

12 January 2005

To: SQA Co-ordinator
Director of Education
Head of Centre
SQA Co-ordinator

**For the attention of all staff
responsible for the delivery of
National Qualifications in
Computing and Information
Systems**

Action by Recipient
Response required
Note and pass on
<input checked="" type="checkbox"/> None – update/information only

Contact Name — Derek Middleton at Glasgow
Direct Line — 0141-242 2190
E-mail — derek.middleton@sqa.org.uk

Dear Colleague

Computing and Information Systems — Update

The contents of this letter should be passed to the member of staff responsible for Computing and Information Systems.

This letter is intended to provide centres with information on developments in National Qualifications in Computing and Information Systems.

I would like to take this opportunity to introduce myself as Qualifications Manager for Computing and Technical Subjects (NQ) and also to introduce Dave Main, taking over from Louise Lilly, as Qualifications Officer for Computing and Information Systems (NQ).

SQA website

I have had a number of queries regarding difficulties in finding material on the website.

Arrangements documents, Principal Assessor reports and other public documents can be found on the subject page on the main website: **www.sqa.org.uk**.

The quickest way to access this material is to click on the NQ logo and then select the relevant subject from the subject drop-down menu.

NAB assessments, coursework tasks and projects can be found on the secure website. Access to this website is through your SQA Co-ordinator. Please note that the secure website contains material for HN subjects as well as NQ subjects. Once on the site select the relevant subject from the **NQ subject** drop-down menu.

It should also be remembered that for Access 3, Intermediate 1 and Standard Grade Computing Studies the name of the subject is 'Computing Studies' and not 'Computing'.

NQ Review

New Courses in Computing Studies (Standard Grade and Intermediate 1) and Computing (Intermediate 2 and Higher) are running this session. The new Advanced Higher Course will start next session (2005/2006).

New Information Systems Courses at Intermediate 2 and Higher level will commence session 2005/2006 with Advanced Higher starting session 2006/2007. Launch seminars for Higher Information Systems took place in November.

Coursework tasks and NAB assessments for the new Courses are now available to download from the secure website.

Prelims, Estimates and Appeals

Many centres use prelims as a way of estimating candidate performance and also as the main source of evidence for appeals. It should be remembered that such prelims should mirror the actual SQA exam in time allocation, number of marks, balance of marks between topics and level of demand. Centres should consider the effect that any deviation from the final examination format may have on level of demand and adjust their estimates accordingly.

Centres must also ensure that prelims are unseen. Because of this specimen papers and complete past papers are not suitable for this purpose. Centres may create prelims by selecting questions from a minimum of three past papers but must not lift questions 'en bloc'. Ideally past paper questions should also be altered.

Centres may use commercially produced papers but must ensure that they are valid, reliable, set at the correct level of demand and are unseen. For this reason centres must use the current year's paper. If old commercial papers are used then the same rules as apply to past SQA papers will apply.

Computing and Computing Studies Update

Standard Grade Computing Studies

The new arrangements for Standard Grade apply to Courses leading to certification in session 2005/2006. Candidates sitting the Standard Grade examination in 2005 will be assessed according to the 'old' arrangements.

Coursework tasks for the 'new' Course are now available on the secure website. Centres can still use centre generated coursework tasks if they wish provided they are in line with the new arrangements.

New project specifications for the 'new' Course will be posted on the secure website in Spring 2005.

The procedure for calculating the Practical Abilities grade and for compiling Practical Abilities evidence for the folder of work for the 'new' Course will be exactly the same as for the 'old' Course. However I would draw your attention to paragraph 6 5 7 on page 26 of the new arrangements document regarding the evidence required for the awarding of Core Skills as this is new.

Error in Arrangements Document

On page 14 (Computer Systems) 'mainframe' appears in the General column. This is inconsistent with page 13 (CDP) where it appears in the Foundation column. 'Mainframe' should be in the Foundation column on both pages.

Dual Running of Intermediate 1 Computing Studies, Intermediate 2 and Higher Computing

Session 2004/5 will be the last session for which centres can present candidates for the 'old' Computing Courses. It is also the first session for which centres can present candidates for the 'new' Computing Courses.

Please ensure that candidates are entered for the correct Courses and Units and that the correct procedure for assessing and submitting coursework marks is followed.

