



## **National Qualifications 2007**

### **Senior Verifier Report**

**Subject: Information Systems NQ**

**Assessment Panel: Computing and Information Systems**

The purpose of this report is to provide feedback to centres on verification which has taken place within National Qualifications in this subject.

## COMPONENT / COURSEWORK IN NATIONAL COURSES

### COMPONENT/COURSEWORK VERIFIED

#### Intermediate 2, Higher and Advanced Higher Coursework Tasks

### FEEDBACK TO CENTRES

#### General comments:

At the central verification event for Int2 and Higher, there was a considerable reduction in the number of centres not accepted; only approximately 30% of centres not accepted. This is encouraging as over 50% were not accepted in 2006.

Once again it was definitely the Using Information sections across both Higher and Int2 that were leniently marked. The Database sections were, in general, accurately and fairly marked. The main problems came from candidates not comparing applications in terms of the stated criteria and not relating their answers to the scenario or task stated. There seemed to be a significant amount of copying and pasting with no attempt to individualise the responses so that they related to the actual scenario given.

Verifiers also made the point that it would aid the verification process enormously if candidate scripts were annotated and detailed comments provided in the marking grid to explain why marks have been awarded or deducted or in fact as a guide to the amount of help provided.

It was also noted by some verifiers that a significant number of candidates were re-submitting work and being credited for the re-submission instead of the original mark before re-submission. This is clearly unacceptable practice.

Visiting verification for Advanced Higher continues to be very successful indeed. It was particularly essential and beneficial this year as this was the first year of the new arrangements for the coursework task. Centres truly appreciate the visit and gain a great deal from the feedback and discussions with the visiting verifier. All AH centres apart from one were accepted after discussion with the visiting verifier on the marks awarded by the centre.

## Advice on good practice and areas for further development:

### Int2

#### Part 1: Using Information

Task 1 was generally done well although a significant number of candidates did not use the correct syntax for the SUM function in Tasks 1(a) and 1(b). A common example was SUM(B5-B11) in Task 1 (c). Some candidates lost marks carelessly for not formatting the spreadsheet to match the one in Task 1 (f), i.e. they did not bold, italicise or align the data to match the spreadsheet shown. Task 2 caused most of the problems as many candidates were not able to provide suitable non-formatting operations. Many centres were awarding marks to candidates for listing formatting/non formatting operations and formatting functions but the question required them to *describe* these. The task required candidates to evaluate the suitability of the spreadsheet application to perform these operations and functions and therefore merely listing a number of operations or functions was not providing what was required.

#### Part 2: Databases

In general, this section was accurately and fairly marked by centres. There were, however, a number of points that centres should take into consideration in marking future coursework.

In Task 2, the creation of the table required the attribute “Halfpipe” to be set as a text field with a restricted choice validation check of Yes/No performed on it yet most candidates set this as a Yes/No Boolean field which was incorrect as no validation check can be performed on this data type. Candidates were not penalised for this.

In Tasks, 8 and 9, many candidates received full marks for selection of correct records when records were either missing or additional to requirements. Also, many candidates received full marks for including extraneous fields.

In general, the moderation team felt they were being quite lenient in what they decided they were willing to accept and a tolerance factor of 2 out of a total mark of 30 was agreed.

### Higher

#### Part 1: Using Information

Task 6 was very leniently marked. The majority of candidates did not *compare* the two software packages based on the criteria listed. They tended to provide descriptions of each with no comparison between them. This should have been penalised by deducting at least 2 marks. Many candidates made a poor choice of the alternative package. Word Processing would have been far easier to compare with web authoring on the criteria listed than some of the packages chosen by candidates.

In Task 7 many candidates were given credit for creating web pages with a navigation bar when all they had done was place buttons or links randomly on the page. Many candidates omitted the page title yet were given credit as long as they had a heading on the page. Also, it is accepted and understood that there can be problems in producing a printout of a web page background but

centres should have indicated to the verification team that, although a printout was not possible, the background was witnessed on screen at the centre and a note to that effect would have been perfectly acceptable. There was also lenient marking in relation to the logo which in many cases had not been used consistently and tended to vary in size from page to page. There were also many examples of inconsistent house styles and page titles not included on all three pages.

The two web pages on the security strategy caused the most problems. This area was very leniently marked. It was clear that many candidates had copied and pasted from the web information on possible threats to a server without relating this to the particular circumstances of Articulate Clothing. Although it is accepted that possible threats to a server will be generic in their very nature as they could apply to any web server, candidates should have couched this in terms of a suitable security policy for Articulate Clothing. Also, many candidates described threats that were not threats to a web server. Similarly the solutions should have been described in terms of how this particular company intend to deal with these threats rather than generic solutions to the problems that these threats create. The same applies to the web page on customer payment transmission. Many candidates researched the web and produced a report on secure payment transmission without even mentioning that this was, in fact, the method used by Articulate Clothing. Other candidates simply named a method or technique. The majority of candidates described the security issues involved when paying for goods over the Internet without actually concentrating on the steps Articulate clothing had taken to ensure that their customers' payment details would be kept secure.

## **Part 2: Relational Databases**

In general, this section was accurately and fairly marked by centres. There were, however, a number of points that centres should take into consideration in marking future coursework.

In Task 1 which was the data dictionary, candidates were not penalised as indicated in the detailed marking instructions. Candidates had to show the full range check for size. Validation rules entered without the use of AND would not have worked when implemented. Centres should take care to read the evidence provided by the documenter facility as this clearly indicates presence checks and validation checks which are omitted or entered incorrectly. In fact, a large number of candidates did not provide evidence of all 8 validation checks but were not penalised according to the detailed marking instructions.

In Task 2 (d), some candidates were awarded marks for the relationships when it was clear that referential integrity had not been enforced.

A tolerance of 4 out of a total mark of 60 was agreed for the Higher coursework task.

## **Advanced Higher**

Centres really appreciate the visiting verification model used for Advanced Higher. It gives the centres the opportunity to discuss and agree on how marks should be awarded to the project. Teachers receive invaluable advice and support on what is expected as the national standard for the project which in turn will help them significantly in the marking of projects of future candidates.

However, the following advice should continue to be adhered to by centres presenting Advanced Higher:

1. Ensure there is evidence for every requirement of the marking scheme.
2. Ensure that the complexity of the task, particularly relating to the processes involved in the task and the design of the user interface, is at AH level.
3. Ensure that the candidates' system design documentation i.e. data modelling, data flow and entity modelling matches the functional requirements in the specification.
4. Ensure that the process of normalisation from UNF to 3NF is included and has been carried out correctly.
5. Check E/R diagram reflects the normalised data model.
6. The design in relation to normalisation and E/R diagrams should reflect the whole database system and not individual sub systems which have been normalised and E/R diagrams created independently of the other entities.
7. Ensure that the design of the user interface is carried out prior to implementation and not screen shots of the interface which has already been implemented.
8. Time allocation should be a plan of how long is to be spent on each activity, not a progress diary of how long was spent on each activity.
9. Candidates must supply evidence of a complete working solution which has been systematically tested to match the original functional requirements.

A tolerance of 6 out of a total mark of 80 was agreed for the Advanced Higher coursework project.

## **Recommendations**

The Coursework Task is intended to give candidates the opportunity to apply their Knowledge and Understanding to a complex context. Centres should only award full marks where candidates have related their answers to the context of the task.

The sample Coursework tasks, which are contained in the Course Assessment Packs for each level, include sample solutions which indicate suitable levels of response.