



Course report 2019

Subject	Graphic Communication
Level	National 5

This report provides information on candidates' performance. 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

Question paper

The question paper contained a good mix of questions, covering the main areas in the National 5 Graphic Communication Course Specification.

Questions covered a range of topic areas based around a different central theme. Most candidates took the opportunity to immerse themselves fully in each question. The question paper performed well in all areas and provided a suitable level of demand for all candidates.

Assignment

This year's assignment took a similar approach to last year's updated assignment.

It was clear from evidence that teachers and lecturers had invigilated the assignment to allow the candidates to complete the work on their own.

Most candidates completed the assignment task in no more than the 8 single-sided pages of A3 as requested.

Section 2: comments on candidate performance

Areas that candidates performed well in

Question paper

- 1(a) Most candidates were able to identify the correct orthographic view.
- 1(c) Most candidates were able to identify the correct surface development.
- 2(a) Most candidates were able to state the correct graph/chart type.
- 3(e) Almost all candidates were able to explain why graphic icons were used in the provided graphic item.
- 4(d) Almost all candidates were able to describe the purpose of the third angle projection symbol.
- 5(a) Many candidates performed well in this CAD modelling task, with most managing to model the complete component.
- 5(c) Almost all candidates demonstrated a good understanding of colour theory.
- 5(e) Most candidates were able to explain how tertiary colours are created.
- 6(a) Many candidates were able to identify the correct components, applying their spatial awareness skills.

Assignment

Task 1

- 1(a) Most candidates were able to successfully 3D CAD model the components, create sectional views, orientate them correctly and dimension them properly.
- 1(b) Almost all candidates answered this question well.
- 1(c) Almost all candidates answered this question very well.

Task 2

- 2(a) Almost all candidates completed this question very well.
- 2(b) Candidates performed very well in this question. Most thumbnails were clear and had the correct use of unity identified.
- 2(c) Most candidates produced the layout to the correct dimensions. Many were able to correctly identify design elements/principles used and justify their use.

Task 3

- 3(c) Candidates performed reasonably well in both the pictorial sketching and rendering areas of this task.

Areas that candidates found demanding

Question paper

- 2(b) Although most candidates were able to identify the correct graph/chart, many candidates struggled to explain why it was appropriate.
- 2(c) Many candidates struggled to explain how proportion had been used to convey the information with many candidates describing use of colour instead.
- 4(b) Many candidates struggled to explain the advantages and disadvantages of both graphics with many candidates providing responses that were far too generic.
- 4(c) Many candidates failed to identify more than two errors that did not conform to British Standards.

- 5(b) Many candidates struggled to describe the correct modelling process for the provided product with the recessed part of the head proving most challenging. Most candidates adopted an extrusion approach where a revolve approach would have been more efficient and simpler.

Assignment

Task 1

- 1(b) Some candidates did not show the views in the required orientation for the task.
- 1(d) Many candidates did not apply centre lines where required. Many candidates did not display dimensions following British Standards. Cutting planes overlapping drawings and poor projection of the sectional view was common. Some candidates had not labelled their drawing views or given each of the component drawings titles.

Task 2

- 2(c) Most candidates found it challenging to produce a good quality desktop publishing (DTP) layout.

Task 3

- 3(a) Many candidates displayed a poor understanding of how to apply orthographic projection. Few candidates correctly included hidden detail in their responses. Although there has been an improvement in sketches produced to good proportions from last year, this area still requires development.
- 3(b) Many candidates did not demonstrate knowledge of the relationship between the depth of a Plan view and an End Elevation.

Section 3: preparing candidates for future assessment

Question paper

Where appropriate, centres should encourage candidates to support their responses with sketches. Although sketching is not a requirement, some candidates find it challenging to express their responses in writing. This is particularly evident in 3D CAD modelling questions. However, although candidates can use pencil to construct a sketch, any final sketch should be in blue or black ink.

It is good practice for candidates to use annotations to support their responses to certain questions. Candidates who struggle to express themselves could benefit from using annotations on a graphic, where appropriate.

Centres should ensure that candidates are using the correct terminology, as detailed in the National 5 Graphic Communication Course Specification. This is particularly important when responding to 2D and 3D CAD modelling and drawing standards, conventions and protocols questions.

Candidates were generally well prepared in the CAD and DTP content (excluding candidate ability to describe application of element and principles within a graphic item. Candidates' performance continues to be poor in the more traditional content (orthographic projection, graphs and charts, drawing types, and British Standards and conventions). Centres should focus on all areas to prepare candidates for the question paper.

If candidates use the 'additional space for answers' section of the question paper booklet, they should ensure that the question they are responding to is clearly identified.

Centres should ensure that they encourage candidates to respond appropriately to the command word used in each question, for example 'state', 'explain', 'indicate', and 'describe'.

Assignment

Task 1

Most candidates found the application of British Standards challenging. In particular, the correct use of centre lines, cutting planes and applying dimensions to British Standards requires development. Producing views at an appropriate scale would help candidates with these areas. Teachers and lecturers should support candidates to understand the application of scale, centre lines, cutting planes and dimensions.

Task 2

Some candidates are annotating their thumbnails with how they have used many different design elements/principles. It is only necessary to label the correct use of the design element/principle asked for in the question.

Many candidates are displaying poor quality DTP work. Teachers and lecturers should support candidates in the creative use of the design elements/principles in order to help improve performance in this area of the assignment.

Task 3

Some candidates are using drawing boards and equipment to complete this task. As described in the task guidance, evidence of measuring, tracing and the use of drawing boards and set squares will result in no marks being awarded for this task. Teachers and lecturers should remind candidates not to use drawing boards and equipment. Centres must ensure that 3D CAD software is not used to create these drawings. If it is used then no marks will be awarded. Teachers and lecturers should remind candidates not to use 3D CAD software

Many candidates displayed a poor understanding of orthographic projection. The practical application of third angle projection and the relationship between views was poorly attempted by many candidates. In particular, candidates found the application of hidden detail in their orthographic sketching challenging. Teachers and lecturers should support candidates to understand third angle projection and learn how to apply and understand hidden detail in orthographic sketches.

Although there has been an improvement from last year, proportion across the orthographic sketches is being poorly applied in some instances. Teachers and lecturers should support candidates to understand the importance of proportion and how to apply it in orthographic sketches.

Grade boundary and statistical information:

Statistical information: update on courses

Number of resulted entries in 2018	5434
------------------------------------	------

Number of resulted entries in 2019	5406
------------------------------------	------

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	21.8%	21.8%	1176	84
B	25.1%	46.8%	1356	72
C	25.4%	72.2%	1373	60
D	16.8%	89.1%	910	48
No award	10.9%	-	591	-

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 that allow:

- ◆ a competent candidate to score a minimum of 50% of the available marks (the notional C boundary)
- ◆ 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 head of service and statistician to discuss the evidence and make decisions. Members of the SQA management team chair these meetings. SQA can adjust the grade boundaries as a result of the meetings. This allows the pass rate to be unaffected in circumstances where there is evidence that the question paper has been more, or less, challenging than usual.

- ◆ The grade boundaries can be adjusted downwards if there is evidence that the question paper is more challenging than usual.
- ◆ The grade boundaries can be adjusted upwards if there is evidence that the exam is less challenging than usual.
- ◆ Where standards are comparable to previous years, similar grade boundaries are maintained.

Grade boundaries from question 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 question papers set by centres. If SQA alters a boundary, this does not mean that centres should necessarily alter their boundary in the question papers that they set themselves.