

CABRA

DOMINICAN COLLEGE



Demonstrating the Design Cycle

Year 9 Computing

C A B R A
DOMINICAN COLLEGE



Research

The purpose of the research stage is to identify the problem that is to be solved, and find out as much as possible about what a solution might involve, and what similar solutions already exist.

C A B R A

DOMINICAN COLLEGE



Statement of Problem

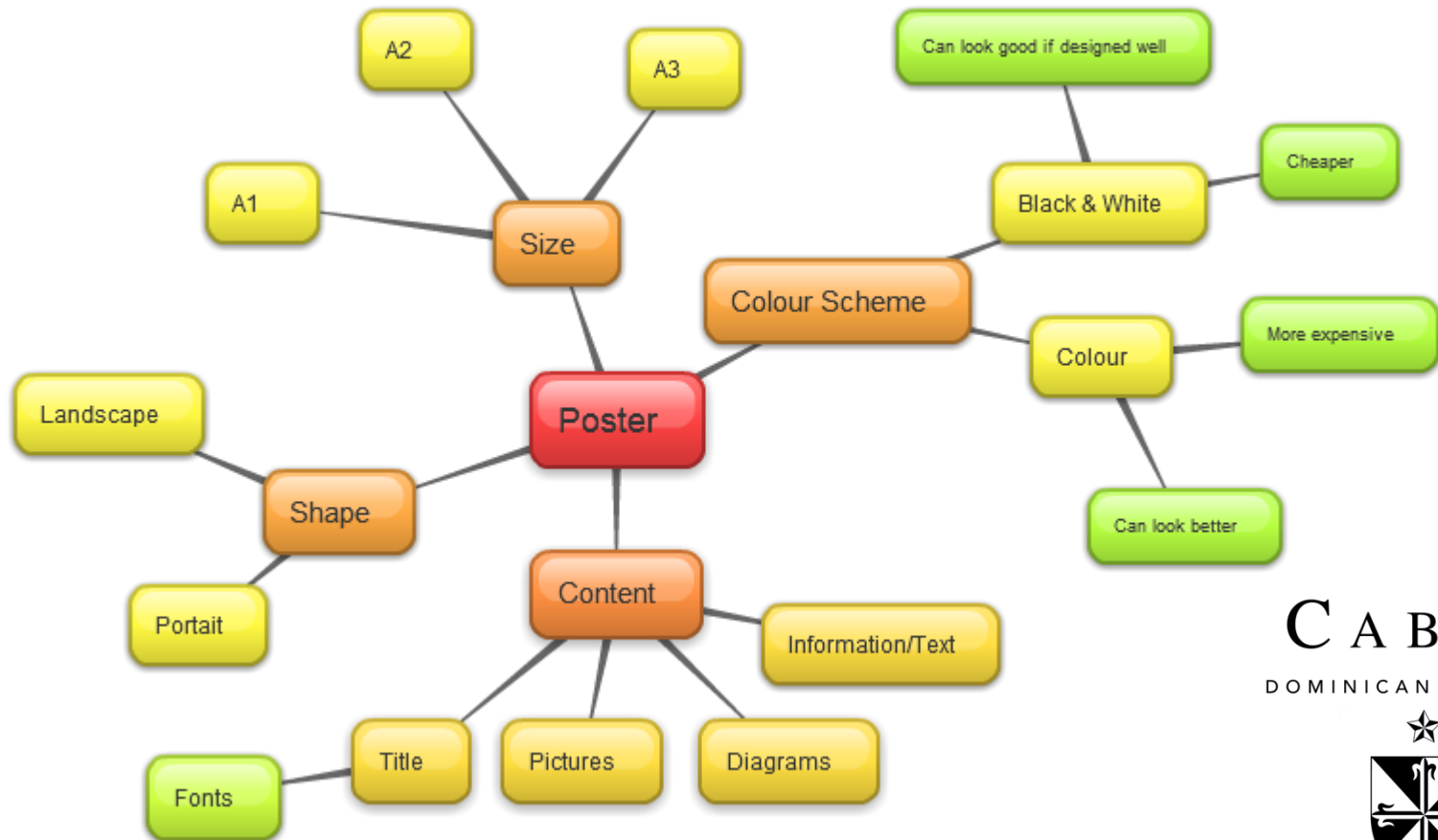
I will be working for my client, Mrs Hejka. Mrs Hejka has asked me to design a poster that explains the design cycle. Mrs Hejka would like to use the poster in her classroom, to help her students understand what the design cycle is all about.

