

# Curriculum Design Pattern

Global Learning by Design

## Name of Pattern

**Virtual Field Trips**

## Date

December 2014

## Abstract

This pattern provides a recipe for the preparation of a course-specific Google website which is equipped with a template for creation of virtual field trips (VFTs) and acts as a repository for completed VFTs. The VFTs can be of places visited, places which are of interest but inaccessible to a class, or independent field trips produced by the students or staff.

## Learning Context

The pattern is applicable to courses that have a fieldwork component. The course site repository can be used by the students for preparation prior to a field trip, revision after a field trip, sometimes in place of a field trip (if not able to attend) and as a basis for further study.

## Rationale/Aim

Many of our programs have courses which are considerably enriched by the addition of relevant field trips. Indeed, in many cases, it is the very best way for the students to learn. However, not all places are suitable for taking large numbers of students as some places can be dangerous, remote or fragile. Students may also miss field trips for one reason or another, or be unable to attend because they are located too far away from RMIT. It has the potential to have an impact upon students from all areas of science and OH&S since the virtual field trips can include virtual tours of industrial plants and premises.

## Learning Design

The pattern will enhance the capabilities of staff to employ technologies that will enhance student learning.

The VFTs will supplement the field work, hence, enhance the learning outcomes of each field trip, especially where students may have missed some critical information during the field trip.

## Conditions

For staff, the pattern has to be easy to use and flexible so that individual enhancements can be easily incorporated into the pattern and communicated to other staff.

For students, the VFTs need to be easy to use and cutting edge in presentation and delivery (ie. similar to the material they can find online).

The initial concept was to employ Google Earth, embedded with 360 degree views (photospheres), video and captioned photographs in pop-up windows, with the resources to be captured by staff and students during the field trips, using smartphone apps, inexpensive cameras and free software.

Unfortunately, not all of this has proved possible in this first iteration.

The template(s) will need to evolve and improve as better presentation software becomes available and used at RMIT.

It is critical that staff generate the necessary assets:

1. using good quality video and still cameras, tripods and so on, after
2. gaining some experience with the equipment, and
3. without the distraction of trying to run a field exercise and record it simultaneously.

## Resources/Technology

### Education resources

- [A Google Sites Template](#)
- [A GLbD Virtual Field Trip Template](#)

### Technology resources

- [Google Sites](#)
- [Google Maps](#)
- [My Maps](#) (currently not included in the RMIT suite of applications)
- [YouTube](#)
- [Adobe Premier Pro CC](#)
- [Adobe After Effects CC](#)

- [Adobe Photoshop CC](#)
- [Adobe Photoshop Lightroom CC](#)
- [Microsoft PowerPoint \(optional\)](#)
- [Movavi video converter](#) (or something similar)
- [GoPros](#) and recording equipment available for hire, free of charge, from Audio Visual Loans (AV Loans)

#### **Staff resources**

- Compiling text, images and video using Adobe Premier Pro CC  
<https://www.youtube.com/watch?v=wK3JTh2jOf8>
- The DV Rebel's Guide  
<http://www.amazon.com/The-DV-Rebels-Guide-All-Digital/dp/0321413644>
- Create immersive photo experiences with Google Photo Sphere  
<http://geojournalism.org/2015/02/create-immersive-photo-experiences-with-google-photo-sphere/>
- How to create a Photo Sphere (Android)  
<https://www.youtube.com/watch?v=UozBwluWWOM>
- How to create a Photo Sphere (iOS)  
<https://youtu.be/ypMUnGZuGqs>
- How to create a video using PowerPoint 2010  
<https://www.youtube.com/watch?v=dvmOGBWwVnc>
- How to record voice-over for PowerPoint  
<https://www.youtube.com/watch?v=3uk4CU7uobM>

### **Case Studies**

Feedback from development staff/students on the site and VFT template instructions will flow into the final revised template.

The VFTs developed during this project will be trialled during Semester 1, 2016 and feedback will be sought from students on the presentation and usefulness of this approach.

### **Outcomes**

Exemplar VFTs to be used for enhancing the student learning experience and providing support material for online learning.

Provision of materials for other teaching staff across the university to prepare similar material for their classes.

### **Keywords**

Employability, first year, motivation.