

SOCIAL SCIENCES REPORT SAMPLE

Summer Retrospective Paper

This summer, I had the opportunity to work with the *Laboratory for Endangered Language Research and Documentation* at Swarthmore College thanks to an award from the *William L. Huginir Summer Research Stipend on Population Issues*. I worked extensively on developing various projects under the direction of Professor David Harrison and Jeremy Fahringer. In particular, I spent most of his summer working on a suite of “Talking Dictionaries,” a collection of lexical (cultural, botanical, geographical, zoological, astronomical, and other ontological), photographic, and phonetic data collected from small, endangered communities around the world. Much of my work was focused on developing a dictionary for the Aneityum community, a remote group of less than 1,000 speakers on a South Pacific island. The Aneityum Talking Dictionary is the very first Internet resource available for this community in their native language.

Generally, the data exists as sets of databases on a Swarthmore server, where each entry contains a native headword, an English (among other languages) gloss, a recording of a native speaker, an image of the object, and various other linguistic details. My primary task was to make this incredibly rich dataset more easily accessible to users, whether that be members of a native community, institutional researchers, or just interested individuals. I focused on making the dictionaries more visual and navigable. One accomplishment was the development of an image gallery to complement the depth and breadth of the data. Additionally, I developed features to encourage greater integration across the individual languages, such as a collection of words to be highlighted on the main landing page and a map that displays different headwords for each of the glosses on the famous “Swadesh List.”

Another task was to research and implement a cloud solution to handling the website, offloading the computational and storage needs from their current home on Swarthmore servers, which may not be maintained indefinitely. Housing the core of the project of the cloud ensures its continued accessibility and robustness into the future.

Over the course of the summer, I gained invaluable technical expertise. I learned five new programming languages (PHP, JavaScript, HTML, CSS, & MySQL), basic system administration, networking, web hosting, the Ubuntu operating system, and the command line.