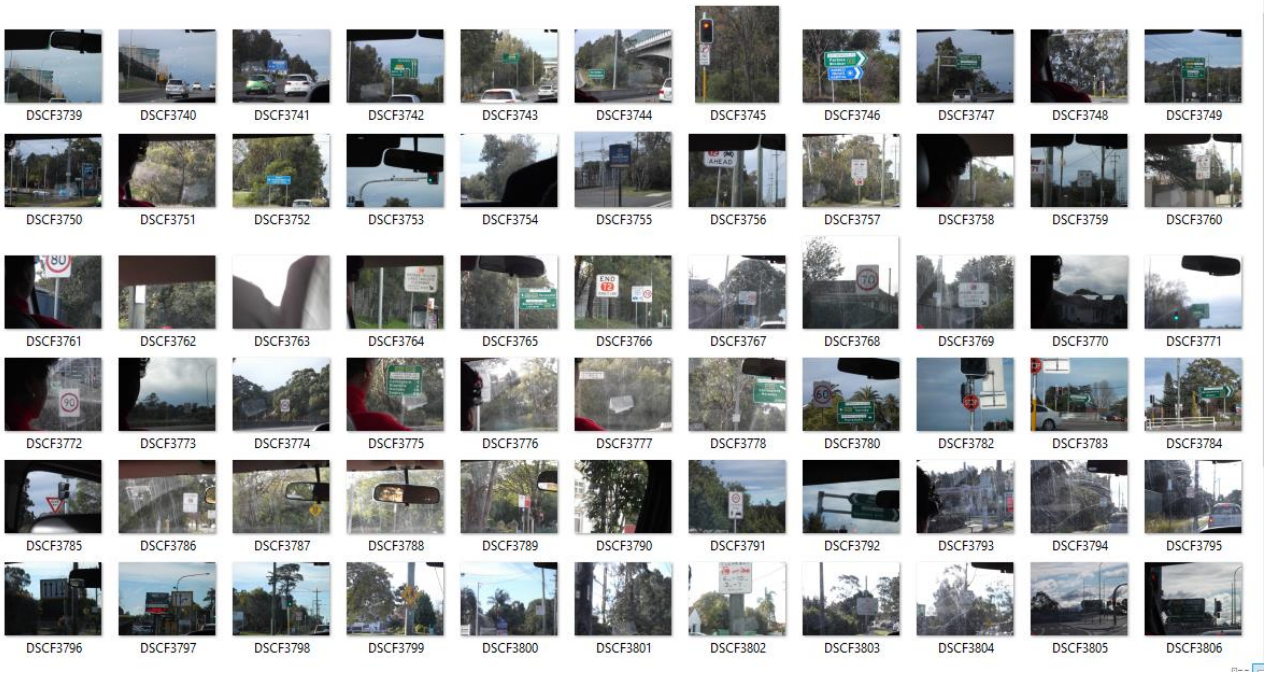
Log Book

Msgana Akele and Chelsey Karvon

13/5/15- In the beginning, we had a few ideas for our project. We started with one of our idea but it seemed as though others had already explored the area and realised that there was no further investigation for us to do on it. We asked our Science Teacher Stuart Garth, if he had any ideas for us and he said that he really would like someone to do something that involved eye charts and the environment. After much discussion and research we came to the final decision to investigate 'What is the best colour for road signs.'

22/6/15- Chelsey drove to Thredbo. On her way there and back she took around 100 photos of varies signs in the surrounding country side. This was gathering information for our project. The photos were going to be used to identify the main country background colour.

12/7/15- Msgana took the photos of signs on her way to church. In total she took 92 photo. She is using a total of 36 out of the 92 photos. These photos will determine the main urban background colour.

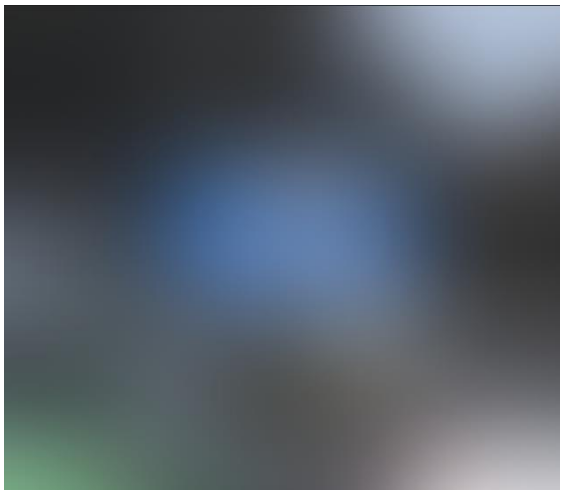


20/7/15- Both Chelsey and Msgana upload their photos onto their laptops.

21/7/15- We started selecting the images of the signs that determine the typical background colour of rural Australia. We then started experimenting with gaussioan blur. We started sorting through the photo into different folders so we could organise our images.

Christmas Yr 9G	Date modified: 12/6/2014 7:02 AM
Copy of Final Science Photos with no editing	Date modified: 7/22/2015 7:37 PM
Final Science Photos	Date modified: 7/22/2015 7:46 PM
Final Science Photos Exact Copy	Date modified: 7/22/2015 8:33 PM
geo	Date modified: 8/12/2015 12:11 PM
History	Date modified: 8/12/2015 4:41 PM
Science	Date modified: 8/1/2015 7:11 PM
Science Photos	Date modified: 7/20/2015 9:04 PM

22/7/15- We then guassioan blurred the images in Corel Photo Paint and used the eye dropper to find the 3 values of the RGB (red, green, blue) of the blurred images and recorded them. We then took the average all of our Red scores and took a number, we then did the same thing for our Green and Blue which will then give us an average colour of the Australian Country side. This was just a practice or test run for our final investigation. We finished organising our pictures into the different folders. We came up with how we are going to test the project.



