The Formative Value of Peer Feedback in Project Based Assessment

By

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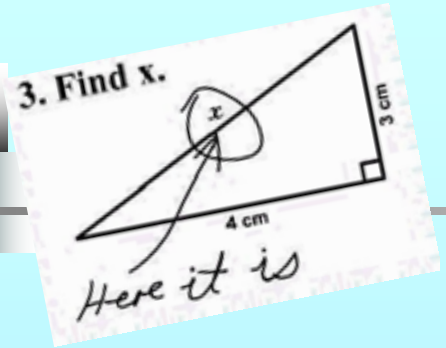
Peer Feedback Module

- This study aims to assess the impact of peer feedback on the learning outcomes of a project based module through the analysis of students' reflections provided on E-portfolios.

- Bloom's Taxonomy was applied to highlight any development in students' higher order thinking skills.



Summative Versus Formative Assessment

Assessment for Accreditation or for Learning purposes

Criterion-Referenced Grading and a "Learning for Mastery" Approach to grading

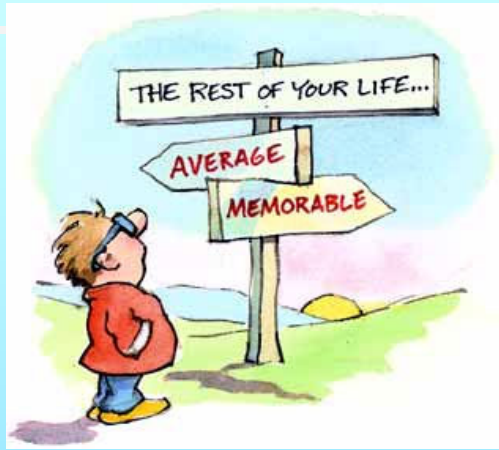
Maintaining Difference

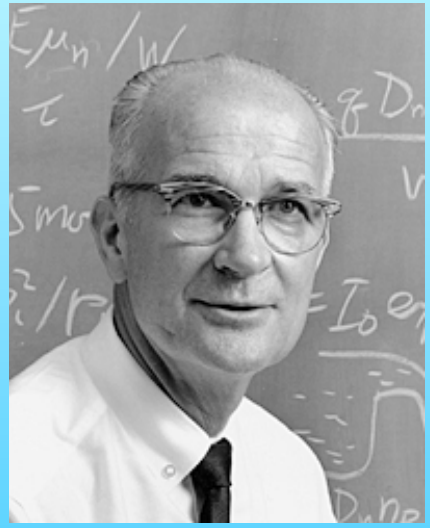
Maxwell's Demon

By repeatedly rewarding those with a certain skill set assessment can help maintain pre-existing differences

Genetic studies of Genius

The Terman Study of the Gifted

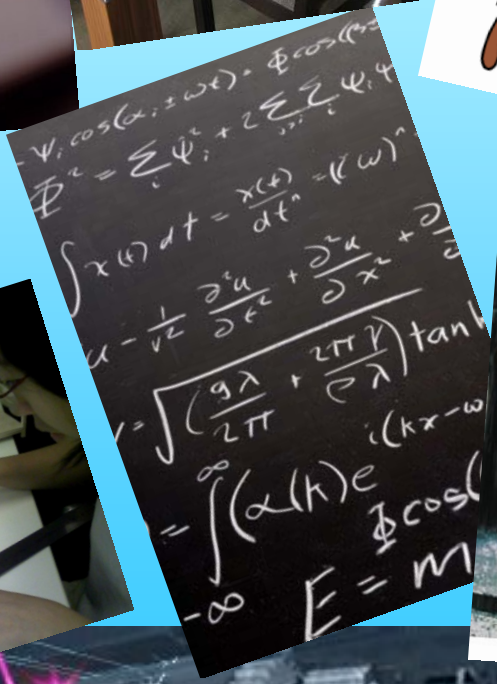




1,528 "Termites"

Screening overlooks two Nobel Laureates - Dr. William Shockley, for the invention of the transistor, and Dr. Luis Alvarez, for the liquid hydrogen bubble chamber

Multiple Intelligences and Learning Styles



The Ability to Express Oneself

E-portfolios were used to enable students to express their designs, concepts and ideas through whatever medium they felt appropriate to the project-based assignment

Mark BARRETT
(Student)

Journal
- Manage
- Timeline
- My Newsfeed

Motor bike

on Thursday, September 17th, 2009

Since we have been given this project I have been looking at various wheel types. I have chosen this as the first area to research as i think it is important for the wheels to reflect the theme of the bike i.e a scrambler or a cruiser style bike. I was thinking it could be difficult to get the correct type of wheel to suit the bike style so i decided to source my wheels first. Some that I have looked at include trolley wheels, wheels on childrens bicycles, mini and midi moto wheels, go kart wheels and mimi dirt bike wheels.

