Course Report 2018

Subject	Graphic Communication
Level	Advanced Higher

This report provides information on the performance of candidates. Teachers, lecturers and assessors may find it useful when preparing candidates for future assessment. The report is intended to be constructive and informative and to promote better understanding. It would be helpful to read this report in conjunction with the published assessment documents and marking instructions.

The statistics used in this report have been compiled before the completion of any Post Results Services.

Section 1: comments on the assessment

Summary of the course assessment

Component 1: project

Most candidates chose a commercial and visual media graphics approach (CVMG) for their project, rather than a technical media graphics approach, with few opting for a combined approach.

If candidates choose a combined approach, quality over quantity is required (not just at the graphic solution stage), as only the best work in either technical graphics **or** CVMG is assessed in any one area of the project.

Most candidates kept to the 20-page limit.

While the project performed as expected, some centres marked too generously across all sections of the project. This was usually towards 'A' type marks (high 90's, to the maximum of 120 marks).

Component 2: question paper

The question paper had one section worth 80 marks. It included both short-response and extended-response questions, covering a wide range of course content. Future question papers may contain more extended-response questions, to ensure the depth of knowledge required at Advanced Higher level.

The following topics were covered:

- animation types
- print and digital media
- 3D CAD modelling techniques
- design elements and principles
- the impact of contemporary graphic communication technology (for example CFD)
- the graphic requirements of specific audiences

Some topics featured in the paper again this year (for example using different file types). Other topics not assessed in previous years (for example project-planning charts and issues of ownership), did not present any significant problems for most candidates.

In general, candidates who expressed themselves clearly, structured their answers effectively and used the correct terms produced the strongest responses. In addition, candidates who correctly applied their knowledge to specific graphic contexts often achieved the highest marks.

Section 2: comments on candidate performance

Areas in which candidates performed well

Component 1: project

Carrying out and using ongoing research
Candidates handled this area well. Some presented their research in a separate section rather than it occurring naturally throughout the project.

Producing a range of graphic ideas or concepts
Many candidates demonstrated how they used techniques and technologies in this area to good effect, for example Finite Element Analysis (FEA), 3D prints, mock ups, and physical models.

Some candidates used animation to good effect.

Producing a graphic solution
For some candidates, the standard and quality of graphics in both technical graphics and CVMG was very good.

The 'Areas which candidates found demanding' section of this report provides information on candidates who did not produce the expected quality of work when producing a graphic solution.

Producing a client presentation
Some candidates who gained high marks in this area used alternatives to PowerPoint (for example, Prezi, physical representations, videos, and film), to demonstrate and present solutions.

Evaluating the solution and the process
This area continues to improve, with most candidates providing a thorough evaluation of the project.

Many candidates used 'record of progress' entries or references to notes, comments or annotations from project design work effectively. These were mostly in the form of a diary, complete with copies of letters and e-mails.

Component 2: question paper
Candidates generally performed well in the following questions:

Question 1(b)
Topic: video files used on mobile devices — although .MPEG and .3GP (or .3GPP) were the most popular correct responses, there was a wide range of possible answers.

Question 1(e)(ii)
Topic: how the use of design elements and principles can enhance a user's experience — candidates had a better understanding of how elements and principles enhance a user's

experience. This was not only in this question about user interface but across a wider range of graphic media (see comments for question 2(e)(i)).

Question 2(c)
Topic: digital rights management and issues of ownership — it was encouraging that most candidates understood issues relating to copyright, registered trademarks and intellectual property.

Question 2(e)(i)
Topic: design element and principles — most of this question related to elements and principles only assessed at Advanced Higher level. Most candidates could identify the design elements and describe how they produced the focal point on the webpage.

Question 3(d)
Topic: project-planning charts — 'planning' and 'review' activities are central to the Advanced Higher project and this knowledge may have helped candidates gain marks for this question.

Although the question paper had not previously sampled this topic, most candidates did well. This shows that candidates are improving and can apply knowledge in unfamiliar contexts. However, this area continue to present a challenge for weaker candidates.

Question 4(b)(ii) and Question 4(c)(i)
Topic: digital testing methods — most candidates have a good understanding of Finite Element Analysis (FEA) and Computational Fluid Dynamics (CFD). You should make candidates aware of the wide variety of situations where these digital testing methods are used.

Areas which candidates found demanding

Component 1: project
Producing a graphic specification
Some specifications created by candidates were just lists of tasks that the candidate would complete. A valid specification should detail the particular graphics needed for the audience and any specific features required.

