National Qualifications 2015
Internal Assessment Report
Graphic Communication

The purpose of this report is to provide feedback to centres on verification in National Qualifications in this subject.

National Courses

Titles/levels of National Courses verified:

Advanced Higher Graphic Communication
(Graphic Presentation Component and 3D Modelling Component)

General comments

The application of national assessment standards has fallen significantly this year. The lack of understanding of the assessment guidelines gives cause for concern (bearing in mind that exemplification of standards has been available on SQA's website for several years and the detail available in the assessment guidelines and website combined is comprehensive).

The results of verification (in numbers) are as follows:

Centres selected for verification   33
Centres verified   32
Accepted   17
Not Accepted   15

Of the 15 Not Accepted centres:

9 had assessment errors only
3 had arithmetic errors only
3 had both assessment errors and arithmetic errors
7 were Not Accepted in both assessment folios
5 were Not Accepted in one of the assessment folios only

All of the Not Accepted assessment error decisions were due to generous marking by the internal assessor.

There is evidence, from the work candidates submit, that suggests limitations of teaching knowledge (every candidate across the sample making the same or similar errors). This knowledge gap has a significant impact on the quality, complexity and validity of the work produced by the candidate. It also has a negative impact when an assessor assesses the work which he/she believes to be correct but is not. The upshot is that they have failed to understand and apply the assessment criteria.

Centres that demonstrate a clear understanding of the requirements of the national standards and instruments of assessment generally do so across both folios and across all assessment topics. Centres that struggled to meet the national standard often fall short across both folios and over several topics within the folios.

Course Arrangements, Unit specifications, instruments of assessment and exemplification materials

The Course is relatively long-running and many teachers are experienced practitioners and, while content guidelines have been revised, these revisions are supported by very detailed exemplars that spell out both content and assessment techniques and clear assessment guidelines in the updated documents.

It is felt that while some centres (assessors) are becoming more familiar with the assessment guidelines there were a number of centres where neither the content nor the assessments of the content were appropriate or accurate.

Student record

The student record is a compulsory part of the verification sample and is required to confirm assessments.

Most centres provided student records and some were very clear, detailed and well presented. This invariably supported the verification process by highlighting the candidates' input and methods of production. It also gave candidates an experience which will help prepare them well for the more detailed version of the process of explaining their 3D CAD modelling methods in the Course exam. The use of annotated screen capture images was more common this year and added clarity to, and supported, successful verification.

However, not all centres included a student record in the sample and, where it had been included, some did not provide enough detail to answer the questions raised at verification or confirm the marks awarded internally. It is the candidate's responsibility to compile the student record and it is a compulsory part of both internal assessment and verification. When it does not get the time or attention it requires there are, inevitably, problems during verification.

Arithmetic errors

While most centres tally the arithmetic totals accurately, errors are still common. This always results in a Not Accepted decision at verification and the centre, consequently, has checks and re-submission of marks to carry out.

Nine centres in total miscalculated the arithmetic total on their student record and consequently incurred a Not Accepted decision and a Hold put on their assessments until checks are made by the centre and confirmation of corrections provided. One centre had four arithmetic errors while another had three in their submission (from just eight candidates). Improvement in internal verification procedures would help establish suitable internal quality checks.

Evidence Requirements

Where Not Accepted decisions occur, the issues relate to a lack of compliance with the assessment guidelines but this is often compounded when the internal assessor fails to identify omissions in content or errors in content, several of which have appeared this year. These include:

- misunderstanding of the differences between 3D modelling techniques and the edits applied to modify the 3D models
- awarding marks for 3D modelling edits without taking account of the categories of edits and how the editing marks are allocated from groups (bullet-point lists specified in the marking guidelines)
- lack of compliance with accepted drawing standards
- incorrect projection methods used in orthographic production drawings
- no evidence of decision making on layout design work
- evidence of retrospective work when 'preliminary' layouts are produced
- failure to create suitable 3D environments in favour of superimposing the image on a simple photographic backdrop

Any one of the above content errors or omissions can be costly in terms of marks and some will result in the verifier being unable to confirm any marks. The confusion between 3D modelling techniques and editing was often a significant contributor to a Not Accepted decision.

This year saw a greater than normal incidence of assessment issues. However, in general, the type and styles of evidence submitted is well established. Evidence presented for verification, in the main:

- reflected an appropriate choice and complexity of product
- was guided by the Course Arrangements
- was a suitable fit to the assessment guidelines

There is a broad understanding of the evidence requirements and the number and types of evidence are commonly satisfied. However, it is the fine detail within each item that some centres do not have a sound grasp of.

Administration of assessments

The student record is an integral part of both assessment and verification processes. It is vital in enabling the verifier to confirm marks awarded by the centre. In many cases it is given the time and effort necessary to review and prepare a commentary on how the candidate has achieved the results in the folio assessments. In some centres it does appears to have been put together quickly and lacks the necessary detail required to describe or explain how the candidate worked throughout the assessments. In such cases reaching agreement can be more difficult at verification.

Internal verification

There was limited evidence of internal verification procedures, perhaps due to the fact that, normally, only one teacher presents the Course. Where it did occur, internal verification took the form of cross-marking and a recorded discussion of the assessments carried out and was welcomed at verification.

Interpretation of assessment criteria

In several areas of the assessment projects the guidelines specify clear and unambiguous instruction to guide assessment and content:

'Orthographic drawings must include three related orthographic views with no hidden detail or facets.'

