2011 年臺灣國際科學展覽會 優勝作品專輯

國家:South Africa

編號:110009

作品名稱

Colour Blindness

得獎獎項

二等獎

作者姓名

Nadia Nicole Barnard

Abstract

Purpose of Research

Colour blind individuals make up a large part of the population but are not usually considered. I aim to design an interactive guide that can be used when designing websites, social networking pages and various digital presentations to ensure that they are legible to colour blind individuals, by determining which colours generally confuse both red-green and blue-yellow colour blind people.

Procedures

I e-mailed my test, which consisted of 240 slides depicting every possible combination of the 16 basic web colours in the form of a frame, a heading-appropriate sized text and a paragraph-appropriate sized text, to a group of red-green and blue-yellow colour blind individuals, as well as an equally sized control group. I asked them to flip through the slides at a comfortable pace and note the slides that were difficult to read offhand, thus getting an idea of which colour combinations are not suitable for colour blind individuals, as well as the combinations that are not visible to those with normal colour vision.

Data

I wrote up my results using tables and stacked column graphs to determine which colour combinations were not visible to an unusually great number of test subjects. I then represented the information I collected in the form of a flash guide. This interactive guide allows one to choose a background colour from a wheel of 16 colours, and then be given a choice of appropriate text colours. The user is also presented with an example of the combination that was chosen, showing how the text appears on the

background. The guide is easy to navigate and understand, can be posted on the internet or e-mailed, and is not overly technical so it can be used by designers as well as ordinary internet users.

Conclusion

Colour blind people are easily confused by colour combinations which might seem clear to us. My hypothesis was proved as I was able to set up a guide that would make it possible for both colour blind individuals and those with normal colour vision to read the text on websites, social networking pages and digital presentations.

評語

- 1. 專題照顧到弱勢團體(color-blind)上網瀏覽網頁之需求,Good。
- 2. 若能增加實驗人數,實驗結果才有可信度。