C A B R A

DOMINICAN COLLEGE



Mind Map



CABRA
DOMINICAN COLLEGE



Product Comparison

For my research, I looked at several different educational posters. I noticed that most posters tend to be A2 or A1 size. Educational posters often contain a lot of information, but sometimes it can be hard to take it all in. I would prefer something that is a bit simpler.

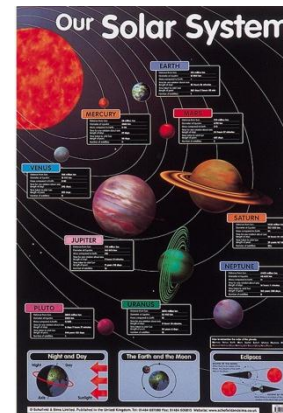


Good:

- Simple colour scheme is eye-catching but easy to read.
- Clear title shows what the poster is about.

Bad:

- Too much information makes poster hard to read.
- Not enough pictures.



Good:

- Big bold title is very easy to read.
- Colourful, but not overly so.
- A good amount of information.

Bad:

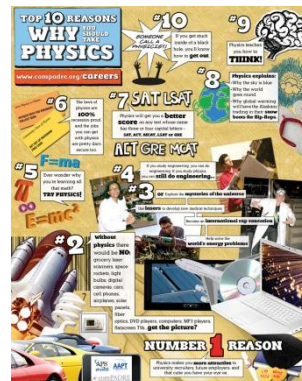
- Very hard to read any of the detailed information.
- Poster is confusing because there is not clear scale.

Good:

- Lots of good information.

Bad:

- Poster is too "busy"; way too many images.
- Impossible to read any of the text unless standing right next to the poster.
- Title is difficult to read and doesn't really stand out.



CABRA
DOMINICAN COLLEGE

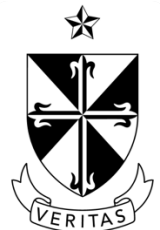


Design

The purpose of the design stage is to identify the needs of the client, and to try out different ideas before committing to just one. By the end of the design stage, you will identify an idea to develop further.

C A B R A

DOMINICAN COLLEGE



Interview and Client Notes

Before interviewing my client (Mrs Hejka), I wrote down several questions that I wanted to ask her:

1. What colours should I use?
2. What sorts of images should I use?
3. Is there a particular style that you want?
4. What information should I include?

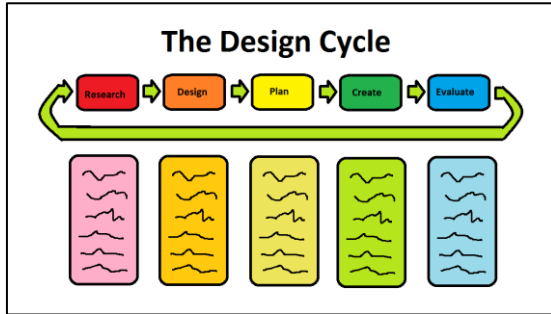
During the interview, I took notes regarding my client's needs. These included:

- Use either Cabra colours (Tan and Gold) or the colours of Saint Dominic (Black and White)
- Use images to demonstrate how the design cycle applies to all sorts of things (not just ICT)
- The style doesn't matter so long as the information is clear.
- Explain the five stages of the design cycle.

C A B R A
DOMINICAN COLLEGE



Feasible Designs



Pros:

- Reading from left to right is easy.
- Lots of room for detailed information.