Some candidates continue to struggle to identify the graphic requirements and their correct formats, to meet the needs of the target audience.

Project planning
For many candidates, their project planning did not refer to intermediate target setting.

Candidates must demonstrate key targets, show how they will help achieve the requirements of the target specification, and specify the resources required at each stage.

In some cases, candidates created project plans, then varied from them but did not update the plan. Their evidence could have been logged in the project itself or in the record of progress.

Candidates who gained high marks in this section typically included sub tasks within their project planning.

Using preliminary graphic techniques to communicate ideas
In most cases, the preliminary graphic techniques were valid for creating a graphic solution. However, in a few cases, candidates showed a more limited skill than expected at Advanced Higher, especially within technical graphics projects.

The detail provided for the preliminary techniques section was poor for both technical graphics and CVMG assignments.

Producing a range of graphic ideas or concepts
Some candidates found this area demanding. They did not demonstrate a range of possible graphic solutions to satisfy the needs of their chosen target audience(s). Candidates did not show any development of their idea (linked to ongoing research) that would allow a valid graphical solution or solutions to be created. In some cases, this linked to candidates attempting too wide a brief or taking on too many tasks.

Producing a graphic solution
Some candidates found this area challenging. Their technical graphic solutions lacked significant details in terms of dimensions, scale, tolerances, and view types, required for the target audience.

Architectural-type projects typically lacked sufficient detail for construction or further work. Again, this linked to candidates taking on too much work, for example working on drawings for a whole building, which may be too daunting for a candidate at this stage.

CVMG solutions lacked significant details in terms of screen resolution, paper size, file types, colour palettes, bleed, crop or registration information. The target audience would require this information to produce this graphic type.

Planning a client presentation
Typically, candidates planning did not reference how the graphic solution was suitable for the target audience and so it became a presentation of their journey through the project. This would not be suitable for the audience initially identified.

Resources required often listed only hardware and ignored any software and/or file types.

Candidates who did well included full details of the presentation content, in relation to the audience requirements. They provided an effective structure and layout, and then went on to detail all media or resources required.

Component 2: question paper
Candidates generally found the following questions demanding:

Question 1(a)(ii)
Topic: motion-tweening — candidates struggled to give an advantage of this technique beyond the creation of a path between the start and end points for character movement.

Candidates should be reminded that providing statements without any justification is unlikely to attract marks, particularly at Advanced Higher, for example 'the technique is cheaper' or 'the technique is less time consuming'.

Question 1(d)
Topic: the impact of graphics on environment and society — candidates should be encouraged to consider the full life cycle of graphic products. This ranges from making choices between printed and digital media, and correct selection and economic use of materials, to energy-efficient production methods, environmentally sensitive distribution and effective recycling or zero-impact disposal.

Question 1(e)(i)
Topic: design principles — candidates should be reminded that dynamic effects can be used in both printed and digital media.

Question 1(g)(i)
Topic: file types — candidates found it challenging to identify the advantages of using 'raster' file types.

Candidates are now proficient at suggesting advantages of 'vector' files, but are not as familiar with raster files. It is also worth noting the distinction between file 'types': raster and vector and file' formats': svg, avi, dwg. etc.

Question 2(b)
Topic: elements and principals — some candidates misread this question and gave answers relating to shape or colour.

Most candidates underperformed on this question, as they had a range of solutions relating to alignment, emphasis, contrast and unity (in relation only to the size or style of typeface), answers.

Question 3(c)(iii)
Topic: graphic users — a significant number of candidates did not respond to this question.

Candidates need a working knowledge of range of graphic users. Candidates should be exposed to a wide range of environments and professions where graphics are used.

Question 5(a)
Topic: 3D modelling techniques — across all levels there are common messages about candidates using the correct terms, structuring their responses clearly, interpreting technical graphics carefully, modelling each feature and including assembly constraints as required. This continues to present a challenge for a large number of candidates

Question 5(b)(ii)
Topic: CAD CAM systems — candidates struggled to understand and explain the topics of 'model manipulation', 'surface finish', use of 'datums', understanding the importance of 'volume', 'mass' and 'centre of mass' in a CADCAM environment.

Section 3: advice for the preparation of future candidates

Component 1: project

Some centres are still allowing their candidates to take on too wide a brief, which is limiting their chances of achieving high quality work. These candidates are producing 'quantity' rather than 'quality' of work. Teachers/lecturers should engage with candidates at the outset, to agree a realistic brief.

