ASSESSMENT and
QUALIFICATIONS
ALLIANCE

GCE in Information and Communication Technology

Regional Standardisation Meetings for Centres: 2004 Examinations

Advice and Information about ICT 3 and 6

Version 1.0
March 2004

Contents Page

GCE in Information and Communication Technology
Standardisation Meeting for Centres for ICT3 and ICT6: the Programme

9.30 – 10.00	Tea/coffee on arrival
10.00	Overview of the contents of the Advice and Information Booklet **ICT 3** • Key points about ICT 3 projects, with reference to the work of Candidate A and the Principal Moderator's Report • Introduction to the work of Candidate A and Candidate D. • Completing a Candidate Record Form. Refreshment break **Group Session:** • Group mark Candidate D and complete a Candidate Record Form **Plenary Session:** • Reviewing Candidate D and the Candidate Record Form
The work of Candidate 2 and Candidate 5 for ICT 6 will be issued to delegates before lunch.	
12.30 – 1.15	Lunch **ICT 6**
1.15	• Key points about ICT 6 projects, with reference to the Principal Moderator's Report. • The revised Project Advice Form **Group Session:** • Group mark Candidate 4 and complete a Candidate Record Form **Plenary:** • Review Candidate 4 and the Candidate Record Form • Good practice: a comparison of the work of Candidate 2 and Candidate 5. • Questions and Answer session
3.45	Close

AS ICT 3 Moderator's Check Sheet[NB]

Centre No: **Cand. No:**

Specification (13)	**0**	**1 3**	**4 7**	**8 10**	**11 13**
Requirements Specification	None	…is vague	Lacks detail or does not fully match the needs of the end-user	…is detailed and matches the needs of the end-user	
Input, processing & output needs	None	Vaguely considered	Stated but do not fully match or are unclear	Match the req. spec. & are stated	Match the req. spec. & are clearly stated
Design Work	None	Little work	Incomplete and also is not effective	Either effective but not third party or, third party but inefficient	Effective designs, third party imp. Possible
Test strategy & plan	None	Vague	Strategy present but incomplete test plan is vague	Test strategy and plans present but are ltd.	Approp. Test strategy. Effective and full test plan
Implementation (20)	**0**	**1 5**	**6 10**	**11 15**	**16 20**
Solution …	None	Limited and not practically operable	A partial solution but those aspects completed are useable	Operable in the proposed environment but has inefficiencies	Effective and operable in the proposed environment
Appropriate techniques …	None	Few used	Some have been used, partial evidence	Some have been used	Have been used
Generic and package specific skills …	None	Simplistic and/or not used appropriately	Employed but not always effectively or appropriately	Fully employed but not always in an effective and appropriate manner	Fully employed in an effective and appropriate manner
Hardware & software facilities …	None	Not Justified	Vaguely justified	Some have been fully justified in relation to the solution	Fully justified in relation to the solution
Testing (12)	**0**	**1 4**	**5 8**	**9 12**	
Strategy and plan	None	Followed in a limited way using only normal data	Followed systematically using only normal data	Followed systematically using normal, erroneous & extreme data	
Results of testing	None	Little documentation of the results	Partially documented with some outputs x-ref to the plan	Fully documented with outputs x-ref to the plan	
Corrective action	None	Little evidence	Some evidence	Taken and fully documented	

Evaluation (6)	**0**	**1 3**	**4 6**		
Assessment	None	Partly assessed	Fully completed		
Awareness of criteria	None	Partially aware	Fully completed		
Limitations	None	Vague	Clearly identified		
User Doc (9)	**0**	**1 3**	**4 6**	**7 9**	
Functions of the solution	None	Partially covered and not well described	Completely covered but not well described or partially covered and well described	Completely c/w screen dumps	
Common problems	None	Vague	Briefly referred to	Covered	
Appropriate to the needs of the end-user	None	Vaguely	Partially	Well suited	
Moderator's Mark:		**/60**	**Senior Moderator's Mark:**	**/60**	**Moderator:**

[NB:] This check sheet must be used in conjunction with the marking criteria in the published specification.

ICT 3: Key issues for candidates to consider when preparing coursework

SPECIFICATION

- Who is the task for?
- What do they basically want?
- What, in detail, is required? How are they going to know if my solution is right?
- How am I going to solve the problem? This is my plan…
- How can I see if my solution does what it is supposed to do?

IMPLEMENTATION

- This is how I've solved the problem…
- Here are the skills I can show you I know. They are appropriate to the solution.
- This is how I prove what I have actually built and that I understand what I have had to do.
- Here are the problems I met and this is how I worked them out and found the solutions.

