

Hey there, my name is Adam Moore. I graduated in Mechanical Engineering from Jordanstown University of Ulster. I love my bike and TaeKwonDo; I am extremely interested in learning more about the academic benefits martial arts has to offer.

The following lesson is based on a class containing one SEN child with ADHD and some boys who are developing behavioural problems. After spending time with the child with ADHD I discovered that he had a strong interest in drawing. Often when the class were developing concept designs, the child with ADHD would draw exceptionally fast and produce good results, for that age group, he would often turn to drawing coke bottles (even though he shouldn't have had that in class) and such and again great results.

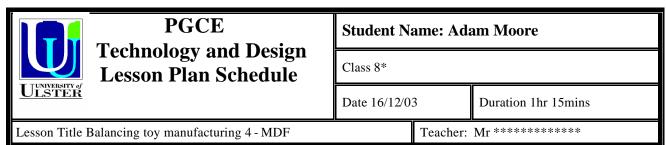
I decided to create a small extension (EXT.) that I could use when manufacturing to prevent troublesome behaviour arising during bottleneck situations. It also had the advantage of developing the spatial awareness skills needed for 3D sketching and getting them aware from using RULERS!

The EXT. was simply a small oblique drawing exercise where the task was to draw 2 simple shapes - a cube and a triangular prism. The task was made more personalised, by asking you to then sketch your initials. The extension also had for the more adventurous the opportunity to try some highlighting.

The EXT. achieved its purpose; I think 7 or 8 pupils ended up using the EXT. including the ADHD child and some behaviourally challenged boys. They engaged the task willingly and it seemed almost like a reward.

I had hoped that the pupils would realise that if there was a bottleneck and no other form of manufacturing could be proceeded with that they would take it on board to start the EXT. through their own analysis of the situation, this was not the case except for a couple of pupils.

NB// where you see '**** I have deleted persons names for privacy.



Lesson Aim

To further develop understanding of and confidence in workshop through manufacture of balance toy

Learning Outcomes: By the end of the lesson Pupils should be able to: -

- 1. Use a Hegner/fret saw confidently
- 2. Recognise poor and good quality
- 3. Work in a workshop environment with regards to safety and clothing
- 4. Make effective use of a file
- 5. Draw or know how to draw simple shapes in oblique

Literacy and Numeracy

Vertical Drill Discourage use of non technical terms i.e. the thing

Hegner Saw Correct all misuse of tech terms i.e. a saw is not a drill and vice versa Linisher Encourage logical thinking of time & task – the bottleneck situations

Oblique

Resources needed

Scissors Wood glue Hegner Fret Saw Vertical Drill

Linisher

Oblique sheets A4 paper

Risk assessment and Safety procedures and preparation

Use of machinery – high risk from drill and saw

Follow standard school policy and go over safety of machines and good practice in the workshop

Insist rules are read out quickly B4 they start

MDF is tougher on Hegner chance of slipping

Pupils Previous Knowledge

Prev knowledge is just introduction and getting a feel – this is still part of them finding their way in the w/shop Drawing EXT. class the drawing is now not alien although little practise has been exercised the class are quite able and I expect them to produce reasonable results

Key Skills, Concepts and Attitudes

Pace, accuracy.

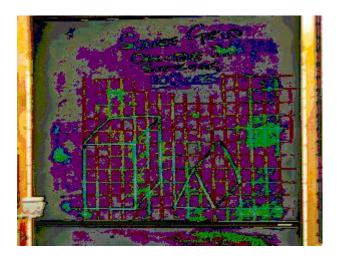
Concentration, Follow methods given

Develop ability and confidence to work in a manufacturing area

Developing spatial awareness

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PGCE Technology and Design Lesson Plan Schedule: Sheet 2		Name Adam Moore		Class 8*	
		Title Manufacture 4 Bal Toy - MDF		Date 16/12/03	
Time	Content		Methods		
9:00	Initiation; Maintain control Watch ***** ***** ***** *****		Insist on order b4 entering workshop. Be firm but do not shout especially at Nathan (Judge how firm to be with the class from their behaviour outside the door). Provide oblique drawing as an EXT. and preventive strat w/***** encourage more difficult tasks i.e. a house Revise quickly how to draw in oblique – use grid on board Refer them to page 22 in 'Book 1' Use simple recall questions to revise last week but also		
9:15	Revise Filing for a smoother finish due to the shape being "rough off the saw"		as a controlling method for order. Show a warding file and ask what it is What is it used for? ON what materials can we use it? How do we use it? – get a pupil to demonstrate – let three attempts go (possibly a few more – judge on time)		
	Visual stimulus – Diff between good and bad		Show the diff between good and bad (poss. use Maggie from other class)		
9:20	MDF cutting out and gluing on		When 10 are at this stage Gather them and while demoing the process ask Higher order like 'How do you think we could' etc This should be revision as I prepared them for this 2 weeks ago – Instruct one Hegner for plastic and one Hegner for MDF		
	They work		Supervise		
	Watch for miss-order off task behaviour ***** ****** messing with **** The girls not doing anything		Encourage the oblique – make it a competition		
	EXT. Oblique		As prepared at start of class encourage 3D drawing of initials		
	Dismissal		Instruct it's a group effort to tidy up Order class Thank them or show disappointment Instruct on safe passage to next class (Merry Christmas)		



This shows the setting up of the EXT. As a class we developed how to draw in oblique using a grid, unfortunately you will have to forgive my shaky hand.

We applied the rules, laid out in their workbooks, and I would ask the class to guide me to the next point – I tried to include the non-participating pupils with "Are they right?" etc.

Here is the actual EXT. again you will have to forgive my camera shake!

You can see the main elements and the personalised initials and the further EXT. of highlighting.

