GCSE
DESIGN AND TECHNOLOGY: GRAPHIC PRODUCTS
45502
Report on the Examination

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GENERAL

The vast majority of centres have now fully embraced the twelve published Controlled Assessment Tasks and assessing them using the five assessment criteria. It is important however that all centres read the updated Controlled Assessment Tasks published on the AQA website, as some minor changes and updates have been made to some of the initial published tasks. There are still however a number of centres whose candidates are still over contextualising the briefs or failing to consider a number of the requirements. A tiny minority of centres are still ignoring the requirements of the controlled assessment brief altogether, which after a number of years is quite worrying.

I must remind all centres that this is Graphic Products and the materials suitable for the manufacture of the completed outcomes are listed in the specification, published on the AQA website. It is worrying to still find outcomes made in wood, complete with joints.

There were still a number of delays in moderation caused by some centres missing deadline dates or misunderstanding the instructions on sample sizes. This causes severe problems as it delays a very tight schedule.

Again it was pleasing to see an increase in the number of candidates who submitted their work by electronic portfolio. Many of these candidates took full advantage of the additional presentation methods available to them when using this media. We require centres sending work electronically to use Power Point or PDF as their chosen method of presentation, and check the discs for any problems before posting. Candidates who choose to field test their prototypes were able to demonstrate using video clips to evidence procedures or activities undertaken. It is worth reminding centres that choose to use this method of submitting their candidate’s work, to inform AQA beforehand. It is also important that centres send electronic work in a format specified by AQA; please do not send the candidate’s work on individual memory sticks and discs, as this makes the moderator’s task much more difficult. All work should be submitted using PowerPoint on one centre disc that has been checked beforehand by the centre. A minority of centres have submitted work this year on discs that have corrupted files included on them. This has caused problems and held up the moderating process.

ASSESSMENTS

It was pleasing that 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 ignored the published criteria to be found in the specification and as a result produced marks that were out of tolerance. We can remind centres that the specification, along with the updated controlled assessment tasks can be found on the e-AQA website or by contacting their coursework advisor. Details of coursework advisors can be found from centres examination officers. 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 worth reminding centres that photographic evidence is required to evidence the manufactured outcomes, and is also a useful tool to evidence the model making that may have taken place by candidates beforehand. Please try to include photographic evidence of all modelling however minor; it is such an important part of the development stage.

Below are some general statements of how the 5 assessment criterions were addressed followed by comments on issues specific to each of the twelve assessment tasks.
Criterion 1 (investigating the design context)  

It is important that candidates remain focussed on the task. Some candidates are still including 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. Much of this work gains little to no credit. Many candidates are still failing to fully analyse the design context, this being the main reason why it is leading to a proliferation of peripheral material. It is pleasing that more candidates are disassembling products considering the constructional detail. Candidates should be encouraged to carry out this disassembly activity stage in their primary research. More candidates are now producing detailed annotated and 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, however 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 to them. 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 and development and evaluation stages. Often no further mention is made to either the questions or answers found in this research activity.

This section was again generally well assessed by the majority of centres, however there are still centres awarding candidates full or near full marks for pages of generic copied research with little analytical comment, or when one or several of the above criteria were not evidenced in the candidate’s folders.

Criterion 2 (development of design proposals)  

In this section candidates are expected to show and develop a range of imaginative design ideas. The use of 2D and 3D annotated sketches through which they demonstrate graphic imagery and constructional detail, 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 the use photographs to evidence this activity. However a number of centres are not encouraging candidates to include the early sketches from which originate their designs and thinking. Modifications and prototypes can then be made as a result, before final proposals are presented. Some went on to consider wider issues including social, moral, and environmental and sustainability but in many cases these wider issues did not relate to their chosen brief and were generic and copied out of textbooks.

