to look for ways to support the development of a video game or digital language learning tools. Parents may choose to participate in the focus group, and if you choose to participate there is a separate consent form for participants 18 years of age and older.

Potential Risks:

Your name and your child’s name will be included on the data. The investigators believe there are no risks greater than what you would experience in your daily life to you or the children who participate.

Potential Benefits:

Your involvement will contribute to a collaborative project that aims to develop fluent speakers of the Secwepemctsin language. The project will benefit participants, since it can increase language awareness and pride in Secwepemctsin language use, and it will create more tools in language learning. Another benefit is that this research aims to establish best practices for working in collaboration and establishing partnerships in research projects and development of new technology and language tools.

Confidentiality:

During the focus group, confidentiality cannot be guaranteed because we will be discussing information as a group. If you or your child feel uncomfortable with any of your statements being shared with others in or outside the group, please do not share them during the process. Data records kept on a computer hard disk will be password protected and stored alongside the documents under lock and key at UBC Okanagan for a minimum of 5 years after publication, and recordings will be transcribed and returned and stored at the Splatsin Tsm7aksaltn. Your name will be added to the data. If you do not wish to have your name added to the
data, please do not participate. Data from this research will contribute to David Lacho’s Master’s thesis and other publications, which may be public documents and available on the Internet. Participants will not be able to withdraw from the study after they have participated in this focus group discussion since it is generally not possible, given the nature of group discussions to identify individual speakers from recordings. They will be able to withdraw until the discussion begins.

Contact for information about the study:

If you have any questions or desire further information with respect to this study, you may contact Christine Schreyer at (250) 807-9314 or via email at christine.schreyer@ubc.ca or David Lacho at david.lacho@gmail.com.

Contact for concerns about the rights of research participants:

If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics toll free at 1-877-822-8598 or the UBC Okanagan Research Services Office at 250-807-8832. It is also possible to contact the Research Complaint Line by email (RSIL@ors.ubc.ca).
Project Name: Splatsin First Nation Digital Language Tools

Consent: The participation of your child in this study is entirely voluntary and you or your child may refuse to participate in this study at any time without consequences. Your signature on this form indicates that you understand the information provided including all procedures, personal risks and use of the information. Your signature below indicates that you consent to your child’s participation in the study and you consent to the focus groups to be audio-recorded, and that you consent to having you and your child’s name included in this study. You will receive a copy of this form for your records.

Name of child:

__________________________________________

Parent/Legal Guardian’s Signature:

__________________________________________

Name of Parent/Legal Guardian:

__________________________________________

Date: __________________________
Appendix B4: Community Meeting Assent Form for Minors

LETTER OF ASSENT FOR VIDEO GAMER FOCUS GROUP SESSIONS

Dear video gamer,

I am writing to tell you about a project for video gamers. The letter will tell you the details and then ask you to sign your name if you wish to be part of a discussion group for video gamers called a focus group session.

Project Name: Splatsin First Nation Digital Language Tools

The people who are leading the project are called the researchers and they are:

Project Name: Splatsin First Nation Digital Language Tools

Principal Investigator: Dr. Christine Schreyer, Anthropology, UBC Okanagan, telephone 250-807-9314, email christine.schreyer@ubc.ca

Co-Investigators: Rosalind Williams; Aaron Leon; David Lacho, Master’s Student, Interdisciplinary Graduate Studies, UBC Okanagan, telephone 778-215-5235, email david.lacho@gmail.com.

Project Description: This project looks to develop an app, or video game with community members of the Splatsin First Nation. The information from the project will help plan what video gamers enjoy and what they like to learn. You are being invited to take part in this project because your ideas are important.

Project Methods: To meet the goals, first, the researchers will
talk with members of the Splatsin Tsm7aksaltln. Then they will meet with video gamers and other members of the community. The way of meeting is in a group of people called a focus group discussion. The people who are at the meeting will talk about the things that video gamers do and what they like to learn.

If you agree to be part of a focus group discussion, please sign at the bottom of this form. The focus group will take 2 to 3 hours and will be conducted at the Splatsin Tsm7aksaltln and will be audio recorded. At the focus group David Lacho will ask questions about video games, especially games that you enjoy, are good at, or help you learn new stuff. He will also ask you about the Aboriginal language and cultural activities at the Splatsin Tsm7aksaltln. David Lacho will take notes at the focus group session.

The information from all the meetings will be shared with the Splatsin Tsm7aksaltln and the researchers. What you say during the focus group will be associated with your name.