Images:

Tasks:

PN4105 (Motorbike Module)

Posting by: Mark BARRETT, at 11:04 PM

Lock Add Comment Add Sticky Note

« prev 1 2 ... 7 8 9 10 11 next »

Classes
PN4105/2B/1 PN4105 PN4005

Tasks
- Open: 1
- Complete: 1
- Marked: 0

Archive

2009
- December (27)
- November (15)
- October (2)
- September (7)

TAG maps

Access Denied

Posting by: Mark BARRETT, at 10:32 PM

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Welding of the frame

on Sunday, November 15th, 2009

I divided the frame into three different sub-assemblies for welding purposes and when they were completed I welded them all together. I used clamps and vise-grips to clamp parts of the frame down to the bench before welding the parts together to avoid distortion and twisting while the parts were being fully welded (This can be seen in one of the pictures).
I also left some of my parts extra long. This helped me as I was able weld a temporary brace in place while I welded the parts together at the opposite end and also while I assembled the sub assemblies to the main assembly.

The frame mainly consists of MAGS welding and it is fully welded at this stage apart from a couple of brackets for the rear mudguard.

Images:

Tasks:

PN4105 (Motorbike Module)

Posting by: Mark BARRETT, at 9:19 PM

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Frame Work

on Thursday, November 12th, 2009

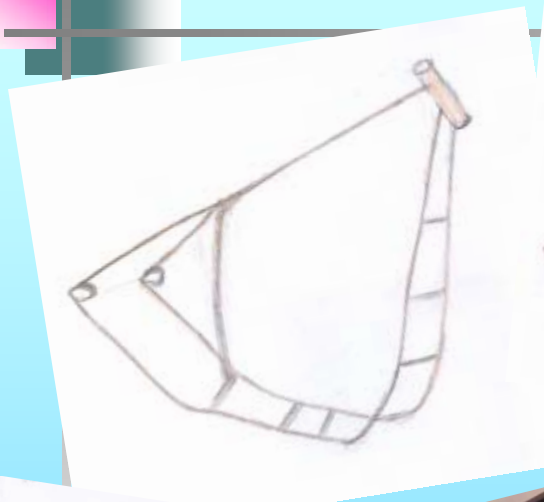
To make all the different components of the frame I firstly printed off the radius for each part scale 1:1 from my working drawing in AutoCAD. This helped me to get the correct radius for each piece when I was rolling them. I used the pyramid rollers in the workshop in the main building to roll all my parts to the required radius.

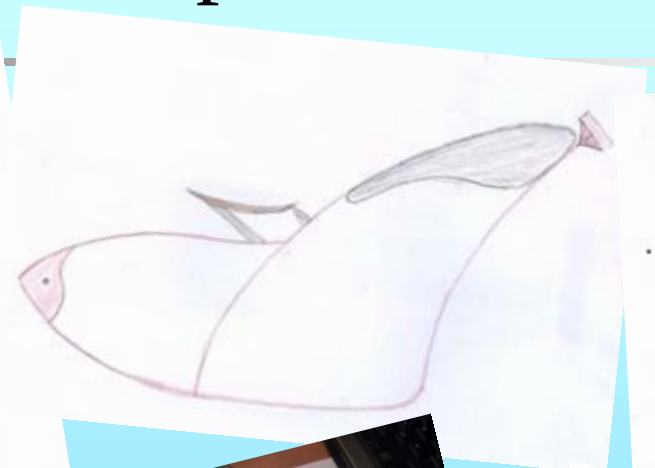
As all the different parts of the frame are curved or have a bend on them it was very difficult to assemble the frame. It was difficult to measure the frame and challenging to make sure that each component was being welded in the correct location.

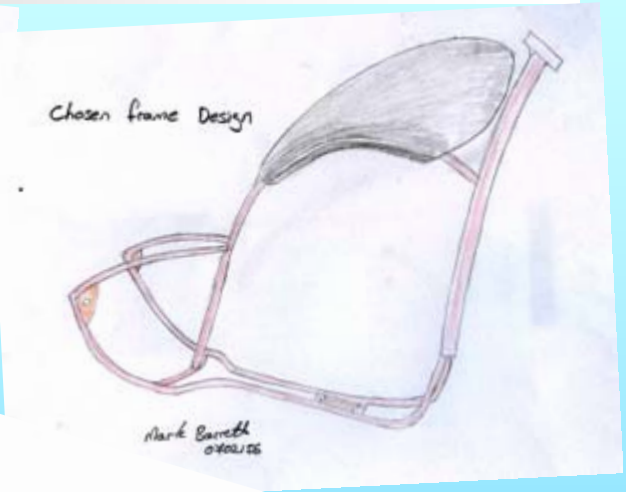
To overcome this I printed off the working drawing of the bike scale 1:1, now I was able to cut each part to the correct length and I was able to tack weld my parts together and then offer them up to the drawing to make sure that they were tacked in the correct position and also at the correct angle. You can see in the photo below.