Bad:

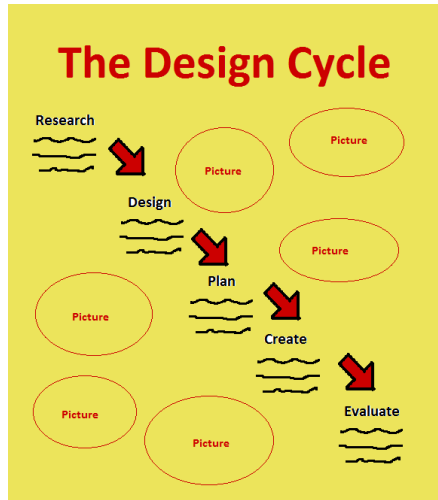
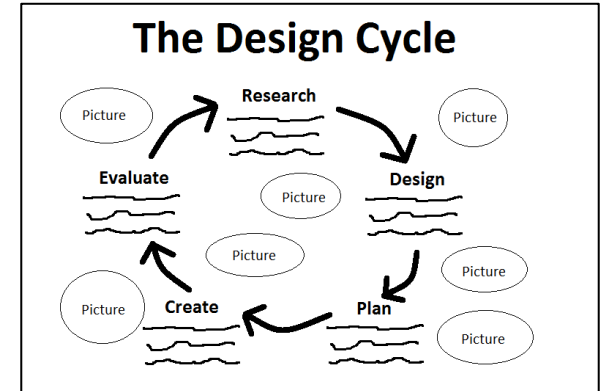
- Layout looks too clinical.
- Colours are vibrant, but don't meet client's needs.
- No room for pictures.

Pros:

- Black & White colour scheme is striking, grabs the eye.
- Shows design cycle as a circle
- Lots of room for pictures.
- Black & White is cheaper.

Bad:

- No colour might not be as interesting



Pros:

- Layout is easy to follow.
- Colours match those of Cabra.
- Lots of room for pictures.

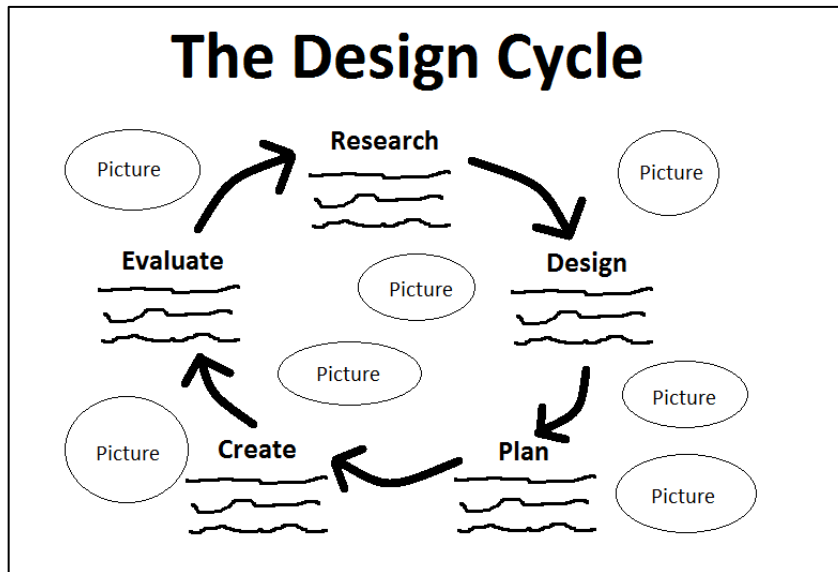
Bad:

- Doesn't show design cycle as an actual cycle.
- Colour scheme doesn't really stand out or grab attention.

CABRA
DOMINICAN COLLEGE



Select Client Solution



This is the design that I chose to create as my client solution. I chose this design because it will be inexpensive to print, it shows the design cycle as a circle (which I think will help people understand it), and it has lots of room for pictures.

I decided that I want this design to have a “hand drawn” look to it. This means that I will use fonts that look like handwriting, and all of the images will be hand-drawn industrial design sketches.