Intermediate 1 Computing Studies (Old)	Intermediate 1 Computing Studies (New)
Course Code C016 10	Course Code C207 10
Units	Units
D094 10 Computer Application Software	DF33 10 Computing Applications
D093 10 Computer Systems	DF34 10 Multimedia Applications
D097 10 Information Systems	DF37 10 Computers and The Internet
D095 10 Software Development	DF36 10 Information and The Internet

D096 10 The Internet	
Coursework	Coursework
Project marked out of 50	Coursework task marked out of 40
Submitted as a percentage	Submitted unscaled

Intermediate 2 Computing (Old)	Intermediate 2 Computing (New)
Course Code C017 11	Course Code C206 11
Units	Units
D093 11 Computer Systems	DF2X 11 Computer Systems
D095 11 Software Development	DF2Y 11 Software Development
D098 11 Computing Project	DF31 11 Artificial Intelligence
	DF30 11 Computer Networking
	DF32 11 Multimedia Technology
Coursework	Coursework
Project from Project Unit marked out of 42	Coursework task marked out of 30
Submitted as a percentage	Submitted unscaled

Higher Computing (Old)	Higher Computing (New)
Course Code C017 12	Course Code C206 12
Units	Units
D093 12 Computer Systems	DF2X 12 Computer Systems
D095 12 Software Development	DF2Y 12 Software Development
D101 12 Artificial Intelligence	DF31 12 Artificial Intelligence
D100 12 Computer Programming	DF30 12 Computer Networking
D099 12 Computer Networking	DF32 12 Multimedia Technology
D102 12 Multimedia Technology	
Coursework	Coursework
2 Unit Assessments each marked out of 10	Coursework task marked out of 60
Submitted as a percentage	Submitted unscaled

Coursework tasks for the 'new' Intermediate 1 Computing Studies, Intermediate 2 Computing and Higher Computing Courses are available on the secure website.

Errors in Arrangements Documents

In the Intermediate 1 Arrangements, Calculated Field appears in the content statements for Information and the Internet at the front of the document but not in the content statements in the Unit descriptor.

Similarly, in the Higher Arrangements, program virus appears in the content statements in the Unit descriptor but not at the front.

In both cases, the statements at the front of the document are the correct ones.

Errors in NABs

Some errors were discovered in the Higher Computer Systems NAB DF2X 12/ NAB 001.

Page 11 Assessment 1A Q12:	The arrows were in the wrong place
Page 16 Assessment 1B Q12:	The arrows were in the wrong place
Page 21 Marking Grid:	Assessment 1A Q13 the answer should be B
Page 21 Marking Grid:	Assessment 1B Q2 the answer should be B

These errors have been corrected and a corrected version of the NAB made available.

Feedback from Principal Assessor Reports

Standard Grade Computing Studies

The rising standard at Credit Level continues to show that teachers are preparing candidates well for this examination. The reduction in numbers failing to achieve Grade 6 or above is indeed another positive indicator.

The stability of the Course over a number of years has increased confidence, leading to accurate teacher prediction, higher standards, and the maintenance of good candidate take up, despite the impact of Intermediate level alternatives.

For a number of years we have seen that GPP is well taught and the challenge is to improve those areas of the curriculum which cannot be addressed in the classroom from a practical angle.

The following general advice is offered:

- ◆ Candidates should be encouraged to answer all questions and read over their work.
- ◆ They should look carefully at the number of marks available and structure their response accordingly.
- ◆ When describing searching or sorting in a database candidates should always name the fields involved.

Specific points regarding this year's paper:

- ◆ Always name the Unit when talking about memory, eg 150(Bytes)
- ◆ The number of records that can fit on a disk is always a whole number — remember to round down.
- ◆ The function SUM on a spreadsheet is used specifically for adding over a range. Do not use it elsewhere.
- ◆ Clip-Art is NOT a graphics tool.
- ◆ Avoid general answers like better, faster etc, when describing why something is an advantage.

Absent Candidates

We were unable to award a small number of absent candidates the predicted grade of the centre.

Please ensure that evidence of candidates achieving the predicted grade is enclosed as would be expected for the appeals process.

Intermediate 1 Computing Studies

The majority of students attempted most questions but still with non-technical vocabulary. The Internet option is still the most popular although the other two options have increased slightly in popularity.

Internet questions were answered well and there was an improvement in the responses to the systems questions.

Many students confused the terms 'backing storage' and 'backup'. The explanation required in the problem solving aspects of computer applications was not always clear enough to enable the candidates to be awarded full marks.

