

# Web Site Evaluation: Student Perceptions and Impact

Mike Lopez  
Christchurch Polytechnic  
Institute of Technology  
130 Madras Street,  
Christchurch, New Zealand  
+64 3 940 8000  
mike.lopez@cpit.ac.nz

David Weir  
Christchurch Polytechnic  
Institute of Technology  
130 Madras Street,  
Christchurch, New Zealand  
+64 3 940 8000  
david.weir@cpit.ac.nz

Luofeng Xu  
Christchurch Polytechnic  
Institute of Technology  
130 Madras Street,  
Christchurch, New Zealand  
+64 3 940 8000  
luofeng.xu@cpit.ac.nz

## ABSTRACT

In this poster paper, we describe the feedback we received from students collected as part of a trial of a new instrument for Web Site Evaluation. The instrument is a questionnaire with 61 questions organised in seven scales. The instrument was trialled with 33 level five computing students. In addition to questions on the web site, we asked students about whether they believed they knew enough to be able to judge web sites, whether they found it difficult to judge the sites with our criteria, and whether they found this evaluation a useful exercise. Students believed they were able to judge web sites and could use our criteria. They also believed the exercise was useful.

## Categories and Subject Descriptors

K.3.2 [Computers and Education]: Computer and Information Science Education

## General Terms

Measurement, Human factors.

## Keywords

Web site evaluation, technology acceptance.

## 1. INTRODUCTION

Our project had its origins in work carried out by a third year computing student in which the student developed an evaluation tool for web sites [Jason Hsiao, personal communication, 2012]. Using this as a starting point, we created a pilot instrument that was more solidly grounded in theory and in extant standards such as the W3C accessibility guidelines. Our instrument has seven major scales.

We tested the instrument in a level five course in a three year computing degree. Students were asked to use the tool to evaluate three major Web sites (Microsoft, Vodafone and Snap).

We then used their evaluations to analyse the psychometric properties of the instrument. The instrument appears to have strong psychometric properties overall, but issues were found with some subscales. We plan to trial the instrument in other contexts and with a wider range of web sites. We also plan to develop the instrument further by refining the questions asked and creating simplified and extended versions.

Once the instrument is validated we will use it to inform the rubrics we use for web site assignments. The instrument may also have a wider use in industry. We plan to use the instrument as a research tool to investigate cultural and gender differences in perceptions of web sites. Finally, a key goal in creating the instrument was to encourage our students to think critically about Web sites and to help them develop professional judgement about what makes a Web site effective. We plan to evaluate how well this goal has been achieved.

There are several parts to this project. This poster paper describes the impact of the evaluation exercise on students.

## 2. METHOD

We asked students in a level five computing course to evaluate three Web sites with the instrument we designed. As part of this evaluation, we also asked students whether they believed they knew enough to be able to judge web sites, whether they found it difficult to judge the sites with our criteria, and whether they found this evaluation a useful exercise. Responses were coded on a five-point Likert scale and there were 78 responses in total.

## 3. FINDINGS

Most students believed they knew enough to be able to judge Web sites (Figure 1).

The majority were also able to judge the Web sites with our criteria (Figure 2).

Finally, most students found the exercise useful (Figure 3).

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Dr Michael Lopez  
Christchurch Polytechnic  
Institute of Technology  
lopez.mike@cpit.ac.nz

Dr David Weir  
Christchurch Polytechnic  
Institute of Technology  
david.weir@cpit.ac.nz

Dr Luofeng Xu  
Christchurch Polytechnic  
Institute of Technology  
luofeng.xu@cpit.ac.nz

**The project**

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**Sample and Data**

We asked students in a level 5 computing course to evaluate three Web sites with the instrument we designed.

As part of this evaluation, we also asked students whether they believed they knew enough to be able to judge Web sites, whether they found it difficult to judge the sites with our criteria, and whether they found this evaluation a useful exercise. Responses were coded on a five-point Likert scale and there were 78 responses in total.

**Findings**

Most students believed they knew enough to be able to judge Web sites (Figure 1).

The majority were also able to judge the Web sites with our criteria (Figure 2).

Finally, most students found the exercise useful (Figure 3).

**Discussion**

Most students reported that they found the exercise useful. One student commented "Evaluating other's creator (Website) is a good way of getting ideas for our own product and avoid the mistakes they have made."