Some candidates are quoting imaginary clients at the 'analysis of the graphic brief and initial research' stage. While we accept that not all centres are in a position to find real clients for their candidates, teachers and lecturers could take on this role to make the project more relevant, particularly regarding feedback, dialogue and presentations.

Centres must ensure that they download and use the most up-to-date versions of the subject documentation and assessment materials. This includes the assessment conditions set out in the CAS. All documentation can be accessed on the Advanced Higher subject page of SQA's website.

Although teachers/lecturers can offer support and guidance to candidates, this must be reflected in the amount of support provided (if significant) in the marks awarded. In addition, candidate can be provided with feedback to help them achieve the next stage of the assessment, however, teachers/lecturers must not re-assess any stages already completed.

Component 2: question paper

In general, candidates showed a greater understanding of the content of the CAS this year.

Over the past three years, question papers have covered all the main topics in the CAS. It is likely that future papers will focus on applying this knowledge and explaining the use of graphics in different contexts. It is clear from marking that contextualisation of knowledge continues to be challenging for candidates.

Where possible, centres should create opportunities for candidates to consider a range of graphics and you should question:

♦ the reasons for creating the graphic
♦ the methods used to generate the graphic
♦ the possible users of the graphic
♦ the advantages and disadvantages of a particular format
♦ where the graphic fits within the design process, including its relevance to particular professions

Candidates should be reminded not to write responses on the supplementary sheets that often form part of the question paper, as these are not marked.

It is extremely important that candidates read the questions carefully. This year, a significant number of candidates missed out on marks because they did not read the entire question, or repeated information found in the stem of a question.

Candidates should write the same number of distinctive points in their response, as the number of marks available for the question. If it is a question with an 'explain' command word, each point in the response should include a reason and an explanation. For example, Question 2(c) in the 2018 question paper, the response might read:

'Companies must protect their logo designs (**1**) so they are not used fraudulently by other companies (**reason**), as this could lead to an inferior quality product being associated with the brand (**explanation**) and (**2**) so customers don't confuse a competitor's logo for the original (**reason**), which may lead to a reduction in the original company's profits (**explanation**)'.

To help prepare candidates, techers/lecturers should refer to the Understanding Standards resources available on SQA's subject page. These resources include candidate responses that have been marked according SQA's marking instructions and have supporting commentaries explaining the marks awarded:

Resources/ Understanding Standards/ Examples of candidate work with commentaries: (https://www.understandingstandards.org.uk/Subjects/GraphicCommunication/AdvancedHigher)

Grade boundary and statistical information:

Statistical information: update on courses

Number of resulted entries in 2017	543

Number of resulted entries in 2018	525

Statistical information: performance of candidates

Distribution of course awards including grade boundaries

Distribution of course awards	Percentage	Cumulative %	Number of candidates	Lowest mark
Maximum mark				
A	10.9%	10.9%	57	156
B	25.5%	36.4%	134	136
C	29.9%	66.3%	157	116
D	11.4%	77.7%	60	106
No award	22.3%	-	117	-

General commentary on grade boundaries

SQA's main aim is to be fair to candidates across all subjects and all levels and maintain comparable standards across the years, even as arrangements evolve and change.

SQA aims to set examinations and create marking instructions which allows a competent candidate to score a minimum of 50% of the available marks (the notional C boundary) and a well prepared, very competent candidate to score at least 70% of the available marks (the notional A boundary).

It is very challenging to get the standard on target every year, in every subject at every level.

Therefore SQA holds a grade boundary meeting every year for each subject at each level to bring together all the information available (statistical and judgemental). The Principal Assessor and SQA Qualifications Manager meet with the relevant SQA Business Manager and Statistician to discuss the evidence and make decisions. The meetings are chaired by members of the management team at SQA.

♦ The grade boundaries can be adjusted downwards if there is evidence that the exam is more challenging than usual, allowing the pass rate to be unaffected by this circumstance.
♦ The grade boundaries can be adjusted upwards if there is evidence that the exam is less challenging than usual, allowing the pass rate to be unaffected by this circumstance.
♦ Where standards are comparable to previous years, similar grade boundaries are maintained.

Grade boundaries from exam papers in the same subject at the same level tend to be marginally different year to year. This is because the particular questions, and the mix of questions, are different. This is also the case for exams set by centres. If SQA alters a boundary, this does not mean that centres should necessarily alter their boundary in the corresponding practice exam paper.