General

This was the third year of the Controlled Assessment Tasks and it is pleasing that the vast majority of centres have now fully embraced the twelve published Controlled Assessment Tasks and assessed them using the five assessment criteria. There are still a number of centres, however, whose candidates are over contextualising the briefs or omitting to consider a number of the requirements. A small number of centres still appear to have failed to understand the requirements of the controlled assessment briefs altogether.

There were delays in the moderation process caused by centres missing deadline dates or misunderstanding the instructions for sample sizes. These delays can cause significant difficulties for moderators and can affect their ability to complete their work successfully.

It was pleasing to see an increase in the number of candidates who submitted their work by electronic portfolio. A popular format used by many centres is PowerPoint and many candidates took full advantage of the additional presentation methods available to them when using this media; for example, candidates who chose to field test their prototypes used video clips to evidence procedures or activities undertaken. We would advise centres sending work electronically to check the discs for any problems before posting.

Assessments

The assessment in the majority of centres was generally accurate and fell within the tolerances set by the Board. There were still a number of centres who had difficulty applying the assessment criteria published in the specification and as a result awarded marks that were out of tolerance. Centres are reminded that the specification can be found on the AQA website, and the updated controlled assessment tasks can be accessed via the e-AQA. The Design & Technology subject support team can be contacted to obtain centres’ controlled assessment adviser details. In some cases, centres have awarded marks in a holistic way not considering the fact that missing criteria can affect the overall mark. It is important to remind centres that photographic evidence is required to show the manufactured outcomes, and is also a useful tool to verify the model making that may have taken place by candidates beforehand.
CONTROLLED ASSESSMENT CRITERIA

Below are some general statements about how the five assessment criteria were addressed, followed by comments on issues specific to each of the twelve controlled assessment tasks.

CRITERION 1: INVESTIGATING THE DESIGN CONTEXT
(8 marks)
It is important that candidates remain focussed on the task. Many candidates still include generic or irrelevant material, much of it downloaded or simply copied directly from a range of sources. In some cases this work can stretch to a disproportionate number of pages and much of it gains little to no credit. Many candidates still fail to fully analyse the design context, and this is the main factor contributing to candidates producing too much irrelevant material. However, more candidates are disassembling products to consider the constructional detail. Candidates should be encouraged to carry out this disassembly activity stage in their primary research. More candidates are now producing detailed and annotated photographic evidence of this activity. Analysis of the research undertaken was often done well, but in some cases the annotation was more descriptive than analytical. Good analysis should lead candidates towards a design specification, identifying the important design criteria to be considered; but many candidates failed to identify the target market and few profiled it. Many candidates are still producing mood boards containing downloads and photographs with no further comment or feedback. Mood boards are only useful if the candidates use the information or inspiration from them later in their design work. Likewise, questionnaires should be used to gain facts and information that proves useful later in the design, development and evaluation stages. Often no further reference is made to either the questions or answers found in this research activity. This section was generally well assessed by the majority of centres. There are still a number of centres, however, awarding candidates full or near full marks for pages of generic research with little analytical comment or when one or several of the assessment criteria were not evidenced in the candidates’ folders.

CRITERION 2: DEVELOPMENT OF DESIGN PROPOSALS (INCLUDING MODELLING)
(32 marks)
In this section candidates are expected to show and develop a range of imaginative design ideas. Graphic imagery and constructional detail were demonstrated through 2D and 3D annotated sketches and then developed through well-evidenced modelling and testing. It was pleasing to see candidates are now developing and using these skills to produce some pleasing work, with photographs to evidence this activity. Modifications and prototypes were then made as a result, before final proposals were presented. Some candidates went on to consider wider issues including social, moral, environmental and sustainability, but often these wider issues did not relate to the chosen brief and included a lot of generic information. The use of CAD continues to contribute greatly to this section. Candidates are encouraged to use “screen dumps” to evidence the development of CAD work, but far too often drawings and images are still appearing in candidates’ folders with little evidence of how they were formed or where they came from. Candidates who produce nets without any design work are still being awarded maximum credit; the preparatory work must be included in candidates’ folders, as well as the CAD work that
precedes outcomes cut out using a laser cutter. Candidates are still missing out some elements of this important process and it was often difficult to follow the development of their thinking from design ideas to final proposals. Many candidates still repeat their earlier ideas with only minor adjustments and miss out the important modelling and testing stages. There is still a tendency for some candidates to concentrate too much on the graphic imagery and use this type of work to form the bulk of the development; thus missing out the constructional detail or materials required to make an effective product. In some cases the product appears without prior evidence at the end of the development stage, with the selected image inserted. As a result many final proposals did not provide sufficient detail to enable a third party to make them.