Possible Benefits and Risks: The comments the people who take part in the focus groups will be studied. The researchers will be looking for connections between language learning, cultural activities, and video gaming. This information will be useful to plan for building a video game in your community. The researchers believe that the focus group process will not pose any risks to video gamers who take part in the focus groups other than what would be experienced in your day to day activities.
Confidentiality and Storage of Information: The research partners from the Splatsin Tsm7aksalt will have access to the information shared in the focus groups, and the names of the people in the focus groups. All copies of the audio recordings, transcripts, and codes will be stored securely in a locked filing cabinet. Digital copies will be password protected and stored in the researchers’ computers. Reports of the project will give the names of the video gamers who took part.

Use of the Research Materials: David Lacho, will use the results of the project to write a report called a Master’s thesis and will be available on the internet. He may also write reports to submit to be published in magazines or books. These reports could use quotes from the focus groups.

Contact Information about the Project: If you have any questions about this research you may contact the Principal Investigator or Co-Investigator at phone numbers or email addresses listed above. If you have any concerns about your treatment or rights as a research participant, you may contact the Research Subject Information Line at the UBC Office of Research Services at 1-877-822-8598 (RSIL@ors.ubc.ca) or at the UBC Okanagan Campus Research Services Office at 1-250-807-8832.
Project Name: Splatsin First Nation Digital Language Tools

Assent: Your parent/legal guardian has given permission for you to participate in this project. Your signature on this form means that you agree to participate. You are a volunteer and you may stop being involved in this project at any time with not consequences. Your participation in this project is entirely voluntary and you may refuse to take part in this project at any time without consequences. Your signature on this form means that you understand the information provided including all methods, risks and use of the information. Your signature below indicates that you agree to participation in the focus group and to the recording of the focus group. Your signature below indicates that your name will be included in the research. Your signature indicates you are okay with participating, with your name being used and with audio-recording. You will receive a copy of this form for your records.

Name: ________________________________

I agree to be part of a focus group session for this research project. Signature:

______________________________

Date: ______________________
Appendix C: Interview and Community Meeting Scripts

Appendix C1: Interview Script

Interview Tentative Script - Developing Digital Language Tools with Splitsin First Nation

Principal Investigator:
Dr. Christine Schreyer
Associate Professor
Phone: (250) 807-9314
Email: christine.schreyer@ubc.ca

Co-Investigator:
David Lacho
Graduate Researcher
Phone: (250) 716-5235
Email: david.lacho@gmail.com

Why is it important to learn Secwepemcitsin?

Who speaks Secwepemcitsin?

Where is Secwepemcitsin spoken?

What technology is used in the Tsm7aksaltn? Is it used for language learning/revitalization?

What technology is used by the community as a whole?

Can technology help the Tsm7aksaltn?

Can technology help in learning Secwepemcitsin?

Are you comfortable using technology? Are others?

Do you want to see more technology in the Tsm7aksaltn?

Do you want to see more technology being used to learn Secwepemcitsin?

Is it important to you that community members are involved in making new technology for learning?

How do you use computers and other technology in your day to day documentation of Secwepemcitsin?

How does technology help you in your day to day work in language revitalization?

Has there been any hesitation in using digital tools or technology for language revitalization?

Could you tell me what your typical day looks like when you are doing language revitalization?

Are you often going back to older recordings or documentation in order to revise them? How do you go about doing that?
Interview Tentative Script - Developing Digital Language Tools with Splatsin First Nation

What kind of language revitalization activities have been documented?

How have you shared that documentation in the past? What forms of media do you share? How do you see it being used in the future?

What role do you see for technology in language revitalization?

Personally, how do you feel when you hear Secwepemctsin spoken?

How do you feel when you are working on language revitalization?

What do you think are the advantages of turning the community play Tuwitames into a video game?

Do you think there are any disadvantages of turning the community play Tuwitames into a video game?

What parts of the play are the most important to you?

What message do you think these parts are trying to say?

What are some of the most important learning outcomes from the play? Should these be the same for the video game?

Do you think there will be any specific challenges to using Tuwitames as a video game?

Is there anything else you want me to know?

Thank you very much for taking part in this study. If you need to contact me or my supervisor for any reason, the information can be found on the top of the consent form.
Appendix C2: Community Meeting Script

Focus Group - Tentative Script
Developing Digital Language Tools with Splotxin First Nation

Principal Investigator:
Dr. Christine Schreyer
Associate Professor
Phone: (250) 807-9314
Email: christine.schreyer@ubc.ca

Co-Investigator:
David Lachô
Graduate Researcher
Phone: (250) 718-5235
Email: david.lachô@gmail.com

Tentative Focus Group Script
These questions are suggested themes and topics for the focus group meeting. Specific information may be added throughout the research project.

