ZORIN POST PUMP - DESIGN TECHNOLOGY

Student Activity 1

Phil's idea involved an innovative new pump for a bicycle, Using the case study about the ZorinPump and the UK Intellectual Property Office website: http://www.ipo.gov.uk:

(i) List of requirements that Phil's new invention, the ZorinPump, had to satisfy to be successful in his bid to secure a patent.
(ii) What was special about the ZorinPump that made it different from its competitors? What did Phil claim was innovative about his product?

Teacher's notes Activity 1

Working through this exercise will demonstrate the students' knowledge and understanding of how the existing technology was changed sufficiently to enable Phil to get a patent on his product and the criteria Phil had to meet with his product to ensure success. This activity will encourage students to use the UK Intellectual Property Office website and gives them an idea of the numbers of patents which are available on-line. The students will need to develop their ability to search for patents on the website because they will need to find Phil Robinsons patent to identify what he claimed to be inventive in his patent application.

Student Activity 2

The ZorinPump already has its own identity but consider yourself as the designer with the brief to "design an advertising logo and associated graphical images for the new ZorinPump". In order to develop the logo/image you will need to consider:

- The audience
- The function of the pump
- The name
- Your personal ideas.

Show in your ideas how these considerations have affected the appearance of your design. In addition, use the information from the UK Intellectual Property Office site on what constitutes a trade mark http://www.ipo.gov.uk/tm.htm Remember you should avoid names or logos already registered by other companies.

Teacher's notes Activity 2

The students will be expected to design an advertising logo for the pump. They will need to check on the UK Intellectual Property Office website that the trade mark would be acceptable for registration and that no-one else has already registered the name in the UK. They will also need to ex-plain what their target audience is, why they chose the logo and how and where they would market the product.

Lesson plan Design & Technology/Technology Studies Suggested lesson structure [45 minutes/one hour]

Lesson objectives

- For students to understand the product and the innovation behind the pump.
- For students to recognise that the physical properties of materials affect the performance of products.
- For students to develop their own ideas in response to the case study information.

Homework

- To find an advert of a relatively new product and from it draw a simple sketch to show the product as clearly as possible. Students are to imagine that the product needs redesigning. Under their illustration students are to add four noticeable changes to its shape and appearance so it is ready for its re-launch after initial sales have tailed off. The students should ideally use a product which shows new technology. Students could create on an A3 sheet a selection of fabric swatches/images/photos that give a feel to the type of design the product will be.

Starter

- Sports brainstorm — what do we imagine when we think of sport and new technologies do we think of — class discussion with results on a board.

Main

- Case study on the pump. Explanation of the invention, what did we have before and show how the technology has moved forward. Examples of other pumps could be brought into the class to show the move in technology.
- Discussion leading to completing Activity 1.
- Discussion of findings as class exercise leading to Activity 2.