Candidates are now including in their production a justified manufacturing specification and sequential plan for making. The best of these compared manufacturing in the school environment to that in industry and included quality control information.

Some candidates failed to produce either a product or manufacturing specification, whilst others simply included imagery of a manufacturing process with comments added to the sheet of work. Many centres included an annotated and sequential making diary which highlighted where modifications were considered necessary in the making process.

This section was significantly over-marked in many centres with high marks being awarded when several of the assessment criteria had not been addressed and in others where a number of simple labelled 2D sketches formed the majority of evidence offered.

**Criterion 3: Making**
(32 marks)
Moderation has been greatly assisted by photographic evidence of the final making. All centres are encouraged to include this.

The Controlled Assessment Briefs often stated exactly what should be made but left it to the candidate to build in an appropriate level of difficulty and rigour. Many candidates tackled this task and produced some challenging and pleasing outcomes. Candidates are using a wider range of materials and processes to produce outcomes with a much better quality of finish. CAM at various levels is being used more selectively in this process. Many outcomes are much more commercially viable. More candidates are to be congratulated on the excellence of their work in this section.

Some candidates, however, showed a lack of constructional planning which meant their work was less challenging or less commercially viable. Corner joints were often taped together with masking tape in the final construction stages. In other cases temporary spray mount adhesive was used, resulting in surface finishes peeling off or joints coming apart.

Some sections of the design briefs were not taken into account by various centres. For example, some briefs asked for a number of manufactured outcomes, including promotional materials or smart materials, yet high marks were still being awarded by centres for one single final outcome.
This section was very well assessed by the majority of centres visited, or work viewed using photographic evidence. There were some exceptions, however, where very high marks were awarded for work which lacked both rigour and a good quality finish.

If centres have any queries relating to what is required from the final outcome, they should contact their controlled assessment adviser and view the past examples of work supplied via the Teaching Online Standardising (T-OLS) section of the AQA website.

**Criterion 4: Testing and Evaluation**

(12 marks)

It is accepted that the evidence for this section can be found throughout the folder. Much of the work done during development can contribute as on-going testing and evaluation which, through modification, leads to improvement. This is often an area of weakness for some candidates. Summative evaluation was generally done well with the majority of candidates including client opinions and matching their evaluation against the specification. Some candidates gave very brief generalised evaluations which sometimes focussed on the process rather than the product.

It is important to involve clients and users at this stage of the project. Many candidates failed to consider the modifications required for industrial production.

Conclusions, modifications, testing and third party opinion are all important aspects of a good evaluation. The twelve marks available for this section can be gained for work throughout the folder. Some evaluations that only made brief reference to these important aspects were still being awarded marks in the higher mark band.

Centres are recognising the importance of this section and it is generally well assessed by the majority, but there were a small number of centres who awarded high marks for superficial evaluations or when there was very little evidence in the folders.

**Criterion 5: Communication**

(6 marks)

This criterion requires candidates to be selective, concise and clear in their presentation, as well as having the ability to use technical language correctly.

Only a small number of candidates failed to be concise and produced folders well in excess of the recommended 20 A3 pages. Much of this excess material appears in the investigation section and candidates should be encouraged to select and summarise only relevant material. In addition, candidates should also be encouraged to avoid repetition and consider the best and most economical layout of each sheet.

In a number of centres, candidates who omitted stages in development and failed to show evidence of the modelling and prototyping were still incorrectly being awarded maximum credit.
Use of technical language, spelling, punctuation and grammar is generally improving, but was still poor in a small minority of centres. Assessments in this section were generally accurate.

