



REPURPOSING SPACE INVADERS TO LEARN CREE

INTRODUCTION

WHY CREE LANGUAGE?

Plains Cree (Y- Dialect Cree) is a dying language.

Language is a pivotal part of culture, therefore revitalization of the Cree language is of prime importance to reconciliation.



Cree Tutor is an Interactive learning system that teaches introductory Cree to people who know English. The first step to learning a language as an adult is to learn how the sounds map to characters, but this can be boring. Using a more interactive and engaging method should help people get past this first hurdle.

OBJECTIVES

Ultimately, our goal with Cree Tutor would be to revitalize the Cree Language in many places and have many people become fluent with our help, but lets start a bit smaller.

We created a game that enforces sound mapping (letter to sound memorization) of the Cree standard roman orthography (SRO) alphabet as building blocks for learning the Cree language.



Anaka Sparrow, Delaney Lothian, Carrie Demmans Epp

METHODS

USER BASE

As this game is very newly developed, research on a user base still needs to be developed. Our current target user is a First language English speaker who is about 18 or older, and preferably active in the Aboriginal community.

LOGGING USER DATA

When a user plays, the data from your game should be logged to choose your next level.

We log data such as how fast you get the correct answer and how many times you get the correct answer.

We also log how close you were to the correct answer if you were incorrect to determine whether you made the wrong choice or made a bad shot. This data is all used to direct you to the next difficulty level



THE CREE ALPHABET

The Cree Standard Roman Orthography (SRO), or alphabet, has many similar letters but different sounds than the English Alphabet.

This is why the game enforces sound to letter mapping continuously. It's hard to retrain your brain to understand a whole new alphabet, so we are trying to make it fun. Some of the differences between the two alphabets include

> P would sound like a soft B. T would sound like a soft D. K would sound like a soft G.



The original Space Invader game is a space themed enemy dense game. To make it more our own we changed it to hunting themed with a bow and arrow instead of spaceship with bullets, and the enemies are deer labelled with letters instead of a large group of aliens.



Credit: pacxon4u.com

QUESTIONS FOR OUR FUTURE:

learn and to find out things like:

- Who is our ideal target user base?
- When would a user be considered fluent in sound mapping?
- Is giving 'Points' and taking 'Health' an effective positive vs. negative reinforcement device?

In the future we would like to see this game used for more than sound mapping, and eventually have it used to teach letter pairs, words, and word pairs.

ACKNOWLEDGEMENTS

I would like to thank

- Carrie Demmans Epp, Principal Investigator
- Delaney Lothian
- EdTeKLA Research Group
- WISEST
- Syncrude Canada Ltd.

- Statistics Canada
- FAQ







CULTURAL RELEVANCE

MOVING FORWARD

This program still needs to be tested to see what is most affective to help

Literature Cited:

- Konstantin Prodanovic, The Silent Genocide: Aboriginal Language Loss