Please do not share any information about others that could be considered confidential.

What kind of technology do you use everyday?
What features do you like?
Do you play video games?
What kind of video games do you like?
What kind of video games do you not like?
What are some of the features of a game you like?

Do you know any Secwepemcitsin?
Do you want to see Secwepemcitsin in a digital product?
Have you seen communities use their language in a digital product?

Anything else?

Thank you again for participating in this research. Please remember that I am not able to guarantee confidentiality because we discussed information as a group. Please do not share any information about others that could be considered confidential. If you have any questions regarding the research, you can contact me at david.lachô@gmail.com or my supervisor at christine.schreyer@ubc.ca. If you have any concerns about your treatment or rights as a research participant, you may contact the UBC Okanagan Research Services Office at 250-807-8832, by email at RSIL@ors.ubc.ca. If you would like this information, please let me know and I will pass it on to you.
Appendix D: Online Questionnaires

Appendix D1: Online Questionnaire Version 1

Questionnaire for Video Gamers

*Required

Are you 18 Years of Age or Older? *
If yes, you will be guided to a consent form to participate in the study. If no, please get your parent/guardian as their consent will be required to participate in the survey. You will be guided to a Parent Consent form and a Child Assent form.

☐ Yes
☐ No

Continue »
Questionnaire for Video Gamers

*Required

CONSENT FORM

Research Description

This letter asks for consent for you to participate in a questionnaire for a research project, which plans to look at ways to build digital language tools for the Splatsin First Nation. The information about the project is as follows:

Project Name: Splatsin First Nation Digital Language Tools
Principal Investigator: Dr. Christine Schreyer, Anthropology, UBC Okanagan, telephone 250-807-9314, email christine.schreyer@ubc.ca
Co-Investigators: Rosalind Williams; Aaron Leon; David Lacho, Master’s Student, Interdisciplinary Graduate Studies, UBC Okanagan, telephone 778-215-5235, email david.lacho@gmail.com.

This project explores new ways in which language revitalization can take place, such as the use of digital software and/or mobile applications. As well, this research aims to follow an empowerment model through creating partnerships and establishing relationships between the Splatsin First Nation community and the research team, as well as by working directly with community members in identifying and achieving the goals of language revitalization. Data from this research will contribute to David Lacho’s Master’s thesis and other publications. David Lacho’s Thesis will be published openly on the internet on dRcle, UBC’s digital repository for research and teaching materials.

Study Procedures:

Study Procedures:
In the first phase of the research, the research team is conducting a questionnaire about
language learning, technology, and the Secwepemctsin language in general. The questionnaire should take 10-15 minutes.

**Potential Risks:**
Your name will be included on the data, if you wish to not have your name associated with the materials, you may choose to not include your name with the associated data. The investigators believe there are no risks greater than what you would experience in your daily life.

**Potential Benefits:**
Your involvement will contribute to a collaborative project that aims to develop fluent speakers of the Secwepemctsin language. The project will benefit participants, since it can increase language awareness and pride in Secwepemctsin language use, and it will create more tools in language learning. Another benefit is that this research aims to establish best practices for working in collaboration and establishing partnerships in research projects and development of new technology and language tools.

**Confidentiality:**
This questionnaire is being conducted using an on-line survey company (google forms), which is hosted by a web survey company located in the USA and as such is subject to U.S. laws. In particular, the US Patriot Act which allows authorities access to the records of internet service providers. The web survey company servers record incoming IP addresses of the computer that you use to access the survey but no connection is made between your data and your computer’s IP address. If you choose to participate in the questionnaire, you understand that your responses to the survey questions will be stored and accessed in the USA. The security and privacy policy for Google can be found at the following address: [https://www.google.com/intl/en/policies/](https://www.google.com/intl/en/policies/)

You do not have to answer a question if you do not wish to. When the questionnaire is complete, data records will be kept on the google server and on a computer hard disk, both of which will be password protected and stored alongside the documents under lock and key at UBC Okanagan for a minimum of 5 years after publication, and returned for storage at the Splatsin Ts’mym7aksaltn. If you wish to not have your name associated with the materials, you may choose to not include your name with the associated data. Data from this research will contribute to David Lacho’s Master’s thesis and other publications, which may be public documents and available on the Internet.

**Obtaining a copy of this form for your records:**
Please use the print function on your web browser to obtain a copy of this consent form for your records.
Consent

Your participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time until publication, without jeopardy to you. You are encouraged to make a copy of the consent form and questionnaire by using the print function in your browser. By answering the question below, you indicate that you consent to participate in this study. Your name can be included in this study by including it below.

