

# GCSE DESIGN AND TECHNOLOGY

8552/C: Non-exam assessment Report on the Examination

8552 June 2019

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### General

The new GCSE Design & Technology Non-exam Assessment (NEA) has proven to be a great success, with the moderation team reporting some excellent examples and approaches. We are seeing a broad range of material areas being delivered across the subject. It is pleasing to see the iterative approach being encouraged by centres, with several innovative and challenging design strategies being used to address the increased focus on design and development.

Electronic portfolios are common, with most presented as PowerPoint or PDF files. However, it is worth noting that many centres did not make use of the AQA requirement for encryption in line with GDPR regulations. As with any electronic file, there can be issues from time to time with file sizes; therefore it is advisable to compress images before saving, as this would significantly help reduce the amount of time spent opening files. A number of centres opted to submit paper portfolios. This is perfectly acceptable but please be advised that printed folders should be treasury tagged, stapled or bound, not sent in A4/A3 presentation folders.

This year the three contextual challenges were:

- addressing the needs of people with disabilities
- supporting a developing country
- encouraging a healthy lifestyle.

All three contexts have been addressed through this NEA cycle, with most centres attempting all three challenges and some restricted to a single contextual challenge. The most popular context was 'addressing the needs of people with disabilities'.

All material areas have addressed the three contextual challenges. Please note that the NEA contextual challenges are set annually and will be released on 1 June the year before the exam. You will find the contextual challenges for 2019/2020 on eAQA secure key materials.

### **Assessment Criteria**

# Section A: Identifying and Investigating Design Possibilities (AO1)

This section is very different from legacy specifications, with additional weighting and more focus on purposeful investigations to support an iterative approach. The introduction of a contextual challenge means students are no longer presented with specific tasks, and will need to analyse the contextual challenge before focusing on a design possibility. The most able students analysed the contexts very well; however the majority of students were fixated on a possibility rather than initially analysing the broader context. A small number of centres encouraged students to analyse all three contexts. This is acceptable, but centres should be reminded that students will only get credit for the context they follow to produce their prototype. It is worth noting that centres who encouraged students to focus on a single product (ie dress, lamp etc) found it very difficult to access the highest marks in the designing sections.

Students achieving the higher marks used investigation throughout the portfolio, particularly in the generating and developing sections. However, a large number of students are still producing legacy style portfolios. These portfolios lacked focus and purpose, and centres need to discourage a rigid approach to investigation, instead allowing students to investigate things they need to know to make their prototype. The majority of students demonstrated both primary and secondary research; primary research was mostly used to identify the client/user needs and wants. The most

able students had a clear client/user focus, and this was reflected throughout. Moderators reported seeing a large number of centres using imaginary client/users, which makes it very difficult to get high quality feedback. Please be reminded that centres do not need to encourage students to focus on both user and clients.

# Section B: Creating a Design Brief and Design Specification (AO1)

With the new specification awarding additional marks for this section, it was impressive how detailed and specific some of the briefs and specifications have been this year. The most successful students made it clear how the investigation linked to their specification and this was then clearly reviewed throughout the generating and developing sections.

Many students are still using frameworks such as ACCESSFM & CAFEQUE. As teachers, we have always seen the advantage of encouraging this approach. However, encouraging students to use a framework limits them to specific criteria that are directly linked to their client needs and wants. It is also worth noting that students performing in the middle mark bands did not review or reflect on their specification throughout the generating and development section, only during the analysis and evaluation section.

# Section C: Generating Design Ideas (AO2)

This section was the weakest area of AO2, with many students approaching this in a similar way to the legacy specification. This was mainly down to the limited use of design strategies and techniques throughout. The students who did a good job of exploring ideas, demonstrating imagination, creativity and innovation, were able to achieve higher marks. Their ideas demonstrated a range of techniques and their ideas were reviewed before moving onto the development section. Less effective assessments used limited techniques and rarely annotated designs to explain decisions. We are still seeing a number of centres encouraging a certain quantity of ideas rather than focusing on the quality.

# Section D: Developing Design Ideas (AO2)

It was very clear that centres understood the changes of emphasis within this section and the majority of students did a very good job at responding to the criteria. A large range of strategies were used throughout this section from sketches to physical modelling. Computer Aided Design continues to be popular, with large numbers of free and easily accessible software available to centres. The more successful students clearly demonstrated the client/user centred approach throughout this section, liaising with their client/user to inform decision making. The addition of material testing and finishing samples was good to see and allowed students to get credit for practical development. The manufacturing specifications varied with some students using a limited approach, making it difficult for third party manufacturers to interpret. Higher marks were accessed by the students who used a range of approaches that would have allowed third party manufacture to have taken place.