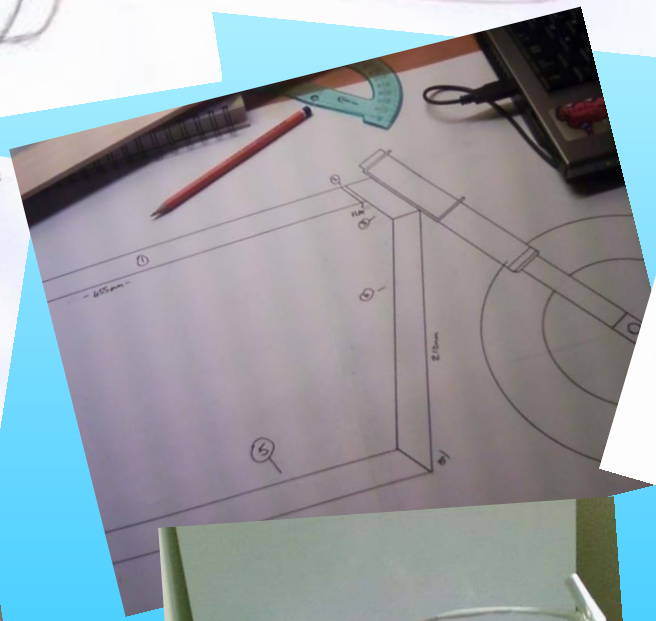
Images:

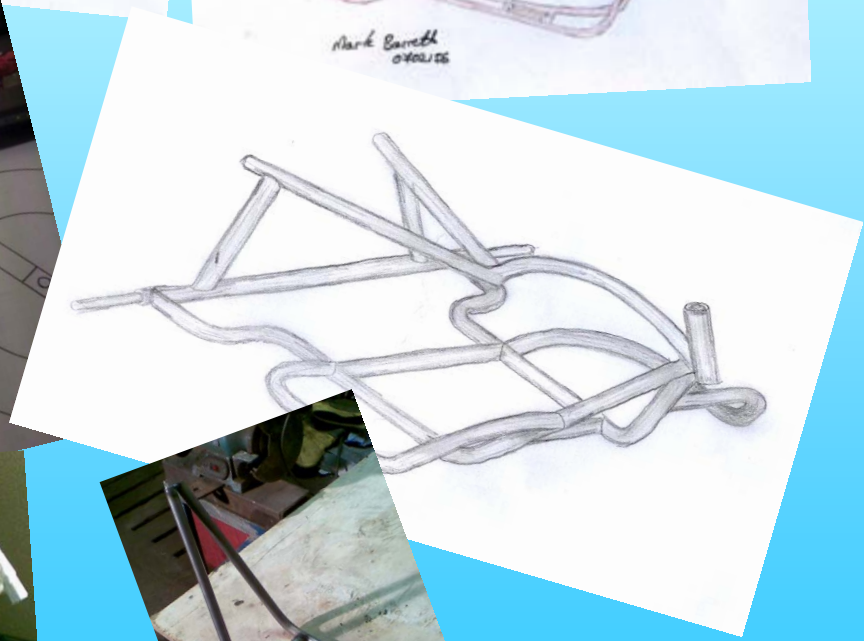
Development of Designs

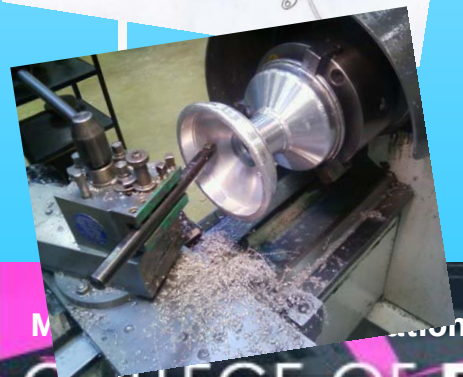












Hierarchical Levels of Bloom's Taxonomy

Evaluation – Shows the ability to judge the value of material for a given purpose based on definite criteria and rational. Includes decision-making and selection.

Evidence: Assessments, critiques and evaluations

Synthesis – Recombines the parts created during analysis to form a new entity, different from the original.