Your consent below indicates that you have printed a copy of this consent form for your own records. By answering yes, you indicate that you consent to participate in this study.

Name (Optional)

I give my consent to participate in this study *

☐ Yes
☐ No

I consent that my responses to the survey questions and my name (if provided) will be stored and accessed in the USA. *

Please see section above, 'Confidentiality', regarding the use of Google Forms

☐ Yes
☐ No

« Back  Continue »
Questionnaire for Video Gamers

*Required

CONSENT FORM FOR PARENTS
This form is for parents. Parents/legal guardians who agree to have their child participate in questionnaires must read the Parent Consent Form Section. If you agree to your child’s participation in the questionnaire for this project, please review the assent section with your child. Your child will be asked to read the section on assent indicating that s/he does wish to participate in the study, since participation is voluntary. Parents may equally choose to participate in the questionnaire, and if you choose to participate please submit a second questionnaire.

Research Description
This letter asks for consent for you to participate in a questionnaire for a research project, which plans to look at ways to build digital language tools for the Splatsin First Nation. The information about the project is as follows:

Project Name: Splatsin First Nation Digital Language Tools
Principal Investigator: Dr. Christine Schreyer, Anthropology, UBC Okanagan, telephone 250-807-9314, email christine.schreyer@ubc.ca
Co-Investigators: Rosalind Williams; Aaron Leon; David Lacho, Master’s Student, Interdisciplinary Graduate Studies, UBC Okanagan, telephone 778-215-5235, email david.lacho@gmail.com.

This project explores new ways in which language revitalization can take place, such as the use of digital software and/or mobile applications. As well, this research aims to follow an empowerment model through creating partnerships and establishing relationships between the Splatsin First Nation community and the research team, as well as by working directly with community members in identifying and achieving the goals of language revitalization. Data
from this research will contribute to David Lacho’s Master’s thesis and other publications. David Lacho’s Thesis will be published openly on the internet on dRcle. UBC’s digital repository for research and teaching materials.

**Study Procedures:**

Study Procedures:
In the first phase of the research, the research team is conducting a questionnaire about language learning, technology, and the Secwepemctsin language in general. The questionnaire should take 10-15 minutes.

**Potential Risks:**

Your name and your child’s name will be included on the data, if you wish to not have your name associated with the materials, you may choose to not include your name with the associated data. The investigators believe there are no risks greater than what you would experience in your daily life to you or the children who participate.

**Potential Benefits:**

Your involvement will contribute to a collaborative project that aims to develop fluent speakers of the Secwepemctsin language. The project will benefit participants, since it can increase language awareness and pride in Secwepemctsin language use, and it will create more tools in language learning. Another benefit is that this research aims to establish best practices for working in collaboration and establishing partnerships in research projects and development of new technology and language tools.

**Confidentiality:**

This questionnaire is being conducted using an on-line survey company (Google Forms), which is hosted by a web survey company located in the USA and as such is subject to U.S. laws. In particular, the US Patriot Act which allows authorities access to the records of internet service providers. This questionnaire does ask for personal identifiers or any information that may be used to identify you, but you may choose not to identify yourself in the questionnaire. The web survey company servers record incoming IP addresses of the computer that you use to access the survey but no connection is made between your data and your computer’s IP address. If you choose to participate in the questionnaire, you understand that your responses to the survey questions will be stored and accessed in the USA.

You do not have to answer a question if you do not wish to. When the questionnaire is complete, data records will be kept on the google server and on a computer hard disk, both of which will be password protected and stored alongside the documents under lock and key at UBC Okanagan for a minimum of 5 years after publication, and returned for storage at the Splatsin Tsm’7aksaltn. If you wish to not have your name associated with the materials, you may choose
to not include your name with the associated data. Data from this research will contribute to David Lacho’s Master’s thesis and other publications, which may be public documents and available on the Internet.

**Obtaining a copy of the consent form for your records:**
Please use the print function on your web browser to obtain a copy of this consent form for your records.

**Contact for information about the study:**
If you have any questions or desire further information with respect to this study, you may contact Christine Schreyer at (250) 807-9314 or via email at christine.schreyer@ubc.ca or David Lacho at david.lacho@gmail.com.
Contact for concerns about the rights of research participants:
If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics toll free at 1-877-822-8598 or the UBC Okanagan Research Services Office at 250-807-8832. It is also possible to contact the Research Complaint Line by email (RSIL@ors.ubc.ca).

**Consent for Parents:**
Consent: The participation of your child in this study is entirely voluntary and you or your child may refuse to participate in this study at any time without consequences. Answering yes to the question below indicates that you understand the information provided including all procedures, personal risks and use of the information. Saying yes to the question below indicates that you consent to your child’s participation in the study, and that you consent to having you and your child’s name included in this study. Please print a copy of this questionnaire consent form for your records.

