

D&T at Balcarras



Subject	Year	Specialism
Design and Technology	Year 12	Product Design

Project

A Level NEA Project

Content (Intent)

Prior Learning: GCSE NEA and Y12 Mock NEA project

This is the beginning if the real NEA project that is worth 50% of the overall A Level course. A range of starting points are given to the students and they mindmap a range of design opportunities to identify a problem to focus on. This part of the project links with the identifying and investigating design opportunities (AO1) section of the AQA specification. From this point a range of research methods are implemented with primary research encouraged. Client interviews (to establish needs and wants), product disassembly and analysis are all carried out. All work is recorded in a PPT document. Students work towards a completed design specification supported by the research they have carried out. This will then be used to drive designing and idea generation.

Future Learning - D&T theory for exam prep. Degree courses in Engineering and Design/Apprenticeships

How will knowledge and skills be taught (Implementation)

Mind mapping to help establish design opportunities

Context page - initial research into the problem area

- to focus the project **Research plan** – project planning to identify the
- research areas students need to focus on
- Client interview and location visit to establish the problem and understand the wants and needs of the
- gain insight into the problem and to identify opportunities. Primary product analysis and disassembly is encouraged

Product analysis – looking at a range of products to

- **Initial specification** to consider the success criteria for the product
- Other research areas materials, mechanisms, ergonomics and anthropometrics, facts and statistics linked to the theme of the project.
- Final design specification using ACCESS FM to establish measurable success criteria for the final product

Graded examples are shown in lessons and tutorials given to ensure that students understand the AQA specification and can produce work of a high standard.

Assessment:

Student work is marked at key intervals to ensure good progress. Verbal feedback as well as self/peer assessment is used during lessons. A more formal assessment is carried out at the end of this project section. Detailed general feedback is given so that students understand the level at which they are working and how to improve.

How will your understanding be

assessed & recorded (Impact)

Main areas of assessment:

Two key sections are assessed in this part of the project:

- Identifying and investigating design opportunities (20 marks – AO1)
- Design brief and specification (10 marks AO1)

How can parents help at home?

Parents and carers can ask to view their child's work and offer feedback on their design ideas. Students will need client feedback throughout the project so it is great to get parents involved.

Helpful further reading/discussion (including Reading and Vocabulary Lists)

Reading A Level AQA Revision Notes Text Book **Balcarras Product Design Pages**

https://www.technologystudent.com/ We have many product design books available in the department so please encourage your child to come and have a look!

Vocabulary Context

Client Analysis Disassembly More key vocab can be found on the VLE

Careers Links

Product Design Graphic Design Furniture Design

Art and Design careers

Careers in Engineering (Design Engineering, Mechanical Engineering Project Management