Anecdotal evidence also suggests at least some students valued using the criteria. One student comment was "This form would be useful for our own project work".

However, we do not yet have sufficient information to address the question of whether we have achieved our objective of encouraging our students to think critically about Web sites and helping them develop professional judgement about what makes an effective Web site.

**Figure 1: Don't know enough**

Response	Frequency
1	10
2	25
3	20
4	10
5	5

**Figure 2: Difficult to judge**

Response	Frequency
1	15
2	25
3	15
4	10
5	5

**Figure 3: Found it useful**

Response	Frequency
1	5
2	15
3	25
4	15
5	10

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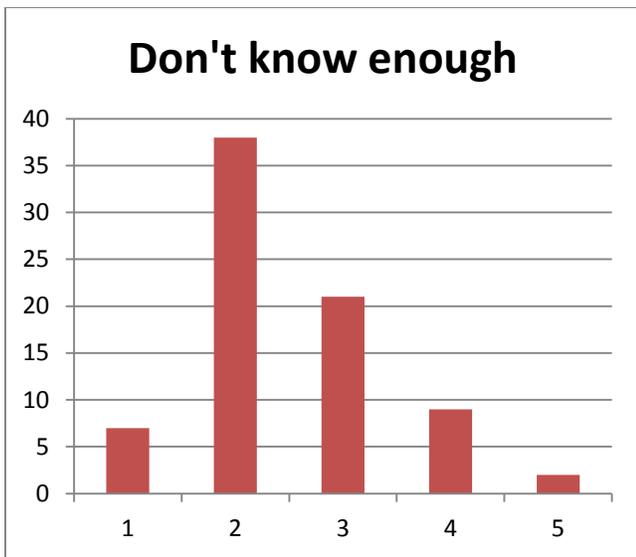


Figure 1: Don't know enough

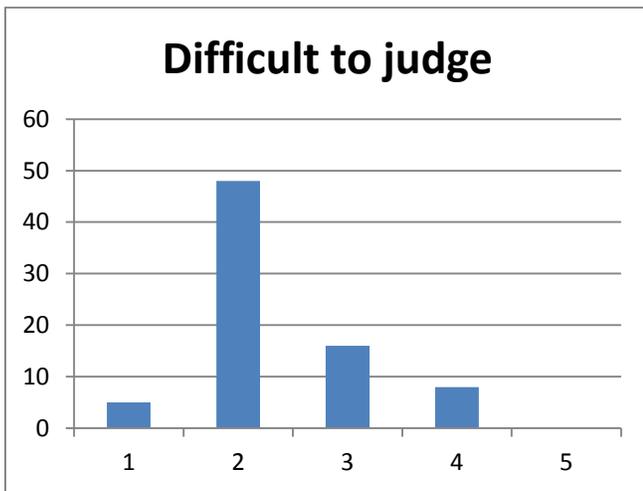


Figure 2: Difficult to judge

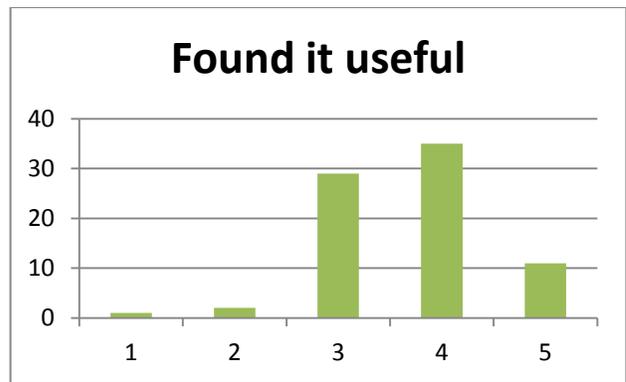


Figure 3: Found the exercise useful

#### 4. DISCUSSION

Most students reported that they found the exercise useful. One student commented: "Evaluating other's creation (Website) is a good way of getting ideas for our own product and avoid the mistakes they have made." Anecdotal evidence also suggests at least some students valued using the criteria. One student comment was "This form would be useful for our own project work".

However, we do not yet have sufficient information to address the question of whether we have achieved our objective of encouraging our students to think critically about Web sites and helping them develop professional judgement about what makes an effective Web site.