## **DT A level Product Design (EDQUAS)**

- The A level structure: Take some time to read over the <u>EDUQAS A level specification</u> and <u>course</u> <u>details/overview</u> from the <u>EDUQAS website</u>. Looking at the SEVEN headings of the subject content in the specification, investigate and write at least one paragraph that defines each of the seven topics listed.
- Design process: Refresh your understanding of the 'double diamond' design approach/process (as covered in the Taster session) and the Framework for innovation from the design council website. Focus upon, make some notes on how this may influence/steer your approach to responding to a design challenge/designing as you approach A level
- NEA: Read through a few times, the <u>NEA walkthrough provided by EDUQAS</u>, make notes to understand what is expected of the structure and format.
- CAD: The OnShape CAD software is cloud based and available free to students if they sign up for an educational account and use their school email address. Please create an account and practice/get to grips with the CAD package using the online tutorials as the ability to design and model representations of products with this software will be important during A level studies.
- Sketchup is also available for free (there are paid for subscriptions too) which is also worth getting to grips with as a design tool to support A level
- Design approaches: Read the seven different PowerPoints that relate to <u>Building ideas From Planning to Conception</u> (on the EDUQAS WEBSITE). Make appropriate notes that may be useful in your future studies
- Design/designers: Look at <u>DESIGNERS</u>, <u>DESIGN MOVEMENTS AND COMPANIES</u> (on <u>www.technologystudent</u>). Select a range of at least 3 designers to investigate with their notable products and compare/discuss their success. Additionally, to the 3 designers you select make sure you understand the impact and importance of:

Philippe Starck Alessi Dyson

Subject knowledge: Look at and work through numerous PDF units in the A Level D&T Notes and worksheets (on

- EDUQAS website) This resource can be considered a good 'starting' point to begin to understand aspects of the subject specification content and possible examination preparation.
- Design timeline and movements: Find out about the timeline (dates), examples, 'ethos' and notable designers of TWO design movements/styles that inspires/interests you (not necessarily on the list below), OR TWO of the following design movements. This website may help get you going: A Timeline of Design History (wordpress.com)

Art Deco	Art Nouveau	Bauhaus
De Stiji	Memphis	Any modernist style

- Research what 'Anthropometrics' and 'ergonomics' are and how they are different. Find at least two examples of products that are 'soundly designed (comfortable to interact with). There is starting information from the Health and Safety executive here: <a href="Ergomomics and human factors at work a brief guide (hse.gov.uk)">Ergomomics and human factors at work a brief guide (hse.gov.uk)</a>
- Design opportunities: Look at <u>'finding a problem to solve through design'</u> (on <u>www.technologystudent.com</u>) .... this is intended to help students start to consider/investigate opportunities for their own design (project ideas). These usually come from a problem/context or situation. Also, consider clients/end users for products. One option is to revisit some of the GCSE NEA 'contexts' that could trigger some design activity. This should NOT be 'what can I make' BUT looking at the 'who/what/why/where' of potential challenges to tackle.
- ➡ End users/clients: Linked to the design opportunities task above -create a potential 'end user' or 'client profile' that may be helpful in your NEA. look at <u>Building a Customer Profile (technologystudent.com)</u> to help and you may find <u>Developing a Customer Profile (technologystudent.com)</u> helpful too.
- Resources and materials: Find the name of a local (ideally):

Timber supplier	Plastics supplier	Metal supplier	Recycled/reclaimed/scrap items
/timber merchant			supplier/schemes (not scrap yards)

Using the above information, create for your own use, a 'mini directory' of material/component suppliers of new and recycled items. It is essential the suppliers are as local as possible and can deliver. Also, collect from appropriate showrooms/suppliers (with permission) a selection of product brochures and catalogues that may be useful reference in studying/designing products.