

### **General Certificate of Secondary Education**

# Design and Technology Short Course

45752

Unit 2: Design and Making Practice

## Report on the Examination

2011 examination - June series

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#### General

This year the Design and Technology: Short Course specification attracted an increasing number of centres and once again moderators saw a very varied approach to the Controlled Assessment Tasks (CAT). The majority of centres had chosen one set task and this led to a variety of outcomes which enabled candidates to successfully access the assessment criteria.

Many centres did not make it clear which of the Controlled Assessment Tasks candidates were using which made the process of moderation more difficult. Hopefully this will be resolved through feedback given to centres this year. It would be a benefit if all centres included the CAT at the start of the candidates' projects. This would help the moderator and also gives the candidate a clear focus for their work. An even higher number of candidates were entered from KS3 this year, and whilst this continued to pose no problem for some centres, many did enter projects that did not allow candidates to access the higher mark range due to the lack of maturity in the candidates approach. Moderators also saw a number of candidates with poor manufacturing skills particularly finishing techniques and using materials inappropriately.

Most centres have understood the importance of high quality photographs and once more candidates used digital photography effectively to record the stages of their work. Some centres provided poor quality and/or black and white photographs which were unclear. This was one of the main cases for visits, along with photographs of work which was clearly not of GCSE level.

The majority of centres had done well to encourage candidates to sort their folders, include relevant material and bind design folders prior to marking, although a few centres did not do this. Annotation on the Candidate Record Form (CRF) was generally good and informative - where it was absent it was sometimes the cause of confusion regarding the nature of work contained in folders. Many CRF's were not completed in full, for example, missing candidate numbers. If unsure centres should refer to the Guidance notes for Controlled Assessment, or contact their Controlled Assessment advisor.

Some moderators reported that centres met deadlines whilst some reported that many centres despatched their work late this year which significantly delayed the moderation process. Centres were generally good at making sure all the required paperwork was included and that folders were presented appropriately for moderation. Centres not including paperwork (e.g. Centre Declaration Sheets etc.) were in the minority, but greater than last year. Most centres followed AQA advice to avoid sending bulky folders; treasury tags or flip-files seemed popular choices. However, some loose work did present issues for moderators, and some time was wasted reorganising candidates work.

Several large centres again organised their entry in rank order and indicated which different material areas were covered which was helpful in selecting the sample. Moderators were grateful to the centres who supplied spreadsheets identifying teaching groups alongside the official Candidate Mark Form (CMF). This enabled moderators to select work from all teaching groups. Some centres did not send work in rank order and some did not send all the work even though they have less than 20 candidates. Some centres made mistakes adding up the marks which affected the mark on the CMF.

In general, the vast majority of centres moderated, appeared to be assessing candidates work accurately. However, where this was not the case, there was a significant difference which was based upon the marks for Criterion 2 and 3. Centres must remember that although this specification requires only half the amount of work, the Controlled Assessment must still be of a GCSE standard.

Internal standardisation was much improved on last year, and this resulted in a minority of visits compared to the increase in take-up of this Specification.

Centres were very welcoming and work was clearly presented in an appropriate venue. Although many teachers were keen for feedback, there was a clear understanding that moderators were not able to discuss marking.

#### **Investigating the Design Context**

This was the area that was done reasonably well, but some high marks were given more for quantity of research rather than quality of analysis, and understanding of the task. Many schools included a client and consumer profile which was good. Once again there were several centres where candidates had submitted sheets containing printed material, unchanged or annotated, from the internet. This was not always acknowledged, did not appear to move the projects forward, and was irrelevant and unfocussed in many cases. Questionnaires again appeared in folders and these generally failed to have any useful impact upon the outcome.

Many centres had encouraged candidates to make good use of strategies to analyse products. These were of a much higher value when candidates looked at 'real' products, although many continued to use internet sourced photos of products to analyse. Research on irrelevant materials and manufacturing processes were also of little value. Candidates should be encouraged to investigate the properties of materials that are suitable for their project, demonstrate the processes they will use and explain how these might change if the product were to be manufactured commercially.

#### **Development of Design Proposals**

Development seemed much improved good use of mock-ups and samples were seen in many centres and much more information on how the product was made, including patterns. Computer Aided Design (CAD) was used in development work in more centres than before. Sustainability was covered by only very few centres but it was still more of a research focus than really developing a sustainable product. Materials choice and properties were covered by some centres.

Centres appeared in the main to have made an effort to limit the number of pages to ten A3 or the equivalent. A high percentage of candidates provided work that was teacher led, formulaic and lacked the sense of risk-taking and testing that should be encouraged. It was noticeable that there was a significant amount of work that can be considered to be of KS3 level rather than GCSE level, and this may in part be explained by the significant number of entries from Year 9 candidates.

Many centres encouraged candidates to exploit the use of testing, modelling, sampling etc. and also used screen dumps of their work in 2D Design or similar, to show how the manufacturing plan led their designs toward a final solution.

#### Making

Making was often over rewarded with regard to the quality and rigor of the outcome. When assessing making skills, centres should consider more carefully the complexity and range of skills demonstrated by the candidate in addition to the quality of the finished outcome. Many candidates were given credit for a high level of skill and accuracy for a product that was not demanding to construct.

Good projects enabled candidates to display a skilful use of materials and equipment. This enabled the production of a high quality outcome with a high level of accuracy and finish appropriate to the specification.

#### **Testing and Evaluation**

The majority of evaluations were generic and were not always checked against the Design Criteria as expected. Some centres did refer to the client/ target market, manufacturing processes and further improvements which are to be commended and encouraged.

Moderators reported seeing some excellent examples from many centres which involved candidates carrying out tests on the final product and clear feedback from the client on its effectiveness. Putting the product in situ, with photographs, was some of the best testing seen.

Weaker evaluations often described the process of designing and making rather than specifically evaluating work against the specific design criteria. Although a pro-former is useful for some students, some poor evaluations involved candidates 'answering' a set of questions prepared by the teacher, with superficial, and often meaningless, answers. The final evaluations do still tend to be too personal and not analytical.

#### Communication

The best folders had excellent examples of sketching with appropriate rendering skills. Ideas were well annotated and displayed the use technical graphics such as Isometric. Poor folders often did not utilise the use of IT effectively and displayed poor basic sketching and drawing skills. Most folders were concise, and the best were clearly focused. Some used modelling as a vehicle for designing but in these cases annotation was generally not very informative.

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