The use of CAD continues to contribute greatly to this section. Candidate are encouraged to use “screen dumps” to evidence the development of CAD work, but far too often drawings and images are still appearing in candidate’s folders with little evidence of how they were formed or where they appeared from. Candidates who produce nets that appear from “thin air” without any design work cannot be awarded maximum credit; the preparatory work must have been included in candidate’s folders, as well as the CAD work, that precedes outcomes that are 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 their 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, some of this type of work forming the bulk of the development thus missing out on the constructional detail or materials required to make an effective product. In some
cases the product appears from “thin air” at the end of the development stage, with the selected image inserted. As a result many final proposals did not have sufficient detail given to enable them to be made by a 3rd party.

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 are still failing to produce either a product or manufacturing specification, whilst others are simply including 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 to be necessary in the making process.

This section was again 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 was once again greatly assisted by the inclusion of photographic evidence of the final making and all centres are encouraged to do this. It is important to point out once again that making marks were only considered or adjusted following a visit to the centre.

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 again took up this challenge 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.

It is still disappointing that some candidates opted for the easiest option and the lack of constructional planning often meant that their work was less than challenging or commercially viable. Corner joints were often masking taped together in the final construction stages. In other cases temporary spray mount adhesive was used, resulting in surface finishes peeling off or joints coming apart. Unfortunately these constructional shortcomings were not limited to the less able.

Once again it was disappointing that sections of the design briefs were ignored by some centres. Briefs that asked for a number of manufactured outcomes, including promotional materials or smart materials were ignored, yet high marks were still awarded for the final outcome.

This section was very well assessed in the majority of centres visited, or work viewed using photographic evidence. There were however some notable exceptions where very high marks were awarded for work which lacked both rigour and a good quality of finish.

Once again I would encourage all centres to contact their coursework advisor or view work on the e-AQA website, if they have any queries over what is required from the final outcome.

**Criterion 4 (testing & evaluation)**

12 Marks

It is accepted that the evidence for this section will be found throughout the folder. Much of the work done in development can contribute as on-going testing and evaluation which through modification then lead to improvement. Often this is the weakest area. Summative evaluation was generally done well with the majority of candidates involving the opinions of the client 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 awarded for this section can be gained, as has been stated, for work throughout the folder. Some evaluations that only made brief or little reference to these important aspects were awarded marks in the higher range band.

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

**Criterion 5 (communication)**

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

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

Candidates who miss out stages in development and fail to show evidence of the modelling and prototyping are still gaining maximum credit from a number of centres.

Use of technical language, spelling, punctuation and grammar is improving but was surprisingly poor from a small minority of candidates especially when considering that much of their work was word processed. Assessments in this section were generally accurate.

**Controlled Assessment Tasks**

**Task 1 Activity Pack**

This task was undertaken by an increasing number of candidates. Few had problems in the interpretation of the brief and finding suitable examples for their investigations. Once again 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 for use by young people on a long journey and that it should therefore be relatively small and compact. Some solutions continue to be very large, quite flimsy and difficult to handle. Some candidates, disappointed by buying in all, or most of the contents of the pack. However the majority of candidates either made the majority of the contents or mixed and matched with made and bought in. A good example of this is when pencils or crayons were to be included, the pencils and crayons were bought in but the package for them was candidate produced.
Task 2 Board Game

Once again 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. Again 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 their secure packaging. In only a tiny minority did candidates ignore the ‘race and chase’ element.

Most candidates completed an effective outcome and 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 the candidates spent more time developing the board imagery rather than the box itself. In a number of cases candidates failed to produce a box or holder for the board and counters at all. It is important that candidates’ research beforehand, constructional details of boxes, noting how the lids and bases can be folded, joined and the imagery applied.

There was a significant use of CAM in completing this task. Candidates need to remember that when using CAM to produce parts of the game, evidence of the CAD settings should be evidenced in the folder work. Some candidates completed their work in a material which was too thin or flimsy.

Candidates whose work concentrated on the board itself confined their folder work to the 2D imagery to be applied offering little to no 3D sketching or CAD work. Little evidence was offered in some cases 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.

