



Internal Assessment Report 2010: Computing (357)

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

C207 10: Intermediate 1 Computing Studies

C206 11: Intermediate 2 Computing

C206 12: Higher Computing

C206 13: Advanced Higher Computing

General comments

It must be strongly emphasised that centre staff who are delivering any of the above Courses should be familiar with the relevant SQA Arrangements documents and all support materials available. They would be well advised to continue to refer back to these documents throughout the delivery of the Course(s). It was evident during the verification procedures that there are centres where such practices are not in place.

Coursework tasks for Intermediate 1, Intermediate 2 and Higher are made available on the SQA secure site at the end of October each year. In a number of centres this can only be accessed by the SQA Co-ordinator who downloads the Coursework tasks and passes these to the relevant staff. Whoever assumes this responsibility, it is essential to check for possible amendments being released over subsequent weeks. There was evidence during the verification procedures that some centres had not picked up these amendments.

Centres should always submit full and complete paperwork for verification, as failing to do so can slow down the process and, depending on the specific situation, may lead to a 'not accepted' outcome.

Coursework tasks for Intermediate 1, Intermediate 2 and Higher issued annually are accompanied by detailed marking schemes that candidates can access while completing the work. In some cases, additional assessors' notes are included to clarify how specific parts of tasks are to be marked. Assessors must adhere strictly to these marking schemes and annotate their marking to ensure the verifier fully understands the decisions they have made.

Assessors are **not** permitted to amend either the tasks or the marking schemes to suit their own circumstances. During the 2010 verification procedures there was some evidence of this happening.

The verification procedures highlighted a number of cases where assessors clearly did not have a good understanding of the standards required in the Computing/Computing Studies Courses. These will be discussed in detail later in this report.

Centres should be clear that:

- ◆ Intermediate 1 Computing Studies candidates must complete a project specified annually by SQA. This project covers material outlined in the two mandatory Units of the Course and must be marked out of 40 according to the marking scheme. It is these project materials and marking schemes that must be submitted for verification. If a centre is selected for Intermediate 1 verification, only Intermediate 1 project materials should be included in the sample.
- ◆ If a centre is selected for Intermediate 2/Higher verification, Coursework materials for the specified candidates should be sent in. Where candidates have withdrawn or changed level, centres should read the instructions for substitute candidates very carefully. No other levels should be included in the sample.
- ◆ Centres should be aware that Advanced Higher Computing is carried out by a visiting process. Pupil projects should be available for scrutiny when the verifier visits the centre at an agreed time.

A good number of centres now include comments to clarify their marking. Verifiers very much appreciate these efforts as it makes the verification process easier. It is to be hoped that all assessors will adopt this practice for next session.

The submissions of a small number of centres provided clear evidence of good internal verification procedures. Marking schemes showed the marks and comments of two assessors and the resolution of any conflicts. Such practices are to be commended and encouraged across all centres. Where a centre has only one qualified assessor, consideration should be given to working with a colleague from a neighbouring centre.

Arrangements documents clearly state that Coursework/projects must be completed under controlled conditions. It is clear from verification evidence that a number of centres understand and abide by this statement in that their candidates have obviously completed the work within the recommended time and have done so independently. Where help has been given, this has been recognised in the marks awarded and explanatory comments added.

Marks from such centres are generally widespread to reflect the ability range of the candidates. Other centres should note these practices and try to conduct their Coursework in this manner. Advanced Higher projects are less precise, but careful monitoring of progress by the assessor and regular discussions with candidates where advice is offered will help to ensure that the work of the individuals stays on track and remains their own work.

Areas of good practice

Intermediate 1 Computing Studies

The majority of centres submitting verification materials at this level were accepted. There was a distinct improvement in the design aspects of the

presentation over what verifiers had witnessed in 2009, and that is to be commended. Verifiers continued to work to a tolerance of ± 2 .

Intermediate 2 Computing

The Computer Systems part of the Coursework requires that candidates carry out research to identify and recommend hardware for a particular situation. It is expected that printouts/screen dumps of web pages or photocopies of magazine adverts will be included in submissions to show where candidates' information has been gathered from. Many centres are now doing this as a matter of course, but a number are encouraging their candidates to highlight the specific information they have extracted. This is to be commended, as it makes both the marking and the verification process very much easier. Verifiers worked to a tolerance of ± 2 .

Higher Computing

The statement above relating to the presentation of the Computer Systems evidence relates equally well to Higher Computing. In this Coursework, verifiers worked to a tolerance of ± 4 .

Advanced Higher Computing

Almost all the centres verified were accepted. In many cases the candidates were available during visits to demonstrate and discuss their projects and, although not mandatory, verifiers saw this as being very helpful and worthwhile. Some projects were of a very high standard, others much more minimal in nature, but the majority had been marked well using the revised marking scheme. In this Coursework project, verifiers worked to a tolerance of ± 7 .

Areas for improvement

Intermediate 1 Computing Studies

Major issues of concern related to the spreadsheet sort and the graphics file type. Too many candidates had sorted on only one field and had not sorted the complete block of data. Some centres had used Microsoft Word as their drawing package, which of course they can do, but it is not acceptable to have candidates say that a .doc file is a graphics file type. Please refer to the Arrangements document to clarify what is acceptable here.

Although, as indicated above, there was a definite improvement in the design of the presentation, there is still room for further refinement in this area. Also, there appeared to be a degree of confusion over using a template and ensuring that objects would appear automatically on every slide.

Intermediate 2 Computing

The majority of issues arising from the 2010 Coursework related to the Computer Systems section. Many candidates were able to recommend hardware but found it very difficult to justify their choice in terms of the given scenario. In too many cases, marks were awarded for vague recommendations (eg 'bigger' or 'faster') with no indication as to why that would be important for the client.

Additionally, candidates were asked to work to a budget and so should be expected to prove that they have done so. They cannot be awarded marks if the assessor has to add up the costs to find out if they are within budget.

Higher Computing

The Computer Systems part of the Coursework at Higher level caused many problems in 2010. Where candidates identified two suitable products (and many did not), they were then expected to carry out a comparison. In many cases this amounted to no more than a table showing the data for the two products, side-by-side. This cannot be accepted as a comparison as it shows no real understanding of Higher Course content.

A written comparison is necessary to achieve the marks for this section. Verifiers tried to be generous by looking carefully at candidates' justifications to see if any comparison existed within these and, if so, award some of the marks, but frequently this did not exist. Assessors must realise that candidates are carrying out a piece of work that measures their knowledge and understanding of Computer Systems as specified in the Higher Arrangements and set their expectations in line with these.

Issues still existed with the Software Development part of the Coursework. In particular, centres must use techniques and languages that allow candidates to demonstrate the requirements of the Coursework. As stated earlier, it is not acceptable to alter the Coursework task to suit a centre's own circumstances.

Advanced Higher Computing

Comments from verifiers suggest that there may be a need for candidates to improve their feasibility studies, focus more on the testing of their software, and put more depth into their evaluations. On the whole marking was good, with only a few centres being a little lenient. They are advised to return to the Arrangements document and to look again at the exemplars available.