C A B R A
DOMINICAN COLLEGE



Plan

The purpose of the planning stage is to gather all the resources and tools that will be needed to create the client solution (product). Being familiar with the tools, and having all the resources in place, will make creating the product a much smoother experience.

C A B R A
DOMINICAN COLLEGE



Gather Resources

There were several resources I needed to find or create before I could begin creating my poster:

Fonts:

I found several hand-written fonts that I will use from urbanfonts.com:

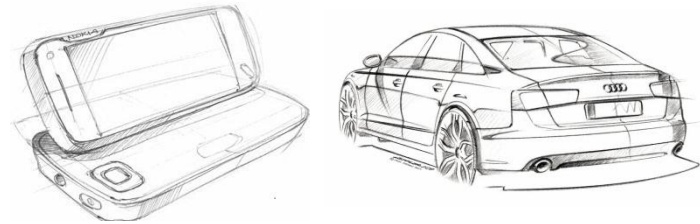
Sketch Rockwell
TIRE SHOP Abscissa

Poster Text:

I typed up and proofread all the headings and detailed information that would be used on the poster.

Images:

I used Google image search to locate a variety of industrial design sketches that I can use:



C A B R A
DOMINICAN COLLEGE



Research Tools/Programs

Program	Advantages	Disadvantages
Word http://office.microsoft.com/en-us/word/	Can edit text, do layout, images, different paper sizes, I already know how to use it.	Doing complex layouts can get a bit fiddly because the program isn't really designed for it.
Photoshop http://www.adobe.com/au/products/photoshopextended.html	Really powerful tools for editing images, can create lots of cool graphical effects quickly.	It can be difficult to move things around, and inserting text is time consuming.
Publisher http://office.microsoft.com/en-us/publisher/	Has all the features of Word, but is better suited for doing layouts, i.e. has customizable guide rulers.	I haven't used publisher much, and would need to practice a little bit.
PowerPoint http://office.microsoft.com/en-us/powerpoint/	Layouts are easy to do in PowerPoint, and I already know how to use it.	There are lots of features that aren't relevant (such as animations), and doing complex layouts can get to be too fiddly.

I chose Microsoft Publisher to make the poster, because of all the programs I had access to, it was the only one specifically designed for this. It has lots of features to make the job easier, such as customizable guide rulers, and groupable objects.

C A B R A
DOMINICAN COLLEGE



Learn Tools/Programs

Although I have used Microsoft Publisher before, I'm not exactly an expert on it. To help me learn how to use it, and solve problems when I encountered them, I used the following resources:

- [Microsoft: Getting Started with Publisher](#)
- [LearnFree.org: Publisher 2010](#)
- Publisher Help file (press F1)

C A B R A
DOMINICAN COLLEGE



Create

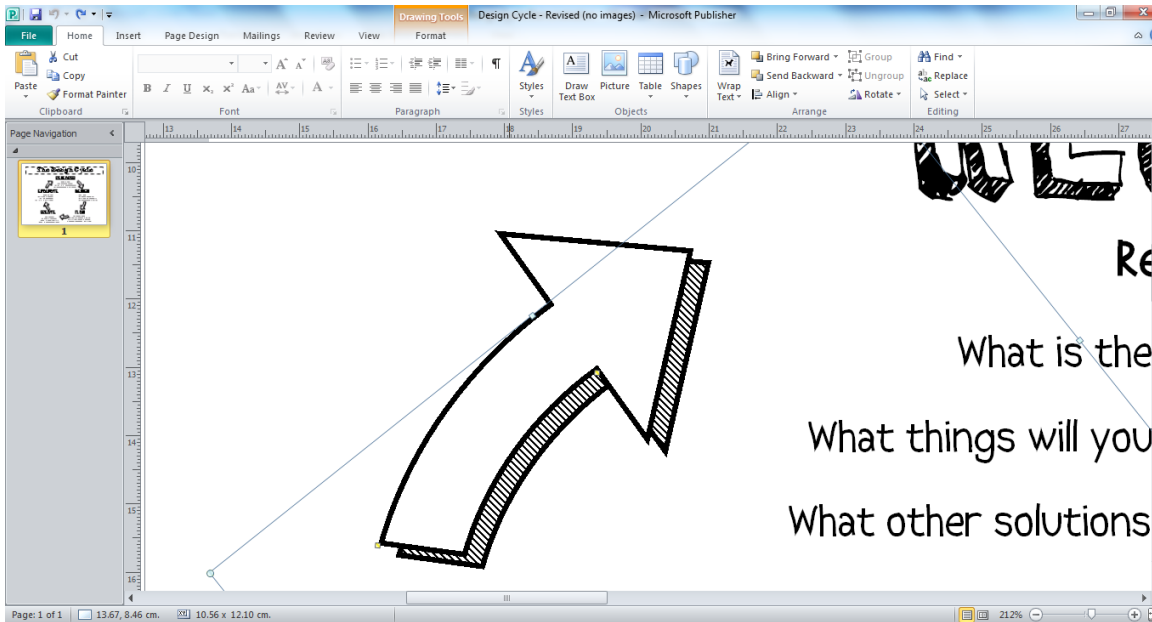
The create stage is the part of the process where everything comes together. This is where you actually make the product. As part of this stage, you document your progress, and make lots of backups, so that you can prove the work is your own.