**Your name (Optional)**

**Your child’s name (Optional)**

I consent to my child’s participation in the study *
- [ ] Yes
- [ ] No

I consent that my child’s responses to the questionnaire and his/her name (if provided) will be
stored and accessed in the USA.

Please see section above, "Confidentiality", regarding the use of Google Forms

☐ Yes
☐ No

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Questionnaire for Video Gamers

*Required

ASSENT FORM FOR CHILDREN

Project Description
This is a project about video games. This part of the questionnaire will tell you the details and then ask you some questions for video gamers. The project’s name is: Splatsin First Nation Digital Language Tools.

The people who are leading the project are called the researchers and they are:
Principal Investigator: Dr. Christine Schreyer, Anthropology, UBC Okanagan, telephone 250-807-9314, email christine.schreyer@ubc.ca. Co-Investigators: Rosalind Williams; Aaron Leon; David Lacho, Master’s Student, Interdisciplinary Graduate Studies, UBC Okanagan, telephone 778-215-5235, email david.lacho@gmail.com.

Project Description: This project looks to develop an app or video game with community members of the Splatsin First Nation. The information from the project will help plan what video gamers enjoy and what they like to learn. You are being invited to take part in this project because your ideas are important.

Project Methods
To meet the goals, first, the researchers will ask you some questions online in a questionnaire. The questions will ask about the things that video gamers do and what they like to learn.

If you agree to be part of a questionnaire, please continue answering the questions below with a parent/guardian. The questionnaire should take 10-15 minutes. If you and your parent/guardian both agree that including your name with the research is okay, you can indicate your name on the questionnaire. You can leave this section blank if you don’t want to include your name.
Potential Benefits and Risks

Possible Benefits and Risks: The comments the people who take part in the questionnaire will be studied. The researchers will be looking for connections between language learning, cultural activities, and video gaming. This information will be useful to plan for building a video game in your community. The researchers believe that the questionnaire process will not pose any risks to video gamers who take part in the questionnaire other than what would be experienced in your day to day activities.

Confidentiality and Storage of Information

The research partners from the Splatsin Tsmíƛəsƛəⱡ will have access to the information shared in the questionnaires, and the names of the people in the questionnaires if they choose to include them. All copies of the will be stored on Google, and you should ask your parents/guardian if that's okay before you continue. The copies will also be securely in a locked filing cabinet. Digital copies will be password protected and stored in the researchers' computers. Reports of the project will give the names of the video gamers who took part, if they include them.

Use of the Research Materials: David Lacho will use the results of the project to write a report called a Master's thesis and will be available on the internet. He may also write reports to submit to be published in magazines or books. These reports could use quotes from the questionnaire.

Obtaining a copy of the consent form for your records

Please use the print function on your web browser to obtain a copy of this consent form for your records.

Children Assent

Assent For Children: Your parent/legal guardian has given permission for you to participate in this project. Saying yes to this consent form means that you agree to participate. You are a volunteer and you may stop the questionnaire at any time with not consequences by closing the window. By saying yes to this form, it means that you understand the information provided including all methods, risks and use of the information. By saying yes to this form, it indicates that you agree to participation in the questionnaire. Including your name indicates that your name will be included in the research, but you may choose not to include your name in the questionnaire. Please print a copy of this form for your records.

Name (Optional)

I agree to participate in the questionnaire *
I agree that my answers to the questions and my name (if provided) will be stored and accessed in the USA.

Please see section above, “Confidentiality”, regarding the use of Google

☐ Yes
☐ No

« Back  Continue »
Appendix D2: Online Questionnaire Version 2

9/22/2017

Questionnaire

1. Are you 18 Years of Age or Older? *
   If yes, you will be guided to a consent form to participate in the study. If no, please get your
   parent/guardian as their consent will be required to participate in the survey. You will be guided to a
   Parent Consent form and a Child Assent Form.
   Mark only one oval.
   ☐ Yes
   ☐ No

CONSENT FORM

Research Description

This letter asks for consent for you to participate in a questionnaire for a research project, which plans to
look at ways to build digital language tools for the Sliatst First Nation. The information about the project
is as follows:

Project Name: Sliatst First Nation Digital Language Tools
Principal Investigator: Dr. Christine Schreyer, Anthropology, UBC Okanagan, telephone 250-807-9314,
email christine.schreyer@ubc.ca
Co-Investigators: Rosalind Williams; Aaron Leon; David Lacho, Master’s Student, Interdisciplinary
Graduate Studies, UBC Okanagan, telephone 778-215-5235, email david.lacho@gmail.com.

