



National Qualifications 2011 Internal Assessment Report Computing

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: Computing Studies (Intermediate 1)

C206 11: Computing (Intermediate 2)

C206 12: Computing (Higher)

C206 13: Computing (Advanced Higher)

General comments

Over the last three years there have been considerable problems with the level of candidate response in both Intermediate 2 and Higher Computing.

In 2011, close to 40% of centres verified, fell short of the national standards and were Not Accepted. This suggests a disappointing trend in terms of the depth of understanding that many centres currently have of the national standards.

Details of the relevant issues are outlined later in this report.

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

SQA Co-ordinators within centres should ensure that all staff delivering Computing/ Computing Studies Courses have access to relevant Course Arrangements documents, Unit specifications and exemplification materials. In situations where relatively inexperienced staff are delivering Courses with no in-house support from senior subject specialists, attempts could be made to try to provide the necessary support through consortium arrangements with staff in other centres.

Additionally, SQA Co-ordinators should make available the appropriate Coursework Tasks for Intermediate 1, Intermediate 2 and Higher when these are released by SQA at the end of October each year. If the staff delivering the Courses do not have individual access to the SQA Secure Site then the Co-ordinator will also have to ensure that all subsequent amendments are also passed on to the appropriate staff.

It is expected that centre staff delivering SQA Courses will have read the Internal Assessment Reports from the previous two or three years before embarking on Coursework Tasks with their candidates.

Evidence Requirements

Centres should ensure that all paperwork is completed and submitted along with the verification materials. The verification process can be significantly hampered where this is incomplete or inaccurate. In some situations it can lead to a centre being Not Accepted.

A few centres still submit Unit assessments along with the actual Coursework Task for verification. Centres should be clear that **only** the responses to the Coursework Task for the relevant year, along with completed (and preferably annotated) marking schemes are required for verification. Only the marking schemes issued by SQA along with the Coursework Task specifications are acceptable, Centres **must not** amend the specifications or the marking schemes. Doing so will invalidate the Coursework Task.

Administration of assessments

Many centres submit well prepared and well marked Coursework Tasks. It is obvious from candidate responses that the Coursework Task is the work of the individual and has been completed under the expected 'controlled conditions'. Marking schemes are applied carefully and thoughtfully, with notes added to explain why marks have/have not been awarded. Such practices are extremely helpful to the verification process.

Some centres show evidence of internal verification where another assessor has cross-marked the candidates' Coursework Tasks, a practice that is expected to be in place in all centres. Internal verification is the only way of ensuring consistent assessment decisions are made across all candidates in a centre.

Areas of good practice/areas for improvement

Intermediate 1 Computing Studies

Approximately 75% of centres verified at this level were Accepted. Candidates' work was generally well presented, with a reasonable attempt being made at the design of the presentation which has, in the past, been an area of weakness. Verifiers again worked to a tolerance of ± 2 out of the total of 40 marks.

Intermediate 2 Computing

As last year, a number of centres fulfilled Verifiers' expectations by providing highlighted printouts from websites to support candidates' choices of hardware in the Computer Systems section of the Coursework Task. Supplying this evidence is a requirement of the Coursework Task, not an option as it is not the Verifiers' responsibility to check URLs. Verifiers worked to a tolerance of ± 2 out of the total of 30 marks.

Higher Computing

The statement above relating to highlighted printouts is equally important at Higher level. Verifiers worked to a tolerance of ± 4 out of the total of 60 marks.

Advanced Higher Computing

Many centres are delivering the Advanced Higher Course on very limited time allocations and in these cases candidates must demonstrate a real ability to work independently and manage their time efficiently. The visits made this year highlighted a few exceptional examples of Project work where candidates had produced software of a very high standard, exploiting many of the new web technologies. Such candidates and the staff supporting them are to be commended for their innovation. AH Coursework Projects were verified to a tolerance of ± 7 out of the total of 80 marks.

Specific areas for improvement

Intermediate 1 Computing Studies

In this task there was a general lack of understanding of the use of a template. This was obvious from the fact that the logo and text that should have been part of the template did not always appear the same on all slides.

Some of the centres Not Accepted at Intermediate 1 level demonstrated a serious lack of understanding of the requirements of the Course. It is recommended that in order to provide candidates with a worthwhile experience, centres should ensure that all staff delivering such a Course have sufficient subject knowledge and expertise to do so.

Intermediate 2 Computing

There are two major areas of weakness at Intermediate 2 level. One of these is the 'justification' of the choice of hardware/software in the Computer Systems section. As with previous years, too many candidates failed to relate their choice to the given scenario. The other major weakness lies with the elaboration of the algorithm in the Software Development section. Candidates continue to write this in program code which is not acceptable. Also, there does not appear to be recognition that the actual program should mirror the stated algorithm. In this year's Coursework Task the use of arrays was essential to fulfil the specification as it was given.

Higher Computing

The Computer Systems section of the Higher Coursework Task continues to present problems for candidates and assessors. In working through the specification, candidates are expected to demonstrate a knowledge and understanding of the Course content at Higher level and all too often this is not happening. Candidates are being awarded marks for very superficial answers and, in some cases, for wrong answers. Centres should ensure the hardware/software identified by candidates actually does meet the criteria. Candidates should then be expected to provide a written comparison of the two items incorporating content they have learned as part of their Higher Course. Finally, candidates should state their choice of item, justifying this carefully in terms of the context of the Coursework Task. It is not sufficient to make statements such as 'bigger', 'faster', etc.

The major Software Development issue continues to be 'data flow' both in terms of showing this in the algorithm and implementing it in the coding. Staff delivering the Higher Software Development Unit should ensure that sufficient time is spent on this major aspect of the work.

Advanced Higher Computing

Some candidates require more guidance as to the requirements of an AH Computing Project and would benefit from discussing their choice of Project with the teacher/lecturer to ensure that they have considered how they will demonstrate mastery of the software development topics they have studied at Advanced Higher level. In addition, the teacher/lecturer should monitor the progress of the Projects, discussing this with candidates and recording any issues or advice given so that this can be reflected in the marking. Candidates should be supplied with the marking scheme and encouraged to use this as a guide when writing their final reports.