Task 3 Kinetic spread book/ greeting cards

A popular and easily understood task.

Candidates in their investigations did not always look at the full range of kinetic and other mechanisms which produce movement and this once again limited them when completing their designs. Some candidates ignored the importance of the kinetic spreads and concentrated on the story to be included in the book instead.

The majority of candidates completed an effective outcome to 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 was at near commercial standard having used CAD/CAM very effectively. However candidates need to bear in mind 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 their ability in developing a number of kinetic movements and simply not repeat the same simplistic movement in each card.
Task 4 Flat Pack Building

This task was chosen by a growing number of candidates.

The majority of those who did complete this brief did it very well.

Investigations generally looked at suitable model buildings, appropriate scale 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. A number of candidates are completing this task using CAD/CAM to cut out the building, it is important that all stages leading up to the completion are evidenced in the folder work.

Task 5 Band Promotion

This was probably the most popular task undertaken. The concept of a CD case with four folding panels was on the whole well done 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 growing number failed to acknowledge that the promotion was for a school band and substituted their own favourite pop group. This limited innovation. In some cases candidates simply downloaded images of these bands and applied them to their case.

Candidates should consider the thickness, folding and spine arrangements for the CD cover. This was done to get them away from producing simple labels which were then inserted into acrylic CD cases. In most cases candidates took up the challenge and produced some worthy outcomes. Centres can refer to the “Ask AQA” website if they require definition of a CD case with four folding panels.

Many candidates did understand what was required and produced a variety of folding arrangements, some of them very complex and innovative. Some candidates are still not fully understanding what is required, and produced a variety of outcomes, such as point of sale displays for CD’s and DVD’s. Many of these outcomes were also quite complex and the demand involved in producing them generally outweighed the miss-understanding. 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 generally produced with smart and modern materials often being used on tickets and T shirts. However some centres are still failing to produce this promotional material, yet awarding high marks for an uncompleted task. 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 produced by many candidates, a growing number are now attempting it. Some candidates that did once again concentrated on the imagery and ignored the packaging of the contents. A growing number of candidates did however produce excellent final solutions displaying creative images, reflected both on the stationary and the cabinet itself.
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. This was not necessary.

Investigations generally concentrated as expected 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 again 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 small minority of candidates again produced a holder for business cards rather than a menu holder made from card as required. No candidate was disadvantaged for this failure to follow the brief. Again a growing number of candidates failed to incorporate a smart material.

Thermal strips were included by most to check the temperature on delivery. Some candidates failed to appreciate 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

A growing in popularity task, once again, generally done well by those who chose it.

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 Play House

A much more popular task, with wide ranging solutions of varying quality.

Candidates have taken up the task of designing and making a suitable play house with increasing success. Those made of cardboard, decorated the play houses with non-toxic inks. A small
number of candidates still interpreted fluted board as the plastic based corrugflute and this would have had disastrous effects when chewed by the hamster.

Outcomes varied widely from some well packaged, flat packed complex card based constructions, with assembly instructions, to a few who failed to produce a package at all

**Design Task 11 Recyclaphone**

A minority choice which was generally done very well. Phones and their packaging along with environmental and recycling issues were readily available for candidates to investigate.

The vast majority of candidates produced an effective outcome consisting of a packaged modelled mobile phone and its 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 a varying quality and complexity. The required items were not as readily available for investigation as in some of the other tasks and many candidates again 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/card board and that adhesive could be used to fix any printed paper material to the board as a finish.

Again there were some excellent and original graphics used and these combined with complex flat packed structures for the foyer display gave many candidates an excellent 3D outcome. Some candidates produced very simple structures however, but were rewarded with high marks when the complexity of the manufacture was often lacking and sometimes very simplistic. It is important that candidates show models and prototypes in the development stage of any folder work. Sadly this work is often overlooked. Many candidates then 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](#)