24/7/15-We continued to guassioan blur the images and record the RGB of each image.

27/7/15-We continued to guassioan blur the images and record the RGB of each image.

28/7/15-We continued to guassioan blur the images and record the RGB of each image.

31/7/15-We continued to guassioan blur the images and record the RGB of each image.

3 /8/15-We finished guassioan blurring all of the images. We then looked at all of our RGB results and took an average of each from all of our results.

4/8/15-We made up 15 different eye charts with just the letters on them. We were experimenting with different methods of how to come up with the background colour of the eye chart which

represents the main country colour and the main urban colour. Our original idea of averaging the RGB didn't work because we realised that when you have similar numbers which you will when you get an average you will be left with a greyish colour which does not represent the country or urban colour.

7/8/15-We found a way to come up with our RGB values which represented the country colour. This is what we came up with.

We used the same method to come up with our urban background colour.

This process was all done with Corel Photo Paint.

10/8/15-We converted all of our RGB values into HSL. We then started to construct our eyecharts.

11/8/15- We finished all of our eyecharts.

12/8/15- We printed out all the charts/

13/8/15- we got a 102 by 153 cm white board and taped an A4 folder containing all the eye charts

14-24/8/2015- We tested all of our subjects in this time period.

17/8/2015- Started the report

18/8/2015- We made the consent forms

INFORMED CONSENT FORM
FOR YOUNG SCIENTIST RESEARCH PARTICIPANTS

Purpose of my research:
We are conducting a scientific investigation as part of the STANSW Young Scientist Awards. For our project, we are investigating which colour signs best stand out in the urban or country environment in Sydney.

If you participate, you will be asked to:
Read a series of three coloured eyecharts from a distance of 90cm. The eyechart will have 10-13 lines in which you will have a 5 second time limit for each line. How far along the each line you are able to read will be recorded.

Time required for participation:
Maximum time required will be approximately 20min.

Risks involved:
Headaches may be caused by trying to read the smaller print.

How confidentiality will be maintained:
Names will not be included in the results of this test and to preserve identity the subject will be given a specific code.

Statement from School Scientific Investigation Coordinator:

The Ethics Committee of ..... Redeemer Baptist School ..... has reviewed the risks involved in this activity and has deemed them as minimal / low / medium / high.

Permission has / has not been granted to conduct this particular activity as part of the student's STANSW Young Scientist project.

School Research Coordinator: Signed ..... Date 12/8/15

Voluntary Participation:
Participation in this study is completely voluntary. If you decide not to participate there will not be any negative consequences. Please be aware that if you decide to participate, you may stop participating at any time and you may decide not to answer any specific question.

Consent:
By signing this form I am attesting that I have read and understand the information above and I freely give my consent to participate or permission for my child to participate in this activity.

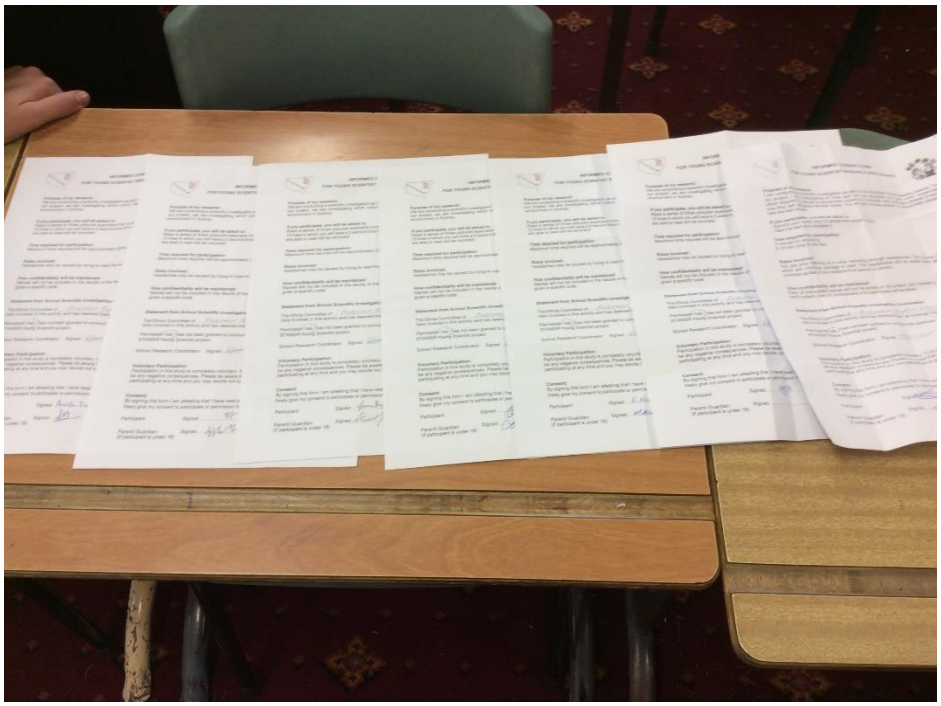
Participant: Signed ..... Date .....

Parent/ Guardian: Signed ..... Date .....
(if participant is under 18)

19/8/2015- Consent forms were handed out

21-25/8/2015- Worked on the documentation.

24/8/2015- Consent forms were returned



25/8/2015- Worked with another mentor to graph and analyse all our data.

26/8/2015- Worked on documentation

27/8/2015- Gave the report to a mentor to be proofread.

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