Outreach activities: Service – Learning Web Projects

Engaging Student through experiential learning in my Web Design I Programming.

These are communities' outreach service-learning web projects where I have collaborated and coordinated with several local, regional and international non-profit organizations and small businesses to connect students in my COMP 2680, Web Design I Programming class requiring students to complete a final project for the course with an actual business client.

These outreach activities where students in my COMP 2680 would either create and/or modify a web site has become a win-win for the organizations involved, Thompson Rivers University (TRU), TRU Computing Science (CS) department and more importantly students in my COMP 2680 classes since 2003.

How it all started?

I started teaching COMP 2680 in January 2001. Previously, this course was taught by a different faculty member, Dr. Richard Paweska. When Richard taught this course, he made students create an on-line version of their resume that usually consisted of about 3 web pages. I tried this for a couple of years and the feedback received from students was that it was boring and non-challenging.

As I was fairly new to Kamloops, and that the web was just starting to gain popularity an idea came across in 2003 about helping non-profit and small businesses develop web sites for their businesses. I knew that during that time very few businesses had a web site, so I knew this idea would be highly beneficial.

Why do outreach activities?

Having students involve with such service-learning web projects activities parallel my teaching philosophy as "you have to be able to practice what you teach". Further my philosophy is actioned in my curriculum by inclusion of the following three factors:

- Actual problem based hands-on learning
- Effective communication skills
- Foundation for life-long continual learning

My students learn to practice problem-solving, and critical thinking techniques for lifelong learning skills during the process of completing the service-learning web project with clients. Key benefits of service-learning web projects:

- For the students:
  - Interact with a real client, thereby promoting student engagement and learning. This enabled them to build skills like time management, project management, communication and technical skills to name a few.
  - Network with businesses thus building their own portfolio for either co-op jobs, webmasters or career upon graduation.

- For the organizations:
  - Have a current web site(s) with current web technologies implemented at no cost.

- For the department:
  - Enhances the name of the program in the communities where the web sites are designed and created.

- For the university:
  - Name is promoted and enhanced locally, regionally and internationally in the communities where the web sites are designed and created.

These outreach activities have been recognized by both within and outside TRU contributing to enhanced teaching, learning and service. Evidence shown in my application for promotion to SL by external reviewers.

Process Involved

First: I had to craft a web project document, a structure for students to follow. A sample of this look as follows: (Show sample)

Second: Reaching out to local and surrounding businesses: Done by creating a small ad that was advertised with no charge through a couple of local radio stations, local TV station as well as through the local newspapers. Note: The responses received was over whelming and it was no surprise I had a waitlist. (Show sample of ad)

Third: Connecting teams of student with businesses. For the most part I gave students the liberty of forming their own groups usually two on average, though at times I have allowed 3 depending on the nature and complexity of the business. I require students to have their first meeting face to face within a week. The important piece is that businesses need to be aware that the web site would be limited to within the scope of the web project document. Further, a disclaimer is to be signed in that this work is student based not professional. Also businesses are required to provide contact, including images, video, audio and any other relevant information for instance logos, background images etc.

Fourth: Students embark on the creation of the web project. Businesses are free to suggest a design for the web site or alternatively students' are free to suggest some design options.

Fifth: Students are often reminded to follow timelines in developing the web site based at the same rate as topics are presented during lectures.

Sixth: Sometime around just past mid-way of the semester the first evaluation of the web project is done. By this time, HTML & CSS must be in place. Placeholders are used for images or other content if not supplied by client.

Seventh: Three weeks later a second evaluation is done, by now JavaScript functional, advance CSS, multimedia features should be implemented.

Eighth: At this point teams wanting to implement extended web features are encourage to have its implementation done. Note: Criteria for extended features will be explained during presentation. Base features must be in place before any extended features will be considered.

Note: Teams are encouraged throughout the project to work on project documentation, including the creation of the cross reference table for ease of marking. I will explain the purpose of the cross reference page during my presentation.

Project Evaluation by Businesses:

Students are to create an evaluation form that has to be signed off by the business. Samples of these will be shown during the presentation.

Maintaining Such Outreach Activities:

As the years went by from first initiation in 2003, the local environment was kind of saturated. Those wanting to have a web site created had one done. This is where I expanded to areas outside the Kamloops areas and went to other parts of BC. Communities included Chase, Salmon Arm, Nakusp, Clearwater, Kelowna, Vernon. Later it was expanded to include international organizations coming from mainly from international students who were enrolled in my classes.

Note: The various departments within TRU often has requested my help as well. This includes professors web page, research students wanting to showcase their work to the community.

Recently, some older businesses were wanting to have their sites updated with newer web standards, as well as, newer businesses moving to the Kamloops areas.

I believe that the web is an area where constant upgrading/maintenance is required on an on-going basis.

What are the dangers in integrating these activities into courses?

Not all businesses web sites would require all the requirements in the project document be fulfilled. In this way, students are given some flexibility, in that certain elements of the project requirements can be made as a sample but not included in the business web site. A link called cross reference page is where students can include info strictly for fulfilling course requirements.

How to manage the client expectation in such activities?

1. Clients need to know that web sites designed and created are by students' who are learning web design programming. Hence not to expect professional web sites, though in some instances client can expect one or the other extreme. (Web sites that are either badly designed or created or very well designed and created) Lots depend on who are the students' being allocated.

2. Clients need to know that their web sites will be designed and created within the scope of the web project document which is in line with the course requirements. Although there are instances where some students' go over and beyond the expectations of the course and project requirements.

Web Project Listing:

Listing of some web projects built by students of COMP 2680 over the years.

To include URL: http://faculty.tru.ca/mohda/studentsite

Web Masters and further and development:

After the project is completed some businesses take on the students for further enhancing the web site beyond the scope of the project requirements and/or to be web masters for web maintenance.