Within the Information Technology section it was clear that many students lacked the knowledge of the correct terminology.

Intermediate 2 Computing

Some candidates still not presented at the correct level, but the majority were answering most of the questions and using slightly better technical vocabulary than in the past. There has been a slight improvement in the answering of Software Development questions but there are still difficulties with students applying their knowledge to problem solving scenarios.

The Computer Systems questions were usually well answered with questions about the difference between ROM and RAM, suitable peripherals etc, usually answered with reasonably good technical detail. Selection of test data, functions of operating systems and the stages of the software development process were answered much better this year.

Problem solving within software development is an area where most students seem unable to grasp the wider concepts. Very few students seem to know what pre-defined functions are.

As in previous years more time should be spent on Software Development with students practising questions which bring together their practical coding skills with general software development structures.

Higher Computing

Centres should stress to candidates the need for detailed, accurate and complete descriptions of computing knowledge. A level of depth and breadth appropriate to Higher level is required.

Candidates should be reminded that when a question asks for a description or an explanation full marks will not be given for an answer which simply states the name of a device or the name of a feature of an application package.

Problem solving questions often require candidates to relate their answers to the context of the question. Many candidates simply write down all that they know without relating it to the context.

To achieve a grade A or B candidates must be able extract relevant knowledge from the text of a question and use that knowledge to solve a given problem which may be set in an unfamiliar context.

It was obvious this year that candidates were not taking time to read the questions thoroughly and lost marks because of this.

Advanced Higher Computing

Questions relating to recall of knowledge were generally well done, but extended responses in problem solving/analytical approach were lacking in the depth required at Advanced Higher. Candidates should be encouraged to consider the structure of responses to extended questions and must learn to relate responses to the context of the question.

Software Development

Candidates demonstrated an ability to recall the stages of the Software Development Process.

Application of the Software Development Process to the scenario outlined in the question paper was not well done. Candidates did not relate back to the stem of the question or apply their knowledge to the scenario.

Development of algorithms and data flow diagrams was attempted by few candidates and those who did were unable to demonstrate an understanding beyond that expected at Intermediate/Standard Grade levels.

Very few candidates attempted Q 2.

Artificial Intelligence

Candidates undertaking questions in this option were reasonably well prepared and were able to communicate more clearly than in other Unit.

Candidates need to be encouraged to develop their use of technical language more appropriately.

The depth of response in relation to questions which required evaluation and synthesis were often not at an appropriate level for Advanced Higher.

Very few candidates attempted Q 5.

Computer Systems

Many candidates wrote large extended responses to some of the questions but failed to give an appropriate level of depth of treatment or attention to the technical detail required at this level.

When comparing Operating Systems candidates still make trivial comparisons between Operating Systems which are not significantly different.

Many candidates could not describe the purpose of a section of code written in assembly language. They merely restated what was given in the question stem.

Very few candidates attempted Q 8.

Data Communications

Very few candidates demonstrated secure knowledge in many aspects of Data Communications and real understanding of technical aspects of networking is often missing from candidate responses.

Treatment of network etiquette remains at a very trivial level despite questions clearly looking for a more in-depth response.

Few candidates have a secure understanding of OSI.

Feedback from Senior Moderators Reports

Standard Grade Computing Studies

Although five centres were 'not accepted' for arithmetical errors, we noticed a marked improvement in centres' procedures relating to summation of marks, application of cut-off scores, transferring grades to flysheets and calculating final grade from element grades.

Centres giving element grades such as $\frac{1}{2}$ or $\frac{3}{4}$ were limited to one or two. One centre still gave decimal fraction grades such as 3.5.

Only one centre was 'not accepted' for an assessment error and this was due to marking general level work at credit grades and using the same courseworks at all levels, but grading candidates on total marks gained. This led to inappropriate grades being awarded.

Higher Computing

Some centres will continue to offer the current Higher arrangements in 2005. They should note the need to clarify individual candidates' marks out of 10 for each of the items of coursework. In addition, where NABs are being used that have only checklists, details of how grades are derived should be included. Where NAB4 is used, centres should ensure that they use the stated cut-offs.

Advanced Higher Computing

The existing arrangements for AH Computing will continue to be used for 2005. Centres should ensure that projects attempted by candidates are at an appropriate level for Advanced Higher. Candidates should be encouraged to consider different strategies before selecting the most appropriate. This should be seen as an important part of the software development process. Candidates should also be advised of the need to structure reports carefully and to proof read all their work.

