General Certificate of Education
Design and Technology: Product Design 3D

PROD2

Report on the Examination

2550

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General

Overall, the quality of work for PROD2 is generally similar to previous examination series. The very best work was seen where candidates took risks and tackled more creative, imaginative projects. Unfortunately, AS projects tend to follow a 'formulae' and in some centres, this can mean there is little to distinguish between candidates. At this level of study, a more individual approach is desirable in order to prepare candidates for A2 and beyond.
The majority of centres adopt either a single project or two to three project approach. In the latter, candidates benefit from experiencing a range of material areas which can support theory teaching for PROD1.

Administration

The majority of centres deal with all aspects of administration promptly and moderators receive work in good order and by the published deadline.
More centres are beginning to make use of cloud based storage and provide moderators with access to download e-folders. In the majority of cases, this worked well but centres need to ensure that work is saved as a simple Powerpoint or PDF file. In a small number of cases, moderators could not open files where specialist software might have been used. Some centres presented work via websites but these occasionally did not work or were very slow for moderators to access, delaying the moderation process.

1. Investigation and Clarification of Problems

It is pleasing to note that in this series, candidates seemed to present their investigation work in a more concise way. The best candidates focussed their work on primary sources such as; disassembly of products, testing and measuring components, client interviews and focus groups. It is especially pleasing to report that questionnaires seem to be almost a thing of the past. Many candidates are making effective use of social media to identify the need for their products and user requirements.
Specifications continue to be a problem area with most lacking adequate design criteria to evaluate design ideas and the final outcome against. This often leads to quite superficial evaluations.

2. Development of Design Proposal

Most candidates produce at least a good range of design ideas. The best examples make use of their research to inspire design concepts, often taking an element of an existing design or a feature observed in nature or the built environment as a starting point. Many candidates are making excellent use of CAD to communicate their designs. Where CAD is used, we often see some very good dimensioned drawings and artist impressions. We are starting to see more modelling used as a design tool as opposed to a hoop to jump through. The best examples included photos of their models which were then sketched over and annotated to explain additional details.
At AS level, only a relatively small number of candidates carry out a thorough investigation of appropriate materials and their associated construction methods. The vast majority only consider one or two ways of making their products and rarely explain their choice. Centres sometimes over rewarded this section of the project with moderators reporting the lack of practical investigation as the source of discrepancies between their marks and those of the centre.
The majority of candidates produce a step by step manufacturing plan which details the materials, tools and equipment to use. The best manufacturing plans also consider health and safety, and quality assurance.

3. Making/Modelling

As in previous series, the quality of making is varied. Where centres have focussed upon one or two projects at AS level, the quality of outcomes is generally better than in centres where multiple projects are tackled in a 'portfolio approach'.
The majority of candidates record the making process and final outcome with good quality photos over 2-3 sheets. When this is done effectively, it can often support teacher assessment decisions. Many candidates make use of laser cutters to produce their practical work. Best responses will include supporting CAD drawings and an explanation of laser settings. More and more centres are presenting work which includes packaging solutions. This has often supported marks for making/modelling-particularly when the practical outcome has been relatively simple.

4. Evaluation and Testing

At AS level, this section of the project continues to be very mixed in terms of depth and quality. Where candidates selected their task with care, produced a detailed specification, and considered the testing strategy they often produced a much better evaluation. Sometimes the nature of the project made it very difficult to test the end product. This was a particular issue for candidates that set out to make a model as their outcome. Whilst candidates may use a model as the final outcome e.g. architectural, they need to think carefully about how the model will be tested and evaluated in order to be able to access the full mark range. Centres are reminded that they may consult their coursework advisor for further guidance on appropriate selection of tasks.

5. Communication and Presentation.

The quality of communication and presentation in folders continues to be high with candidates making good use of ICT and CAD to enhance their work. Drawing skills continue to be a problem area for candidates at AS. The variety of graphics techniques and media tends to be quite limited. Very few centres present work that goes beyond using simple pencil and pen.
Where candidates use e-portfolios, there is a need to consider the quantity of text/images per page. E-portfolios are often excessive in the number of sheets they use.

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the Results Statistics page of the AQA Website.

Converting Marks into UMS marks

Convert raw marks into Uniform Mark Scale (UMS) marks by using the link below.

UMS conversion calculator www.aqa.org.uk/umsconversion