



# **NQ Verification 2015–16 Key Message Reports**

<b>Verification group name:</b>	<b>Computer Science</b>
<b>Levels</b>	<b>N3 – Advanced Higher</b>
<b>Date published:</b>	<b>October 2016</b>

**This Report combines all Verification Key Messages for the academic session 2015-2016.**



## NQ Verification 2015–16 Key Messages Round 1

01

### Section 1: Verification group information

Verification group name:	Computing Science
Verification event/visiting information	Event/visiting
Date published:	March 2016

#### National Courses/Units verified:

H222	National 3	Information Solutions
H21X	National 3	Building Digital Solutions
H226	National 4	Information Systems Design & Development
H223	National 4	Software Design and Development
H226	National 5	Information Systems Design & Development
H223	National 5	Software Design and Development
H226	Higher	Information Systems Design & Development
H223	Higher	Software Design and Development
H226	Advanced Higher	Information Systems Design & Development
H223	Advanced Higher	Software Design and Development

### Section 2: Comments on assessment

02

#### Assessment approaches

All the centres used SQA Unit assessment support packs (UASPs) with Unit by Unit approaches, although some centres had made some small changes.

Centres should ensure that they are using the most recent UASPs and the appropriate Evidence Requirements.

Centres should ensure that if they make changes to the assessments in the UASPs the assessments still cover all the Assessment Standards.

The prior verification service is available free of charge and full details (along with appropriate forms for submission) can be found on the [new National Qualifications prior verification web page](#).

## Assessment judgements

The majority of centres were judging the evidence according to the appropriate Assessment Standard.

It is important that assessors record on the candidate evidence where they decide that an Assessment Standard is achieved. This would aid support for the candidates, internal verification of the candidates' work and eventually the external verification process.

### Higher Software Design and Development (SDD)

Assessment Standard 2.4 asks for an appropriate test plan and completed final testing. Depending on the task this could require a number of different tests, eg the task for UASP1 only requires one test to ensure the program finds the candidate with the top mark, whereas the task for UASP 3 could require more than a dozen different tests to ensure the program works correctly. It isn't acceptable to just test normal, extreme and exceptional data. All test plans should be accompanied by evidence (screenshots) that the test plans have been carried out.

Assessment Standard 2.2 requires evidence of high-level planning showing main modules and data flow. It should be possible to do this using one design notation.

### Higher Information Systems Design & Development (ISDD)

The standard accepted by some centres for Higher ISDD Assessment Standard 1.1 ('Applying contemporary design and development methodologies'), when applied to Website design was much lower than required. The design should show where the implementation of the required structure and links will take place eg internal and external hyperlinks and search facility.

### Advanced Higher SDD

UASP 1 did not give clear guidance as to where the opportunity to describe two data types was, and this will be rectified next session.

03

## Section 3: General comments

Oral evidence is acceptable but it is expected that the assessor submits a note of the discussion that took place.

If a candidate doesn't meet the requirements of an Assessment Standard, then it is acceptable for an assessor to return the work to the candidate, without any further support, and ask the candidate if they could add some additional information to the answer that they have provided. This would not count as a re-assessment.

If a candidate cannot overtake an Assessment Standard then a period of consolidation and remediation should take place before the candidate is given another opportunity to be re-assessed on that Assessment Standard, using a different assessment instrument.

Centres should note that candidates should be given an opportunity to be re-assessed on any Assessment Standard that the assessor has deemed that they have failed.

Evidence of internal verification must be provided, as should a detailed description of how this has been carried out by the centre. Cross-marking should be clearly shown in a different colour to the original marking, as should the signature of the cross-marker. Clear guidance exists on SQA's website regarding internal verification:

[Internal Verification: a Guide for Centres offering SQA Qualifications](#)



## NQ Verification 2015–16 Key Messages Round 2

01

### Section 1: Verification group information

Verification group name:	Computing Science
Verification event/visiting information	National 4 Added Value Unit — event National 5/Higher/Advanced Higher IACCA — visiting
Date published:	June 2016

#### National Courses/Units verified:

H227 74	National 4	Added value unit
	National 5	Internally assessed component of course assessment (IACCA)
	Higher	Internally assessed component of course assessment (IACCA)
	AH	Project

02

### Section 2: Comments on assessment

#### Assessment approaches

All centres had used an SQA produced assignment.

