# Geog 490 Directed Studies Project Proposal 2017-08-30 By Wendy Anthony

#### **ProForma**

**Title: Engaging With Natural Places** 

### **Content (brief outline)**

Engagement with place creates meaning for people, which can enhance their health and mental well-being. Community based mapping methods allow for the unique development of place meanings by individuals. To address an increasing dissociation from nature and the local environment, and encourage an engagement with place for individuals, a place-based nature trail guide route will be created. To provide learning opportunities in an inquiry-based interactive manner, the trail guide will use mobile-friendly accessible web technology, and utilize thought-provoking questions, maps and images connected to Points of Interest (POIs), physical locations, individual plant species information, cultural/historical narratives, etc.

## **Evaluation technique**

- \* 10% Journal of research, discovery process, and creative reflections through weekly meetings with Professor Dawson
- \* 75% Trail guide application development, based on community mapping goals and principles

10% - requirements gathering/scoping

25% - design

25% - prototype development (includes 10% for Concept map)

15% - Oral defense, Application demonstration, features, proof of concept, relationship to goals

\* 15% - Final report and future directions

### **Proposal: Engaging With Place Using Mobile-Friendly Trail Guides**

#### 1. The Problem

Increased urban living can reduce contact with, and access to natural areas, resulting in a lack of knowledge and awareness about the natural world, less drive to protect these areas, and a reduced opportunity to experience the healing powers of spending time in a natural place. As natural areas become more degraded, protection may become a function of how many people have become engaged enough with these areas to care about them.

Given that many people rely on mobile technology, even while walking through natural areas, I'd like to experiment with ways to help incorporate this technology into a person's experience of place, and to help them find ways to engage with more curiosity about a place.

Through a previous Environmental Studies Directed Studies project, I created a field identification guide to native plants, with a catalogue of plant species to expect while walking at the Vic campus, but giving no context to their locations or associations, or how they change while moving along a trail. I wanted to find some way to breath new life into my field guide, and to more fully engage the user in the experience of a natural area, in order to learn and understand more about the place.

# 2. Relevant Literature & Context (as Recommended by Prof. Dawson) Geographic Education & Place

- \* Chamberlain: "If This Is Your Land, Where Are Your Stories"
- \* Relph: "Place & Placelessness" experience of place is often superficial or casual
- \* Tuan: "Space & Place"
- \* Flavelle: "Mapping Our Land" Community Mapping methodology
- \* Battiste: Geographic education and indigenous pedagogies

**Programming:** Online tutorials for new mobile coding skills and building on previously acquired coding skills and techniques (HTML, CSS, JavaScript); using open-source libraries and community forums; leaflet.js, mapbox; research off-line capabilities and challenges ...

#### 3.a. Project Goal

I would like to explore different ways of helping the user become interested in the various layers of a Place, in the belief that the more we know about a place, the more likely we are to care about it.

I intend to design an interactive, accessible, mobile-friendly, inquiry—based, web-based trail mapping guide to natural areas, with the purpose of helping the user to engage more fully with this place, and to help make the place come alive. Discovering more about a place could change a casual walk into an adventure trail.

#### 3.b. Proposed Solution

I propose to build a working base code for a web-enabled trail guide, with different variations, to test with users, students, classes, with the potential to be customized or refined based on user suggestions or other community-based needs. This may be limited by the technology I'm able to master as I explore learning new coding techniques over the 3-month semester.

I intend to research ways for how to engage with natural places, and to experience plants in place. I will also research and test coding techniques including how to offer inquiry-based information, to enrich the engagement experience of a user, and find ways to give greater depth to their experience of place.

Enabling the creation of a deeper experience of this place, and helping a user to learn more knowledge about the natural environment of a place, could be done through the use of guided points of interest (POIs), including native plants specimens encountered, plant associations, habitat, and maybe even including some geological, cultural and historical context, with the potential to be used to help map stories about a place.

After building the application it will need to be tested and used to see whether it does indeed help create a deeper connection to place then the simple field identification guide - this research, testing and refining could potentially lead into a second directed studies research project.

#### 4. Method

I will need to identify a Place for which a trail guide application would be useful to a community of users, and to choose potential routes that might actually be used, using community mapping methodology.

I will at the same time be interviewing potential users, and educators who teach using inquiry-based learning techniques, to identify what information to offer, in what format, what questions to ask, features to include, usability issues, interest in using such an app, and to understand how they might use this tool.

While mapping the trail route, I will experiment, and build on my previous coding knowledge of mobile-friendly webpage and mapping design, to learn which new-to-me open-source coding skills and techniques I could use to enhance the mobile web experience of an interactive trail guide. By experimenting with different options, the coded application will have the intent of helping to create an interesting and useful user experience. The code template may also be useful for other places, or community of users.

## 5. Support Needed

#### \* Professor Teresa Dawson:

- Supervise my progress with weekly meetings to provide feedback on direction and my learning process

# \* Computer Code Evaluation: assistance TBD (Yvonne Cody on leave)

- Assist with evaluating the resulting application

# \* Ken Josephson:

- Tech-support for inDesign and Photoshop software, community network, help finding older iPhone in the department, test out ideas/brainstorm

# \* Community Mapping Lab:

- iMac Computer, iPad, software, office workspace access