New Intermediate and Higher Coursework

Many centres will be moving over to revised arrangements in Intermediate 1 Computing Studies, Intermediate 2 and Higher Computing. All new Courses will require candidates to submit coursework specified by SQA. Centres are encouraged to carefully annotate the marking of this coursework in line with the marking scheme provided. Markers' comments are very useful to moderators trying to check that standards have been applied accurately.

Information Systems Update

NQ Review

Arrangements documents and course assessment packs for the new Intermediate 2 and Higher Information Systems Courses are available for download from SQA's website. The course assessment packs contain the specimen question papers and the specimen coursework tasks.

Changes to Higher Arrangements document and Intermediate 2 Database NAB

Some changes have been made to the Higher arrangements document to correct typing errors, resolve inconsistencies and clarify terms.

The definition of complex queries (page 43) has been expanded to include calculations.

To maintain consistency with earlier statements, paragraph 6 on page 44 has been changed and now reads:

*Candidates should be presented with **two** source documents and a requirements definition detailing the restrictions which apply to the system and, from this, should analyse, design and implement a database system. In the **most** complex problem presented to the candidate the source documents should breakdown into two tables in 1NF (one of which will have a compound key of not more than **three** attributes), three tables in 2NF (based on the compound key given in 1NF) and four tables in 3NF (based on a single non-key dependency). It is appropriate that some problems given to candidates will not require all of the stages of normalisation to be applied. Candidates should be aware that entities in 3NF are already in 1NF and 2NF by definition and that entities in 2NF are already in 1NF.*

The latest version is on SQA's website.

Several errors were discovered in the Intermediate 2 Database Systems NAB. These errors have been corrected and the NAB has been replaced on the secure website.

Please make sure that you are using the most up-to-date versions of these documents.

Feedback from Principal Assessors' Reports

Intermediate 2 Information Systems

Section 1 was answered well with most candidates scoring over 20 out of 30.

The Multimedia and Internet optional sections remain far more popular than Applications of IT in Society, and are usually better answered. Candidates performed slightly better in the Internet section than in Multimedia.

Overall, candidates performed less well in their optional section than in Section 1.

In Section 1 Q12 and Q14 were found challenging with few candidates scoring the full two marks. In Q4 many candidates failed to relate their answer to the multimedia database mentioned in the stem of the question.

In Q18 many candidates confused *telecommuting* with *teleconferencing*.

Question 23(c) had few correct responses.

In general, questions requiring a definition of a term were not well answered, eg 20(a), 21(c)(i).

There is still a problem of candidates using non-technical terms when answering questions, eg 'look for' instead of 'search'.

Many candidates give single word answers even when asked to describe something.

As has been noted in previous years, candidates continue to use proprietary names in answers instead of generic terms, eg 'Microsoft Word' instead of 'word processing software'.

Higher Information Systems

In the core section, the normalisation database question (Question 1) was done very well by the majority of candidates with a significant percentage scoring full marks. The first Information Organisation question (Question 2) was also answered very well, a significant improvement in the responses to this question compared to previous years. In the optional topics, expert systems questions were answered the best with candidates scoring particularly well in questions 9 and 10.

In the core section, questions 3 and 4 were answered very poorly indeed. In question 3 (a), the majority of candidates either did not know why this flat file database was unsuitable or they responded in general terms with no reference to the particular problems with this flat file database. In questions 3 (c) and (d), a practical knowledge on the use of a database is required to answer these questions but many candidates found it difficult to explain how these tasks could be performed using the database with which they were familiar.

In question 4 (a) the majority of candidates did not describe the hardware, software and communication requirements in any detail. Most just listed the items with no link to the scenario and no apparent understanding of the structure of a networked information system. In question 4 (c) a significant amount of marks were lost (up to 5) as candidates did not select a suitable contemporary information system. Many candidates chose the Internet without referring to a particular website that they had studied or become familiar.

In the Computer Application Software option, candidates found difficulty with question 6 in that the majority could not identify four features required by the software to produce the effects in the leaflet and could not identify two suitable contemporary developments relating to the functionality of application software. Very few candidates were able to give a suitable stimulus to development for the contemporary development.

