SEN Lesson
Technology and Design

Hello, my name is Victoria McAuley and I graduated in 2003 with a BSc Hons in Technology and Design.
I am currently completing Post Primary PGCE – also in Technology and Design at Jordanstown.
I selected SEN as my extension subject because feel that schools involve more than just teaching and learning – I think it's important to be aware of the difficulties pupils may experience in their schooling lives - whether it be learning difficulties, child protection needs or pastoral care. I feel SEN is extremely relevant in today's society and important for myself as a teacher to understand.

Example Lesson

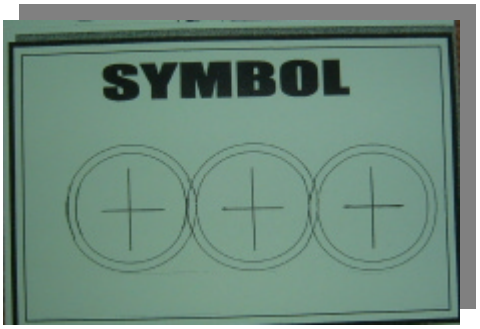
The lesson I have selected for this task, is that of a Gears and Mechanisms class, with low ability pupils in year 12.
I found it very challenging to get across the main sections involved in teaching gears, and the low ability pupils found it very difficult to connect the sections together. For example for every separate gear, there are 4 or 5 different sections to learn –
First of all the pupil must **recognise the gear**, then **recall the name** of the gear, and connect the **symbol representation** of the gear and finally be able to verbally **describe the gears** function.
I felt that with the low ability class this was too much information to connect together, so started thinking about ways to make the lesson more understandable and attention-grabbing.

Learning cards

I decided to devise learning cards that would help the class to connect the sections, whilst also being interesting and challenging – i.e. turning the lesson into a game situation.

Learning cards

In order to assist the pupils I decided to brightly colour co-ordinate each section – i.e. all the 'DESCRIPTION' cards are yellow and all the 'REAL VIEW' cards are red, and so on.



The pupils worked in pairs so that they could discuss their thinking and work the task out together. Each pair were given a pack of 32 cards and had to arrange them into 8 different rows (they were helped by the fact that there should be one of each colour per row).

The class really enjoyed this task, and started to compete against each other to see who could finish1st, and without trying they began to learn and connect areas together.

I feel the cards offered focused entertainment into a subject area that is generally theory orientated and quite mundane.

PGCE Technology and Design Lesson Plan Schedule	**Student Name Victoria McAuley**	
	Class 12D	
	Date 11/11/03	Duration 80mins
I Mechanisms - Gears	Teacher Mr. Rea	

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T ete the mechanisms section on gears and recap the section using the gear 'match up' cards.

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

1. Connect the symbol and real view of the gears
2. Draw the symbols for gears and gear trains
3. Recognise the connection between the description and name of each gear
4. Think of a real life use for each of the gears

Literacy and Numeracy

RPM, simple gear trains, bevel & worm gear, rack & pinion, shaft, idler, pinion, meshing

Resources needed

Gear worksheets x20, match up cards x 10, models of bevel, worm and rack & pinion gears.

Risk assessment and Safety procedures and preparation

Ensure class rules are sustained throughout the lesson.
Make certain that the gear models are operated in a safe and correct manner

Pupils Previous Knowledge

pupils have an adequate knowledge of basic mechanisms and gears – but they are new to gear ratios
Some weaker pupils may have difficulty connecting the description to the symbol etc

Key Skills, Concepts and Attitudes

The pupils should understand the relationship between the different types of gears, and how they slot into the Mechajnisms section.
Class must understand that the mechanisms section is important for their exams and can also be used in their project work.

Homework

None