Centres should ensure that they are using the latest version of the assignment and that they have prepared any required files for the candidates in advance, as specified in the 'guidance for assessors' section of the assignment.

Some centres had created electronic pro-formas for candidates to use. This is acceptable so long as the electronic versions are **identical** to the paper versions — any deviation from this could affect the level of demand of the task and render the assessment invalid.

## **Assessment judgements**

### **National 4**

In the design of the database structure, the data types should be those that are mentioned on page 16 of the National 4 Course Support Notes — ie text, number, date, time, graphic, calculated.

Candidates must have evidence to show that they have met the assessment standards. For example, in Games Design, evidence would include screenshots of webpages and scoreboards. Evidence must also be of a reasonable size to read.

Design should be in an appropriate graphical or contemporary design notation.

The design of the user interface must show both the input and output.

### **National 5 and Higher**

Assessors are reminded to check the 'Guidance on appropriate support from assessor' section in the assignments, and to reflect any assistance given in the marks awarded, along with a comment in the assessment record to explain this.

It is important that assessors use the criteria for a stage being complete and then assign it to the correct banding:

- ◆ If the evidence almost matches the level above, the highest available mark from the range should be awarded.
- ◆ If the candidate's work just meets the standard described, the lowest mark from the range should be awarded.
- ◆ If neither of the above is appropriate, then a mark from the middle of the range should be awarded.

A mark of 9 can only be obtained when a candidate has everything complete for that stage, allowing for a very slight error.

Candidates should not have marks deducted for having additional material within their solution. Marking should always be positive.

### **Stage 1 Analysing the problem**

Assessors must only award marks relative to the 'Analysing the problem' stage.

The analysis stage must be marked for the assignment as a whole and not marked separately for the program and information system.

### **Stage 2 Building a solution (modular program design)**

The design of the user interface must be annotated and include both inputs and outputs.

It is not necessary for candidates to provide more than one method of contemporary design notation.

SQA Reference Language (Haggis) should not be used as a design notation. Higher only: Data flow should show the variables that are to be inputted and outputted to subprograms. There is no requirement to use program-specific instructions such as 'by ref' and 'by value'. A number of candidates made the mistake of thinking that the data inputted and outputted from the program should be shown in the data flow.

### **Stage 2 Building a solution (modular program development)**

Assessors should be careful not to mark 'internal commentary' too harshly. If the major steps of the program are internally commented on, that is sufficient.

Candidates must ensure they provide evidence of all their testing.

### **Stage 2 Building a solution (Information system design)**

Validation, such as restricted choice and lookup of data from other tables, needs to be clearly stated. For example, it is not sufficient to say 'restricted choice' without stating what the choice is restricted to.

Candidates can show the design of their queries in any way that is appropriate, but they cannot screenshot the implementation of the query as evidence of design.

### **Stage 2 Building a solution (Information system development)**

Many candidates did not ensure that they had evidence of all the requirements for this stage.

Assessors should ensure that the candidates have the candidate checklist and remind them to use it.

### **Stage 3 Reporting on the solution**

Only one legal implication **or** one security implication is required; it is not necessary to have one of each.

### **Advanced Higher**

Assessors must ensure that the marking reflects the evidence that a candidate submits.

Candidates must have detailed evidence for all stages of the project.

It is important to stress to the candidates that the Record of Progress and reflective commentary must be continually updated.

03

## **Section 3: General comments**

The majority of assessors have now gained confidence in the marking system used for the internally assessed component of course assessment (IACCA) and are marking appropriately.

Assessors should feel free to add comments on candidates' completed assignments to explain how they arrived at their decisions on the banding. This not only helps the assessor come to their decision, but is also helpful to both the internal and external verifier.

The comments made by the assessors regarding the reasoning for their marks were invaluable to the verification process.