This clear instruction is not always applied correctly by the candidate nor assessed appropriately by the centre. There were instances of incorrectly assessed work in this and other well-defined assessment criteria.

When the assessment guidelines are of a more subjective nature:

'The presentation should show the effective and appropriate integration of text and graphics.'

Centres have to work harder during assessment and, presumably, during the lessons that generate this material. The centre looks closely at the candidate's input, decision making and skill in carrying out the work. The accuracy of internal assessment depends on the assessor's knowledge of creative layout techniques.

Internal assessment can be straightforward when the creative layout is strong. Creative design work is almost always obvious. The candidate's input, creativity and DTP skills are evident and application of the national standard in assessment is, almost always, correctly applied. In centres where the creative input is not as strong, the quality of layout is weak and the assessment of layout can be problematic.

Areas of good practice

Graphic Presentation

Analysis of grid and structure and design elements and principles

In a few cases the layouts to be analysed were well chosen and a thorough job was made of lining-off the structure and annotating the layout features. Analysis of design elements and principles was, in a small number of cases, extremely well done with justification given for the application of the elements and principles.

Thumbnails and visuals

Creative design layout work was found in a very small number of centres. However, clear decision making was evident in annotations and the thumbnail layouts provided an effective springboard for development of the layouts.

Implementation

There were few examples of strong creative layout work but, from a small number of centres, the combining of a range DTP features with carefully considered use

of design elements and principles produced layouts with genuine visual impact, clarity and purpose.

Presentation to a client

More centres attempted the process of applying imposition techniques at pre-press to create an eight-page publication correctly set out and ordered.

3D Modelling

3D Modelling techniques

The samples this year varied between descriptions of the modelling techniques which were clear and demonstrated an excellent understanding of the processes employed, to those which were not clear and demonstrated a very limited understanding of modelling techniques. 30 marks are available in this section and it required time, effort and careful thought.

Orthographic drawings

There are excellent examples of complex and detailed production drawings which have required skilled 3D modelling and challenging problem-solving in their creation. The application of drawing standards in some cases is first class.

Technical detail

The range of technical detail included exploded views and through, stepped and part sections. There was evidence of good understanding of the purpose and application of such drawings and they were skilfully set out to optimise clarity.

Visualisation

3D scenes and environments ranged from creative and detailed kitchens, bedrooms, living areas, workshops and outdoor areas. The challenge is to contextualise the environment to suit the product that the central model is based around and scaling the scene to match the model; this was a challenge for many centres but clearly a joy for others. The lighting of such environments was, on occasion, of a professional standard.

Specific areas for improvement

Graphic Presentation

Analysis of grid and structure

Candidates are producing a much less detailed analysis of the grid structure and typeface than is required for full marks. The knowledge gained when candidates carry out a thorough analysis of layout features is valuable learning that is built upon later in the Course and examined in the Course exam.

Analysis of design elements and principles

The analysis of existing magazine layouts is the section of this project that encourages candidates to learn about layout elements and principles and DTP features. Learning will only occur if the level of challenge is appropriate and the candidate's input demonstrates understanding of the task. Evidence was, more often than not, much less detailed than is required for high marks and with less candidate input in terms of dimensioning of features and sourcing of typeface and font sizes, etc.

Outline specification

For high or full marks candidates should create a specification covering: target audience, purpose, message and design features proposed for the layouts.

Thumbnails

Recording clear reasons for developing thumbnail layouts or for taking forward layout features is decision making.

Implementation

Multi-page layouts were, in some submissions, lacking the creative input that a good understanding of design elements and principles and DTP features brings.

Presentation to a client

Only a small number of centres used imposition techniques to produce their magazines in a properly compiled eight page signature.

3D Modelling

3D Modelling techniques

The lack of understanding in this area was the most common cause of Not Accepted decisions at verification. The marks available in this section total 30 (from the 60 available for the 3D Modelling folio) and a Not Accepted verification result is likely to occur if the assessor does not understand the difference between 'modelling technique' and 'modelling edits'. The definitions are explained clearly on pages 6 and 7 of the *Guide on Assessment – Computer-Aided 3D Modelling Presentation* (Diet 2014/2015). The definitions are also explained in several exemplar assessment resources on SQA's website. In several cases the centre's mark was changed from 6 or 12 or more, to zero. This single lack of understanding can take a centre into the Not Accepted category immediately.

Orthographic drawings

Centres are reminded that all orthographic drawings should be set out using the 3rd angle projection method as too many centres failed to comply with this long established standard.

Pictorial drawings

The assessment criteria for pictorial work states that they should be line drawings (not rendered) and without facets. Too many candidates submit rendered or faceted drawings and often with hidden detail included.

Annotations

Conformance to British Standards drawing conventions is our focus and, sadly, centre lines are often missing and view titles inappropriately sized. Title blocks must be created by the candidate (often the default title box is used and does not attract marks) and dimensioning is often too sparse and badly set out to agree, at verification, the marks awarded by centres.

Visualisation

While there is evidence from centres of strong and dynamic work in this area, too often it is not tackled with the depth and breadth of treatment expected at AH level.

Scenes and environments are an area in which candidates can create graphics (models) that have visual impact by using lighting techniques and materials that bounce and reflect light and cast shadows. This was not the norm this year. Environments were often simplistic, poorly lit and lacking the range of materials and impact required to attract high marks.