In the Hypermedia option, a significant number of candidates did not select a suitable contemporary development in the area of hypermedia in question 11 (d). Consequently, up to five marks were lost here because of this. More difficulty, however, was experienced with question 12 where the vast majority of candidates could not answer question parts (b) and (c).

Presenting centres should stress to candidates that their responses should not be vague but detailed, accurate and complete: a level of depth and breadth appropriate to Higher level is required. A question which asks for a description or an explanation will not be given full marks if the answer simply states the name of an information system or the feature of an application package. The use of appropriate technical terminology also has to be encouraged.

Centres also need to stress to candidates that problem solving questions often require candidates to relate their answers to the context of the question. They have to use the information supplied in the scenario. Many candidates simply write down all that they know without relating it to the context.

Since the question paper only has 70 marks available in an exam lasting 2.5 hours, asking candidates for two responses for 1 mark question is unavoidable if Higher standards are to be met. Centres should ensure that candidates are aware of the need to give as full and focused answers as possible to maximise attainment.

Advanced Higher Information Systems

Candidate performance in the exam continues to show improvement — especially the skills required to successfully complete the normalisation in Section 1. Although the overall pass rate shows a slight increase from previous years, significantly fewer A grades were awarded to candidates. This is due to the fact that fewer in-depth responses were received.

Section 1

Question 1 was completed well by the majority of candidates. It should be noted, however, that fundamental errors are still being made.

All candidates are expected to clearly state all attributes that form the UNF – this should be a single list with the primary key and repeated items *clearly* indicated. Several candidates still provide multiple entities as their UNF.

When carrying out the processing through 1NF, 2NF and 3NF candidates *must not* introduce new attributes — this instruction is clearly indicated in the question paper. It should also be noted that many candidates are extremely careless when carrying forward lists of attributes — candidates should be encouraged to check that all attributes have been included at each stage of the normalisation. Centres should encourage candidates to *indicate clearly* the work that they are presenting as UNF, 1NF, 2NF and 3NF. Without appropriate headings, it is extremely difficult to determine one stage from another.

The Entity/Event Matrix in question 2 was poorly attempted. A large number of candidates automatically assume that all entities must have create, modify and delete events. Although it is true that all entities will have create and delete events, the question clearly asks candidates to base their matrix on the outline provided. Candidate should be encouraged to restrict their answers to the outline/scenario provided rather than provide generic responses that receive no marks. Events listed in the EEM should relate to the words stated in the scenario. For example, issue new contract is an event that requires *Contract* entity to be *created*, the *Extra* entity to be *read* and the *Scene* entity to be *read*. This is clearly stated in the question. However, many candidates simply state ‘New contract’ and enter a C against the Contract entity. Candidates at this level are being asked to show an understanding of how each event affects **each** of the entities in the system. Similarly, many candidates recorded an event ‘Edit contract’ and entered M against the contract entity rather than recording an event such as ‘Send substitute (existing extra)’ and entering M against contract *and* R against extra.

In many cases, the Entity Life History in question 2 was also poorly attempted. Few candidates demonstrated any knowledge of the proper *structure* of an ELH diagram — events that create, modify and delete are shown from left to right; events with alternatives or options, and events that repeat, must be shown on a second and subsequent levels. Disappointingly, even fewer candidates seem to understand the o and * symbols. These are frequently omitted completely or are scattered randomly on the diagram.

Section 2

In Section 2, **all** candidates **must** give more in-depth answers and descriptions. Many questions in this section ask candidates to discuss, describe, explain and justify. The **vast** majority of candidate responses are no more than one or two sentences. In some cases, bulleted lists are provided. At this level, candidates are expected to demonstrate a *detailed* understanding of the concepts.

For example, question 3(a) asks candidates to discuss copyright issues arising from the situation described in the stem of the question. **Large numbers** of candidates stated that including website content in a product breaks copyright. This level of answer would be acceptable at Intermediate 1 or 2 level but a lot more is expected at AH level. **Some** candidates went on to say that permission should be sought. This does improve the answer — slightly. **Several** discussed Data Protection and Computer Misuse issues that were not required. **Few** seemed to be able to differentiate between the use made of band materials by the unofficial site and the intended use by Jonathan. As a result, answers failed to discuss **all** of the issues arising from the situation described.

In question 11(b), candidates are asked to give examples of documentation and explain their content. **Many** candidates mentioned user guides: user guide contains instructions on how to use the system. Although this answer does name a type of documentation, it does not provided an explanation of its contents. This lack of detail is unacceptable at AH level. Candidates are expected to state the contents of various types of documentation and explain the use made of each *within the admission system described*.

