

Criterion B: Analysis

Proposed solution: **wiki** using Wikispaces (<http://www.wikispaces.com>)

The student and client have determined that the best solution that will allow collaboration between the students is a wiki.

Requirement specification

IT System requirements

- Hardware – Macintosh computer with Internet connection, 2GB RAM and 250 GB internal hard drive, memory stick for backup from the wikispaces website.
- Software – Mac OSX, Apple Garageband for creating podcasts, Microsoft Word for creating text for the website, Adobe Photoshop and Illustrator for creating the logo, Microsoft Excel for creating student teams for the project.
- Network – access to Internet and websites required for the product (i.e. Wikispaces, and YouTube).

System interaction

- Compatibility requirements minimal; mostly web-based resources used (i.e. Wikispaces, YouTube).
- Compatibility concerns: making certain that the music loop can be imported, linking the podcasts to the Wikispaces site.
- Making certain that the YouTube videos do not display unrelated movie clips
- Backup of the Wikispaces website in HTML through the Manage Wiki menu option

Input / output requirements

Input (content)

- Information from Ms. Akmed regarding the topics to be used for the wiki and relevant “Digital Citizenship” websites (i.e. websites relating to experts’ work, Dr. Mike Ribble’s website).
- Digital video from YouTube explaining issues.
- Podcast from Dr. Mike Ribble; introductory podcast from Ms. Akmed.
- First name and last name of all of the students in grade 8 from Ms. Akmed to create teams for both phases of the grade 8 project: investigation and research, and action.

Output requirements

- Every student assigned to one of the nine teams in phase 1 and one representative from each of the nine teams on the four action teams (Excel spreadsheet)
- Well-designed website with consistent webpage layout
- Images/graphics that load quickly.
- Videos and podcast with appropriate content, design and sound.
- Students must be able to place text, videos, podcasts, PowerPoint presentations and cite resources on webpages.

- Students add to/edit each others' work and post comments on the work.
- History of add to/edit maintained for each page

Processing

- Posting/editing information on the wiki and linking to online resources (i.e. links to websites, using embedded code)
- Place original content on the website (i.e. text from Word, podcast from Garageband) and edit using the Wikitext/text editor as required.
- Create anonymous team member names to assign students to teams using the functions in Excel.
- Create master templates for designing the webpages to ensure consistent design
- Use wikitext (similar to HTML) and the text editor to edit/create webpages whenever the visual editor is inadequate.

Security

- Manage Wiki feature exports the entire Wikispaces website; backup whenever there was a major change or once a week on Mondays.
- Only Ms. Akmend and myself know the password for the website.
- Include Ms. Akmed as an organizer under the Manage Wiki menu. Grade 8 students are only members and contribute to certain pages on the website.
- Certain pages are locked using the feature under the page menu for each page.

Specific performance criteria to test functionality

The effectiveness of the website will be tested if the following conditions were met:

- a) a well-designed and consistent website
- b) appropriate content from suitable sources
- c) additions/edits by students must be possible and traceable.
- d) the wiki must be interactive
- e) Ms Akmed's webpages need to be locked so that students could not accidentally change those pages
- f) Ms Akmed provided access as organizer with password access.
- g) a regular method of backup

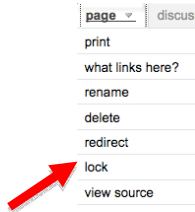
Justification of chosen solution

The wiki website is the best and most likely only solution that will provide a collaborative team environment required by the problem described in criterion A. It will give easy access to all of the grade 8 students to use from home and school and they can add text, videos, podcasts, images, files, links and code. Most important it is the only application that allows the students to add/edit each other's work and that all of the members of the team and grade 8 can view the development. It is also an environment that will allow for discussion relating to each page and track the history of the additions/edits.

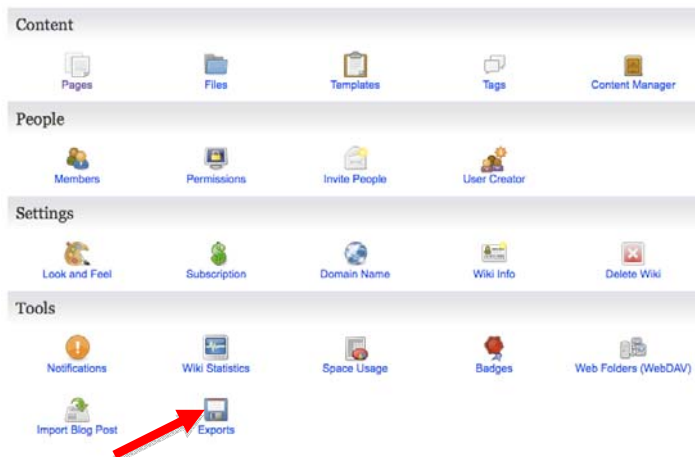
Ms Akmed and I met with the grade 8 ICT teachers. Ms Akmed and the other ICT teachers feel that Wikispaces will be very straight forward to learn and use with the grade 8 students once the website

is created. This will be the second time that a collaborative environment is being used in the school and the ICT teachers feel that it will be highly motivating for the grade 8 students to be involved because they have heard about it from the history students.

There was some concern about students tampering with each others work. However, it was pointed out that this is easily monitored because all work on the webpages is recorded in the history for each webpage and certain pages can also be locked.



The security features are also available. The wiki has an export function for backing up the website in HTML.



I use sites like Wikispaces and it has an excellent help menu if extra assistance is needed. There are also online tutorials (<http://www.wikispaces.com/site/tour#introduction>). All of the other software required (i.e. Garageband, Excel, Photoshop, Word, Firefox) for creating the project are available on my personal laptop. The access to the Internet in the school is of sufficient speed and there are enough desktop computers to allow access to the wiki website by the grade 8 students working during their ICT classes.

Word count = 335

5 marks

The analysis form is used. There is a clear reference to the scenario described in criterion A. The requirements specification and the specific performance criteria can be used to evaluate the success of the IT solution. There is a detailed justification why the IT solution was chosen with screenshots.