# Section E: Realising Design Ideas (AO2)

This was the most accurately assessed section by centres. The quality of prototypes has remained very high and those which achieved the highest band often demonstrated a high level of complexity. Smaller prototypes were popular, with many centres opting to take advantage of the scale model approach. Some students have produced a range of prototypes to demonstrate how their product would look and function. Even though we still saw a number of prototypes using a

traditional approach, a large number were multi-material. These used a wide range of materials and techniques throughout the manufacture.

This was the first year of postal moderation. The vast majority of centres submitted high quality photos supported by a detailed Candidate Record Form (CRF); this was very helpful and allowed the moderator to assess the work accordingly.

# Section F: Analysis and Evaluation (AO3)

Although the analysis and evaluation section has similarities to legacy specifications, we have seen an improvement of analysis and evaluation throughout. However, students achieving the middle and lower bands tend to show limited analysis or superficially evaluate throughout. The final evaluation still included key features such as: strengths & weaknesses, modifications and evaluation of their specification. On the other hand, not enough client/user testing or feedback was evident during this section. Third party testing was evident; however this was predominantly conducted through peer assessment. Many centres still focused on commercial production, which isn't always relevant in this specification. The summative evaluation should be the conclusion to the portfolio but also identify what is next for the prototype. In some cases, this may be a redevelopment or it could be preparation for commercial manufacture, it depends on the success of the prototype.

# **Conducting Non-Exam Assessment**

Centres are reminded that feedback given to students should be generic, ie feedback given to the whole group. Detailed guidance about conducting the NEA can be downloaded from the D&T subject page on the AQA website. This can also be found in the specification under section 4.4.3.

Some centres have made use of scaffolding, frameworks, templates, etc to assist pupils with the NEA. Centres are reminded to follow the instructions in the specification and on the JCQ website for GCSE NEA.

The Guided Learning Hours (GLH) for this unit is 30 - 35 hours, with a recommendation of 20 pages of A3 or equivalent.

Teachers are reminded that standardising materials are now available as interactive folders on the Teacher Online Standardisation system (TOLS) on the e-AQA. All members of staff can access TOLS and work through the exercises individually. The marks entered by the user are not recorded, but AQA does register that a centre has reviewed the materials. The standardising materials are updated annually in the autumn term.

Alongside this, each centre has been allocated an NEA adviser. The role of the adviser is to support centres with any advice specific to the NEA. The Advisers operate through email and will help in any way they can. It is advised that any correspondence from your NEA adviser should accompany the NEA sample, so the moderator can see what has been discussed.

Finally, AQA offer a range of CPD courses to support teachers. You will find information on any upcoming CPD events on the professional development tab on the AQA website. Once a course has been completed the course resources will be uploaded onto eAQA secure key material.

## **Administration of assessments**

The majority of centres' marks were within tolerance and thus in line with the AQA standard. Where centres were inaccurate, it was usually down to section A, B or C. It is also worth noting a number of centres have been adjusted due to the lack of internal standardisation. Please look at section 4 of the specification to look at how to conduct internal standardisation.

In section A, assessments were inaccurate due to the lack of client/user focus or irrelevant research taking place. Some folders were very similar to legacy folders and investigation did not continue throughout the portfolio. Therefore, section B lacked focus and it was unclear why decisions had been made. Also, the use of ACCESSFM & CAFEQUE limited the middle and higher ability students from hitting the top band. Section C was reflective of the legacy specification, which was due to the focus on quantity of designs rather than quality. More focus on a range of design techniques and strategies is needed to focus on the quality of design ideas.

Nearly all centres submitted the Centre Declaration Sheet (CDS), and those that had not submitted forms have now done so after a prompt from the moderator. The Candidate Record Forms (CRF) have been key in communicating why marks have been awarded. Most centres produced detailed CRFs outlining why marks have been awarding and where the evidence could be found. Examples of high quality CRF's are available on eAQA secure key materials.

The quality of photographs and annotation, submitted by centres to support practical assessment, was very good and so it was easy to see where and why marks have been awarded.

The e-subs system worked well again this year, keeping the moderation process as efficient as possible. Please note we still have a small number of centres submitting the incorrect mark onto e-subs; please take care when submitting marks.

The moderation team would like to thank centres for the quality of their administration. If you feel you need some further support with administration or you are new to this specification, please contact your NEA adviser for further help or advice.

# **Mark Ranges and Award of Grades**

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