C A B R A

DOMINICAN COLLEGE



Create Client Solution & Progress Journal



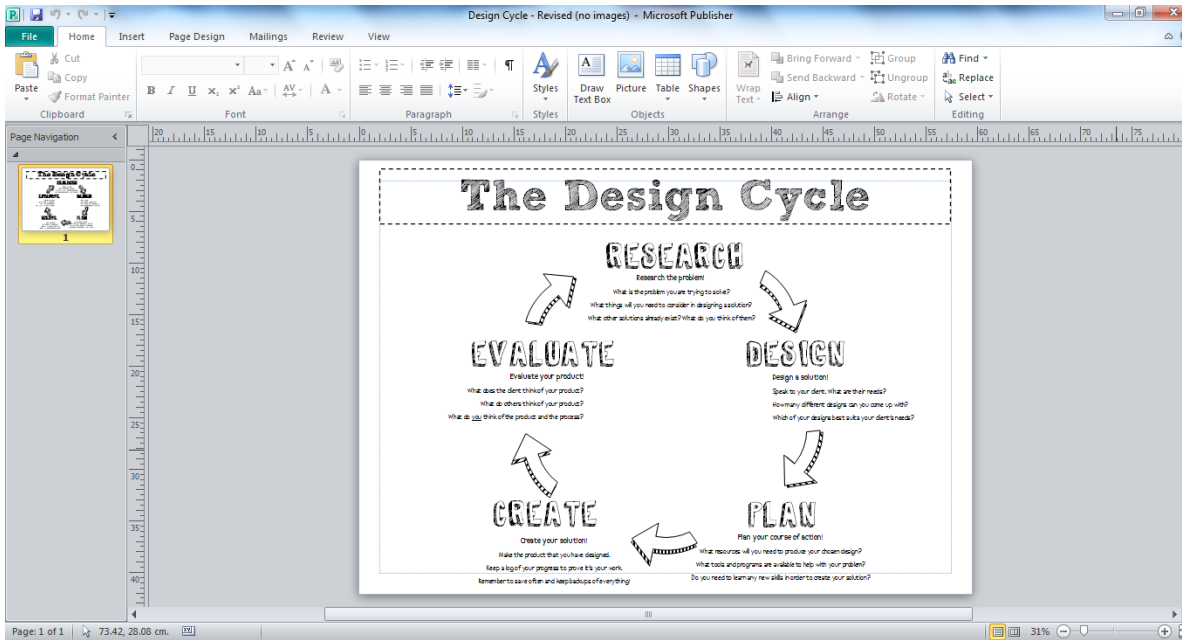
One of the first things I did was to create the basic layout, and the five arrows that connect the different parts of the cycle.