This project explores new ways in which language revitalization can take place, such as the use of digital
software and/or mobile applications. As well, this research aims to follow an empowerment model through
creating partnerships and establishing relationships between the Sliatst First Nation community and the
research team, as well as by working directly with community members in identifying and achieving the
goals of language revitalization. Data from this research will contribute to David Lacho’s Master’s thesis
and other publications. David Lacho’s Thesis will be published openly on the Internet on cIRcle, UBC’s
digital repository for research and teaching materials.

Study Procedures:

Study Procedures:
Once you have had the chance to take a look at the app that has been developed for this project, you may
optionally fill out this questionnaire. The questionnaire should take 10-15 minutes.

Potential Risks:

Your name will be included on the data, if you wish to not have your name associated with the materials,
you may choose to not include your name with the associated data. The investigators believe there are no

https://docs.google.com/forms/d/1iwYVXwU9jR_74d2UIALdY7m1mbF_WkxGKu-o4luc/edit
risks greater than what you would experience in your daily life.

**Potential Benefits:**

Your involvement will contribute to a collaborative project that aims to develop fluent speakers of the Secwepemctsin language. The project will benefit participants, since it can increase language awareness and pride in Secwepemctsin language use, and it will create more tools in language learning. Another benefit is that this research aims to establish best practices for working in collaboration and establishing partnerships in research projects and development of new technology and language tools.

**Confidentiality:**

This questionnaire is being conducted using an on-line survey company (Google forms), which is hosted by a web survey company located in the USA and as such is subject to U.S. laws. In particular, the US Patriot Act which allows authorities access to the records of internet service providers. The web-survey company servers record incoming IP addresses of the computer that you use to access the survey but no connection is made between your data and your computer's IP address. If you choose to participate in the questionnaire, you understand that your responses to the survey questions will be stored and accessed in the USA. The security and privacy policy for Google can be found at the following address:


You do not have to answer a question if you do not wish to. When the questionnaire is complete, data records will be kept on the google server and on a computer hard disk, both of which will be password protected and stored alongside the documents under lock and key at UBC Okanagan for a minimum of 5 years after publication, and returned for storage at the Splitsail Secwepemctsin. If you wish to not have your name associated with the materials, you may choose to not include your name with the associated data. Data from this research will contribute to David Lacho's Master's thesis and other publications, which may be public documents and available on the Internet.

**Obtaining a copy of this form for your records:**

Please use the print function on your web browser to obtain a copy of this consent form for your records. You may also request a copy of this consent form from any of the research team members by contacting them. Their emails are at the top of this page.

**Consent**

Your participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time until publication, without jeopardy to you. You are encouraged to make a copy of the consent form and questionnaire by using the print function in your browser or by requesting a copy from the researchers above. By answering the question below, you indicate that you consent to participate in this study. Your name can be included in this study by including it below.

Your consent below indicates that you have printed a copy of this consent form for your own records. By answering yes, you indicate that you consent to participate in this study.

2. Name (Optional)
3. I give my consent to participate in this study *
   Mark only one oval.
   ☐ Yes
   ☐ No

4. I consent that my responses to the survey questions and my name (if provided) will be stored and accessed in the USA. *
   Please see section above, "Confidentiality", regarding the use of Google Forms
   Mark only one oval.
   ☐ Yes
   ☐ No

CONSENT FORM FOR PARENTS
This form is for parents. Parents/legal guardians who agree to have their child participate in
questionnaires must read the Parent Consent Form Section. If you agree to your child’s participation in
the questionnaire for this project, please review the assent section with your child. Your child will be asked to
read the section on assent indicating that she does wish to participate in the study, since participation is
voluntary. Parents may equally choose to participate in the questionnaire, and if you choose to participate
please submit a second questionnaire.

Research Description

This letter asks for consent for your child to participate in a questionnaire for a research project, which
plans to look at ways to build digital language tools for the Splatstín First Nation. The information about the
project is as follows:

Project Name: Splatstín First Nation Digital Language Tools
Principal Investigator: Dr. Christine Schreyer, Anthropology, UBC Okanagan, telephone 250-807-9314,
email christine.schreyer@ubc.ca
Co-Investigators: Rosalind Williams; Aaron Leon; David Lacho, Master’s Student, Interdisciplinary
Graduate Studies, UBC Okanagan, telephone 778-215-5235, email david.lacho@gmail.com.