Several candidates had difficulty with question 7 in Section 2 (Natural Language Processing) and failed to provide a lexicon to indicate the classification of the words in the grammar — this is essential for the parsing that is required in part (b).

Feedback from Senior Moderator's Report

Standardising Issues at Intermediate 2 Information Systems

1. The task asks the candidates to choose three different software packages to explore. The arrangements state that different types of application software should be explored. If a candidate chooses three different types of database package then that satisfies the coursework as three different types of database can be regarded as three different software packages but not the arrangements as they are not three different types of application package.
2. Do not penalise if candidates show the two records for the search on wisdom teeth.
3. The beta version of the coursework cannot be used.
4. NABs cannot be used for coursework.

Standardising Issues at Higher Information Systems

1. Marks should be entered as percentages on the moderation sample form.
2. Only tasks 1-3 from Database NAB 002 can be used in place of the tasks within the Integrated Coursework pack.
3. Do not send disks of candidate's work.
4. It is not acceptable to combine the Primary entities with the 1NF entities. They must be shown separately.
5. In Analysis and Design section some candidates are stating that member no. and property code in the bookings entity are unique identifiers when they cannot possibly be.
6. Property code and member no. must be included in the bookings entity to gain full marks.
7. Relationships should be explicitly stated and not inferred from the ER diagram.
8. Extraneous relationships are incorrect and should be penalised since they do not represent the data model.
9. ER diagrams should be annotated to show the relationships.
10. The use of the 'Documenter' facility in Access cannot be used to represent the design of the database. This facility can only be utilised once the data has been inputted into Access. It is therefore implementation.

11. Do not accept the ER diagram in Access using the tables showing the relationships as part of the analysis and design. This is implementation.
12. If candidates are extending the data dictionary in Outcome 1 in order to cover the requirements for Outcome 2 then this must be explicitly stated. Candidates must differentiate clearly between their data dictionary in Outcome 1 and their design of the database structure for implementation in Outcome 2.
13. For task 2 (design a database structure), candidates should design the database structure **before** implementation in their chosen software. It is not acceptable to submit screen shots of the design view of tables created in Access as this is clearly implementation. The marking scheme requires the designed database structures to be appropriate to the intended implementation method.
14. Data types should be explicitly stated and not inferred from format details, eg xx99
15. Irrespective of chosen software, sizes should be explicitly stated.
16. In the functions requires (section 1e) candidates must state the time period of one month for one of the processes and the output in order to gain the marks.
17. Reports should reflect a different layout other than just a printout of a collection of fields.
18. In producing reports, ensure candidates only include the required fields for the report. Extra fields should be penalised.
19. Centres should discourage candidates from copying verbatim information from the sample answer and from the booklet 'Using Microsoft Access for Database Systems' for task 3e (evaluation). This does not allow candidates to demonstrate individual performance in this area.
20. Accept both tactical and operational for Task 4 as long as explanation is correct.

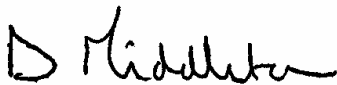
Standardising Issues at Advanced Higher Information Systems

1. Ensure there is evidence for every requirement of the marking scheme.
2. Ensure 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. Advise candidates to include the process of normalisation and check it has been carried out correctly.
4. Check E/R diagram reflects the normalised data model.

5. 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.
6. Ensure there is evidence of design of tables, relationships, forms, reports, queries, macros, where appropriate to the task.
7. Ensure the user interface is designed using a different tool or application to the one used for implementation. In other words, if the chosen application to produce the database system is Access then the design of the user interface should not be done using Access but using another application or design tool.
8. Ensure the design of the user interface is carried out prior to implementation and not screen shots of the interface which has already been implemented.
9. 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.
10. Advise candidates to supply as much evidence as possible of a working solution. This can be done with the use of screen shots to demonstrate the testing that has been carried out.
11. Use the marking scheme and commentary of the two AH projects supplied on the 'Exemplification of Standards' CD as a benchmark on which to base your own assessment of your candidates' AH projects.

I hope that you have found the information in this letter helpful. If you require clarification please do not hesitate to contact me.

Yours faithfully



Derek Middleton
Qualifications Manager
Computing and Technical Education