I tried to create a hand-shaded look similar to the fonts that I was using. To do this, I actually used two offset, overlapping arrows, with the back arrow shaded using a diagonal line pattern.

CABRA
DOMINICAN COLLEGE



Create Client Solution & Progress Journal



I followed my original planned design to create the basic layout and the arrows. Once this was done, all that was left was to add images.

I cropped and resized images as I added them to fit the empty spaces on the poster. I also had to recolour the images to black & white; even though they were all sketches, some of them had slight colouring.

CABRA
DOMINICAN COLLEGE



The Design Cycle



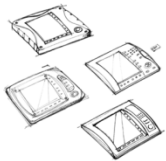
RESEARCH

Research the problem!

What is the problem you are trying to solve?

What things will you need to consider in designing a solution?

What other solutions already exist? What do you think of them?



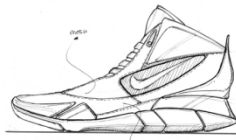
EVALUATE

Evaluate your product!

What does the client think of your product?

What do others think of your product?

What do you think of the product and the process?



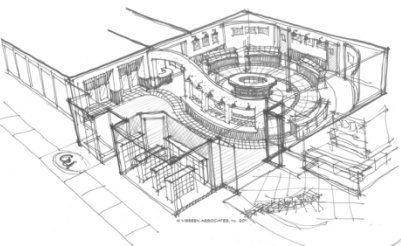
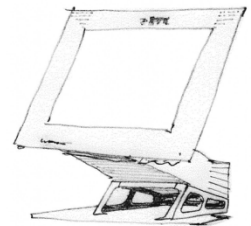
DESIGN

Design a solution!

Speak to your client. What are their needs?

How many different designs can you come up with?

Which of your designs best suits your client's needs?



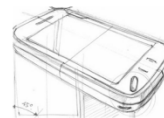
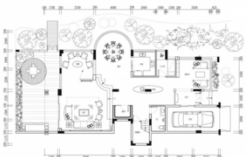
CREATE

Create your solution!

Make the product that you have designed.

Keep a log of your progress to prove it's your work.

Remember to save often and keep backups of everything!



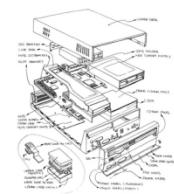
PLAN

Plan your course of action!

What resources will you need to produce your chosen design?

What tools and programs are available to help with your problem?

Do you need to learn any new skills in order to create your solution?



Evaluate

The purpose of the evaluate stage is to evaluate your performance, and consider whether the product meets the needs of the client. If the product is not perfect, the evaluate stage is used to identify a new problem to solve, and the whole cycle is repeated.

C A B R A

DOMINICAN COLLEGE



Survey / Product Testing

I showed the final draft of my poster to several friends and family members. I prepared a short survey that I used to evaluate the effectiveness of the poster. The questions I asked were:

- Can you tell what the poster is about?
- Would you be able to use the information on this poster to work through the design cycle yourself?
- Do you understand the significance of the images on the poster?
- What is your overall impression of the poster?
- Is there anything you would change?

Everyone who I asked responded to the survey positively. They all understood the poster, thought it looked attractive, and thought that the images and information were all relevant.

C A B R A
DOMINICAN COLLEGE



Presentation to Client and Feedback

My positive survey results convinced me that it was time to show my finished product to my client, Mrs Hejka. I presented the client with a digital copy of the poster in .PDF format.

The client was very happy with the product, because it addressed all of the needs and criteria that she had identified when I interviewed her.

C A B R A
DOMINICAN COLLEGE



Evaluate Product and Process

Overall, I was very happy with the final product. By going through each stage of the design cycle, I was able to ensure that I came up with a product that met all the needs of the client.

I think I could have asked more questions during the client interview. In particular, I could have asked for clarification about what style to go for. Although the client ended up liking the “hand-drawn” look, this was a risk. The client could just as easily have turned the idea down.

If I had had more time, I would have liked to create a colour version of the poster as an optional alternative for the client to use.

C A B R A
DOMINICAN COLLEGE