**Controlled Assessment Tasks**

**Design Task 1: Activity Pack**
This task was undertaken by an increasing number of candidates. Most candidates had no problems interpreting the brief and finding suitable examples for their investigations. It was pleasing to see some very clever and complex designs offered for both the package and its contents, and the majority of candidates produced an effective and complete outcome.

Candidates should recognise that this pack was intended for young people on a long journey and that it should therefore be relatively small and compact. Some solutions were very large, quite flimsy and difficult to handle. Some candidates, many of high ability, chose to buy in all, or most of, the contents of the pack. The majority of candidates, however, either made the contents or mixed and matched with made and bought in items. A good example of this is when pencils or crayons were included – the pencils and crayons were purchased but the package for them was candidate produced.

**Design Task 2: Board Game**
This was a very popular task which was undertaken by a significant number of candidates. This was often the only task undertaken by candidates in a given centre.

Candidates generally understood what was being asked of them and found suitable examples for their investigations. These investigations often concentrated on how the game was to be played or its graphic imagery rather than the constructional detail of its constituent parts and secure packaging. Only a small number of candidates failed to include the ‘race and chase’ element.

Most candidates completed an effective outcome. The main discriminators were the complexity of the box and board, the range of game accessories such as counters and cards and the quality of finish. In some cases, however, candidates spent more time developing the board imagery, than the box itself. A number of candidates failed to produce a box or holder for the board and counters at all. It is important that candidates research constructional details of boxes beforehand and note how the lids and bases can be folded, joined and the imagery applied. There was a significant use of CAM in this task. Some candidates used materials that were too thin or flimsy.

Candidates whose work concentrated on the board itself confined their folder work to the 2D imagery to be applied and offered little to no 3D sketching or CAD work. Little evidence was offered as to how the board could be folded to fit inside the box. The packaging and secure containment of the contents are equally important; candidates need to bear this in mind when undertaking this task.
Design Task 3: Kinetic Spread book / Greeting cards
A popular and easily understood task.

Candidates’ investigations did not always consider the full range of kinetic and other mechanisms which produce movement; this once again limited their range of designs.

The majority of candidates completed an effective outcome of the correct size and orientation. The main discriminators were the range and complexity of the mechanisms, the method of binding and the quality of finish. Some of the work produced by candidates neared commercial standard through very effective use of CAD/CAM. Candidates need to bear in mind, however, the need to bind and complete the book to a satisfactory standard. Some quality book interiors were let down by a poor or incorrect binding.

Candidates who produce greeting cards are reminded that envelopes should also be produced to hold the cards. To gain credit in the top mark descriptors, candidates need to show they are able to develop a number of kinetic movements and not simply repeat the same movement in each card.

Design Task 4: Flat Pack Building
This task was chosen by a growing number of candidates. The majority of those who completed this brief did it very well.

Investigations generally looked at suitable model buildings, appropriate scales and methods of flat packing and packaging ready for sale. There was a range of materials chosen. Most candidates considered scale but a few did not package their product ready for sale.

The better candidates produced effective flat packed models to scale in a suitable material such as thick card. They then packaged these and included assembly instructions and commercial signage.
Design Task 5: Band Promotion
This was the most popular task. The concept of a CD case with four folding panels was well done on the whole, but the definition and inclusion of a smart/modern material were the main concerns.

Candidates investigated a wide range of items which would be suitable for promoting a band. A number failed to acknowledge that the promotion was for a school band and substituted their favourite pop group. This limited innovation. In some cases candidates simply downloaded images of their chosen band and applied them to the case.

Candidates should consider the thickness, folding and spine arrangements appropriate for the four panelled CD cover described in the brief. This specification was included to discourage candidates from producing simple labels which are then inserted into acrylic CD cases. Most candidates took up the challenge and produced some worthy outcomes.

Many candidates understood what was required and produced a variety of folding arrangements, some of them very complex and innovative. Some candidates, however, produced a variety of outcomes, such as point of sale displays for CDs and DVDs which are not required by the controlled assessment tasks. A few candidates produced the CD cover in paper; this material is unsuitable for a commercially produced outcome.