This project explores new ways in which language revitalization can take place, such as the use of digital
software and/or mobile applications. As well, this research aims to follow an empowerment model through
creating partnerships and establishing relationships between the Splatstín First Nation community and the
research team, as well as by working directly with community members in identifying and achieving the
goals of language revitalization. Data from this research will contribute to David Lacho’s Master’s thesis
and other publications. David Lacho’s Thesis will be published openly on the internet on ciRcle, UBC’s
digital repository for research and teaching materials.

Study Procedures:

Once your child has had the chance to take a look at the app that has been developed for this project,
your child may optionally fill out this questionnaire. The questionnaire should take 10-15 minutes.

Potential Risks:

Your name and your child's name will be included on the data, if you both wish to not have your name
associated with the materials, you may choose to not include your name with the associated data. The

https://docs.google.com/forms/d/1IwYvXcVqjR-7/42ualL41m1hB_WkzGKu-o41uc/edit
investigators believe there are no risks greater than what you would experience in your daily lives to you or the children who participate.

Potential Benefits:

Your child’s involvement will contribute to a collaborative project that aims to develop fluent speakers of the SecwepemcSin language. The project will benefit participants, since it can increase language awareness and pride in SecwepemcSin language use, and it will create more tools in language learning. Another benefit is that this research aims to establish best practices for working in collaboration and establishing partnerships in research projects and development of new technology and language tools.

Confidentiality:

This questionnaire is being conducted using an on-line survey company (google forms), which is hosted by a web survey company located in the USA and as such is subject to U.S. laws. In particular, the US Patriot Act which allows authorities access to the records of Internet service providers. This questionnaire does ask for personal identifiers or any information that may be used to identify your child, but your child may choose to not identify themselves in the questionnaire. Please review this with your child. The web survey company servers record incoming IP addresses of the computer that you use to access the survey but no connection is made between your data and your computer’s IP address. If your child chooses to participate in the questionnaire, you and your child understand that the responses to the survey questions will be stored and accessed in the USA.

Your child does not have to answer a question if they do not wish to. When the questionnaire is complete, data records will be kept on the google server and on a computer hard disk, both of which will be password protected and stored alongside the documents under lock and key at UBC Okanagan for a minimum of 5 years after publication, and returned for storage at the Splatsin Tsimshatsin. If you or your child wish to not have your name associated with the materials, you and your child may choose to not include your name with the associated data. Data from this research will contribute to David Lacho’s Master’s thesis and other publications, which may be public documents and available on the Internet.

Obtaining a copy of the consent form for your records:

Please use the print function on your web browser to obtain a copy of this consent form for your records. You may also request a copy of this consent form from any of the research team members by contacting them. Their emails are at the top of this page.

Contact for information about the study:

If you or your child have any questions or desire further information with respect to this study, you may contact Christine Schreyer at (250) 807-9314 or via email at christine.schreyer@ubc.ca or David Lacho at david.lacho@gmail.com. Contact for concerns about the rights of research participants: If you or your child have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics toll free at 1-877-822-8598 or the UBC Okanagan Research Services Office at 250-807-8832. It is also possible to contact the Research Complaint Line by email (RSIL@ors.ubc.ca).

Consent for Parents:

https://docs.google.com/forms/d/1IswYxVxVujR_742UJLaIYm1nbfWkxGkca-no4Iuc/edit
9/22/2017

Consent: The participation of your child in this study is entirely voluntary and you or your child may refuse to participate in this study at any time without consequences. Answering yes to the question below indicates that you understand the information provided including all procedures, personal risks and use of the information. Saying yes to the question below indicates that you consent to your child’s participation in the study, and that you consent to having you and your child’s name included in this study. Please print a copy of this questionnaire consent form for your records.

5. Your name (Optional)

6. Your child’s name (Optional)

7. I consent to my child’s participation in the study *
   Mark only one oval.
   
   ☐ Yes
   ☐ No

8. I consent that my child’s responses to the questionnaire and his/her name (if provided) will be stored and accessed in the USA. *
   Please see section above, “Confidentiality”, regarding the use of Google Forms
   Mark only one oval.
   
   ☐ Yes
   ☐ No

ASSENT FORM FOR CHILDREN

Project Description

This is a project about video games. This part of the questionnaire will tell you the details and then ask you some questions for video gamers. The project’s name is: Splitsin First Nation Digital Language Tools.

The people who are leading the project are called the researchers and they are:
Principal Investigator: Dr. Christine Schreyer, Anthropology, UBC Okanagan, telephone 250-807-9314, email christine.schreyer@ubc.ca; Co-Investigators: Rosalind Williams; Aaron Leon; David Lacho, Master’s Student, Interdisciplinary Graduate Studies, UBC Okanagan, telephone 778-215-5235, email david.lacho@gmail.com.