Evidence: Creative behaviour such as the development of new solutions.

Analysis – Breaks down material into its constituent parts so that its organisational structure can be understood.

Evidence: Breaking down, categorising, classifying, and differentiating.

Application – Uses information, principles, and theory learned to answer a question, solve a problem or complete a task.

Evidence: Conceptual activities such as application, classification and development.

Comprehension – Awareness of what the material means, allows one to demonstrate an understanding of the material based on prior knowledge.

Evidence: Demonstrate comprehension by applying comparisons and/or contrasts.

Knowledge – The recall of previously learned material, of simple facts or complete theories. Bringing to mind appropriate information.

Evidence: Definitions and outlines. Reproduction of requisite knowledge.

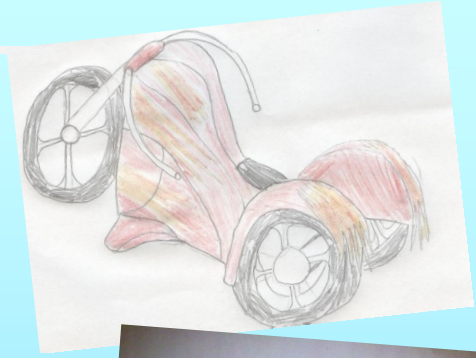
Evidence of Lower Order Thinking

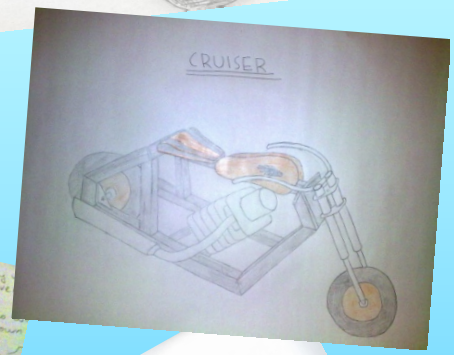
A common result of the thermal stresses induced by welding is a distortion or warping of the assembly *(Knowledge)*. To avoid this I made the welds with the least amount of weld metal (filler) possible and used a jig to support the frame. It is essential that the frame does not distort as the wheel axle needs to line up so that it will spin freely *(Comprehension)*. (Student 33, week 2)

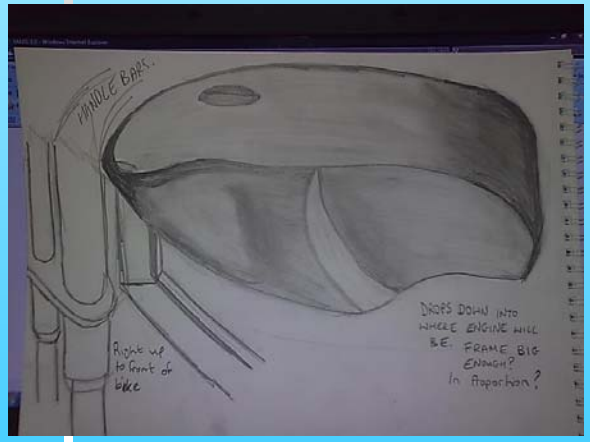
Application – evident in students' projects

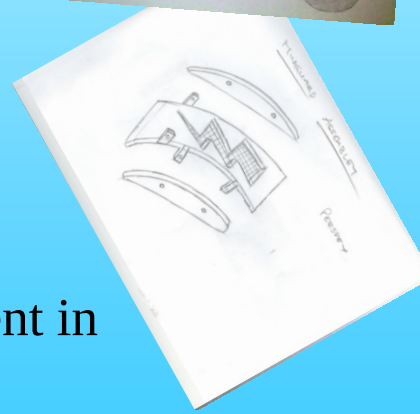
Evidence of Higher Order Thinking

While I agree with *Student X* that you should have an additional support for the back axle as drilling through the frame may weaken it, I think you should weld this on first and then drill it out afterwards. I don't think you will be able to get the holes to line up if you pre-drill it as *Student X* suggests. (*Analysis)*. (Student 24, week 4)









Synthesis – evident in students' designs

Evidence of Higher Order Thinking

Evaluation – Evident in student's assessment of their finished motorbike model and of the module.

Now that the bike is finished I think there are certain things I would change if I had the time. I think my own time management skills could have been a lot better on this bike project. I left the finalisation of my design too late and as a result I didn't have enough time to get the finish I would have liked on the bike. (Student 2, week 14)

I thought the peer feedback part to the module was very good, but I would have liked more feedback from the lecturer at times so that I knew how I was doing in the module. (Student 2)

Compared to Control Module

Greater engagement evident in peer feedback module and enhanced learning outcomes