A good range of other promotional material was produced with smart and modern materials often being used on tickets and T shirts. A growing number of candidates did not acknowledge or use a smart/modern material.

Design Task 6: Stationery Pack
Although in previous years this was not a task undertaken by many candidates, a growing number are now attempting it. Some candidates did concentrate on the imagery and ignored the packaging of the contents. A number of candidates did, however, produce excellent final solutions which displayed creative images on both the stationary and the cabinet.

Design Task 7: Sporting Event Promotion
Another popular and generally successful task. Candidates were asked to make the packaging and promotional material for a commemorative sporting product; many also designed and modelled the product itself, which was not a requirement of the task.

Investigations generally concentrated on packaging and promotion. There was some slight confusion as to whether candidates should use an existing logo or design one of their own; credit was given in both cases.
This was seen as a ‘catch all’ task, and a very wide range of products were identified and used. Discrimination was achieved by assessing the range of skills, techniques and processes used and the quality of finish.
Design Task 8: Fast Food Packaging and Promotion
A very popular and generally successful task.

Material was readily available to aid investigation and the majority of candidates had no problems with the interpretation of this task. A minority of candidates produced a holder for business cards rather than a menu holder made from card as required. Some candidates did not incorporate a smart material.

Thermal strips were included by most candidates to check the temperature on delivery. Some candidates failed to understand that some fast food packaging arrives at the fast food outlet flat packed and opted for a permanent construction. Because of size and printing issues, this brief encouraged candidates to stick on their labelling rather than printing them directly onto the box. Some candidates solved this problem by completing scaled prototypes and commenting on the problem when relating to commercial production. Menus and their card holders were generally well made.

Design Task 9: Chocolate Outer
An increasingly popular task that was generally done well.

The majority of candidates understood the significance and dual purpose of an outer and considered these in their investigations. Some outcomes used CAD/CAM very effectively in the production of the final outcome.

Most candidates produced an effective outcome consisting of a point of sale outer and wrapped chocolate bar. Many of the more able candidates built rigour into the point of sale outer by including elaborate constructional detail and comprehensive promotional and informative graphics.

Design Task 10: Hamster Playhouse
A much more popular task, with wide ranging solutions of varying quality.

Candidates have taken up the task of designing and making a suitable playhouse with increasing success. The playhouses made from cardboard were decorated with non-toxic inks. A small number of candidates still interpreted fluted board as the plastic based corrugflute; using this material would be harmful to hamsters when chewed. Outcomes varied widely from some well packaged, flat packed complex card based constructions, with assembly instructions, to a few that did not have a package at all.
Design Task 11: “Recyclaphone”
The small number of candidates who chose this task generally completed it very well.

Phones and their packaging along with environmental and recycling issues were readily available for candidates to investigate.

The majority of candidates produced an effective outcome consisting of a packaged modelled mobile phone and promotional material. The environmental issues were invariably addressed through the graphics and signage on the packaging and/or in the instructions given for recycling the phone.

Design Task 12: Cinema Fairy Tale Promotion
A popular choice producing outcomes of varying quality and complexity.

The required items were not as readily available for investigation as in some of the other tasks and many candidates concentrated on the graphic imagery rather than constructional disassembly.

It is accepted that a scale of 1:5 relates only to the height of the free standing display and not the thickness of the foam/cardboard and that adhesive could be used to fix any printed paper material to the board as a finish.

There were some excellent and original graphics used; these combined with complex flat packed structures for the foyer display gave many candidates an excellent 3D outcome. Those candidates who produced very simple structures were incorrectly awarded high marks by centres when the complexity of the manufacture was often lacking and sometimes very simplistic. Many candidates completed their submissions by producing a smart cinema ticket, poster and press advertising. Some of the press adverts were shown incorporated into the page of a newspaper. Smart and modern materials used on tickets were generally related to security or made use of ‘glow in the dark’ or holographic material, candidates displaying some novel final solutions. A small number of candidates did not acknowledge or use a smart or modern material; others restricted their use of these materials to a generic explanation in their initial research section.
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