Project Description: This project looks to develop an app, or video game with community members of the Splitsin First Nation. The information from the project will help plan what video gamers enjoy and what they like to learn. You are being invited to take part in this project because your ideas are important.

Project Methods

To meet the goals, first, the researchers will ask you some questions online in a questionnaire. The questions ask about the app that was made for this project.

If you agree to be part of a questionnaire, please continue answering the questions below with a parent/guardian. The questionnaire should take 10-15 minutes. If you and your parent/guardian both agree that including your name with the research is okay, you can indicate your name on the questionnaire. You can leave this section blank if you don’t want to include your name.

https://docs.google.com/forms/d/1HwVxUJoJK74Y2UIAa1Vmslm8F_Wx0wGKs-so44u/edit
Potential Benefits and Risks

Possible Benefits and Risks: The comments the people who take part in the questionnaire will be studied. The researchers will be looking for connections between language learning, cultural activities, and video gaming. This information will be useful to plan for building a video game in your community. The researchers believe that the questionnaire process will not pose any risks to video gamers who take part in the questionnaire other than what would be experienced in your day to day activities.

Confidentiality and Storage of Information

The research partners from the Splatsin Tam7aksat will have access to the information shared in the questionnaires, and the names of the people in the questionnaires if they choose to include them. All copies of the will be stored on Google, and you should ask your parents/guardian if that's okay before you continue. The copies will also be securely in a locked filing cabinet. Digital copies will be password protected and stored in the researchers' computers. Reports of the project will give the names of the video gamers who took part, if they include them.

Use of the Research Materials: David Lacho will use the results of the project to write a report called a Master's thesis and will be available on the internet. He may also write reports to submit to be published in magazines or books. These reports could use quotes from the questionnaire.

Obtaining a copy of the consent form for your records

Please use the print function on your web browser to obtain a copy of this consent form for your records. You may also request a copy of this consent form from any of the research team members by contacting them. Their emails are at the top of this page.

Children Assent

Assent For Children: Your parent/legal guardian has given permission for you to participate in this project. Although your parent/legal guardian has given consent, you do not have to agree to participate if you do not wish to do so. Saying yes to this consent form means that you agree to participate. You are a volunteer and you must stop the questionnaire at any time with no consequences by closing the window. By saying yes to this form, it means that you understand the information provided including all methods, risks and use of the information. By saying yes to this form, it indicates that you agree to participation in the questionnaire. Including your name indicates that your name will be included in the research, but you may choose not to include your name in the questionnaire. Please print a copy of this form for your records.

9. Name (Optional)

10. I agree to participate in the questionnaire *
   Mark only one oval.
   
   [ ] Yes
   [ ] No
11. I agree that my answers to the questions and my name (if provided) will be stored and accessed in the USA.

Please see section above, "Confidentiality", regarding the use of Google
Mark only one oval.

☐ Yes
☐ No

Questionnaire

12. Can you tell me if you noticed any parts of Splitsin culture in the app?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

13. The app is narrated in Secwepemctsín (Shuswap language). Did you learn or remember any words or phrases in the language? Which ones?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

14. How does having a Splitsin app in Splitsin’s Secwepemctsín make you feel?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

15. What would you say are some of the best parts of this app?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
16. What improvements would you like to see with this app?


17. Do you have any last comments?


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Google Forms

https://docs.google.com/forms/d/1IwYyXzVujR_74zRIUILa1Ytm1mbF_WkxGKuo-no4Iuc/edit
Appendix E: Recruitment Letter for Facebook

Sample Script for Facebook Invitation to Participate:

Splatsin First Nation Digital Language Tools

Splatsin Tsm7lausltn with researchers from UBC Okanagan are searching for people who are interested in participating in a study about Secwepemctsin language learning and video games. This is a joint UBC and Splatsin Tsm7lausltn study. The study will involve interviews and focus groups (community meetings) and you can participate in an online questionnaire. You can participate in both the online questionnaire, and the community meetings or interviews if you wish.

If you would like to participate in an online questionnaire that will help develop the research project, you can view and answer the questionnaire at this link: <sample link>

To participate, please contact any member of the research team by email:

David Lacho, University of British Columbia (Okanagan Campus): david.lacho@gmail.com
Christine Schreyer, University of British Columbia (Okanagan Campus): Christine.schreyer@ubc.ca or call: (250) 807-9314
Rosalind Williams, Splatsin Tsm7lausltn: zoralind@gmail.com
Aaron Leon, Splatsin Tsm7lausltn: neon_leon135@hotmail.com