TESTING

This is about showing that:

- my solution does what it is supposed to do, and does not do what it is not supposed to do;
- I understand what I have done;
- the testing I have done is easy to read and understand;
- I understand what testing is and what is meant by "corrective action".

EVALUATION

- Does my solution do what the end-user wanted?
- Does my solution fulfil the task?
- Does my solution solve the problem in the way that the end-user wanted it to?
- Have I proved that my solution solves the problem?
- What are the problems with the solution I have built? How could I solve them?

USER GUIDE

- Can my user understand how to use the solution?
- Do they see what they want to see on screen, and is it always clear what they have to do?
- What do they have to do if something goes wrong?

Guidance Notes for Centres on the Moderation of ICT 3 and ICT 6 Coursework Units in GCE in Information and Communication Technology

Introduction

The aims of these notes are to:

- help coursework Moderators carry out their duties more effectively;
- aid the production of constructive feedback to centres so as to enable them to ensure that their future assessment is in line with AQA standards as a result of your guidance.

General Notes

1. As a Moderator your job is to ensure that candidates' work is assessed consistently between all centres; you should not be critical of either teachers or individual candidates.

2. You should be positive in your approach to moderation, allowing credit for work that has been done, rather than penalising work that has not been included. The candidates' interests should always be as paramount as they are when marking examination papers and, where possible, the benefit of the doubt should always be given to the candidate.

3. You are aiming to give guidance on where and how the centre can improve its assessment of candidates' work; not on how to improve its teaching. By showing where the assessment was too generous, for example, it is possible to add that, "the marks would have been appropriate if the candidates had…"

4. You must at all times ensure that the candidates choice of organisation, on which to base their project, should not influence the assessment of the marking carried out on their work. There is a space on the feedback form to comment on the appropriateness of the tasks selected.

5. Some centres will encourage candidates to incorporate elements in to their projects that may not be essential to the coursework marking criteria e.g. the consideration of the legal aspects of ICT. However, you must never criticise this (and it is not in the criteria that such inclusions can be marked down) as the teacher may be using the project work as a "vehicle" for teaching theory or as reinforcement for the theory teaching.

6. At all times Moderators must be aware of
   (a) what has been said to centres at Standardisation Meetings regarding the standard of work expected;
   (b) the exemplar materials issued to centres;
   (c) the Principal Moderator's Reports;
   (d) the guidance published in the specification and the Teacher's Guide;
   (e) the help given to centres by Coursework Advisers;
   (f) the vast network of people involved in the process of moderation and that the biggest problem is ensuring consistency of approach by all involved.

7. You must at all times be seen to be fair and equitable, and to be encouraging rather than critical.

8. You must remember at all times that you are carrying out a professional task and the work of candidates must be treated with the respect that you would expect to be given to your own candidates' work.

9. Confidentiality issues are discussed in the *Instructions to Moderators*. The way in which a centre has been moderated is confidential. This confidentiality of moderation applies equally to when you re-mark the work of candidates taught by a fellow Moderator: your moderation of that centre must not be discussed with your fellow Moderator. Equally, your fellow Moderator must not attempt to contact you about his/her centres' coursework.

Contact with centres

Contact with centres should be kept to the minimum necessary to perform the moderation process. It is the Coursework Adviser's job to provide guidance, not that of the Moderator; the Moderator must be totally impartial. If you have any doubts about your ability to be impartial with the work from a centre, then you must declare this to AQA at the time of appointment, or at least in advance of centre allocations being made to you, or even subsequently if circumstances change. Similarly, you must declare an interest if you have knowledge of an individual at a centre allocated to you.
Contact with a centre should always be made as quickly as possible. Don't expect centres to send out coursework during half term. If it is necessary to ensure deadlines are met, telephone the Examinations Officer and back this up with one of the AQA letters provided. Sometimes you may not receive work because of late changes in the allocation of centres – so the centre doesn't know that you are their Moderator, even if you do!

If you are at all unsure about the answers being given by the centre, then get in touch with the next person in your hierarchy and check – don't make executive decisions.

Examinations Officers are not infallible and centres do make mistakes by, for example:

- sending too much coursework
- sending too little coursework
- sending coursework different to that requested
- not sending any mark sheets or other paperwork
- entering the wrong candidates so mark sheets and work do not tally
- sending correspondence regarding mitigating circumstances

…and so on.

There are procedures outlined in the *Instructions to Moderators* to deal with all of these issues. The important thing to remember is that it isn't your fault and these things happen to everyone at sometime or other and in all subjects! Do remember though that it is probably not the fault of the person who you speak to on the phone – so be patient and, if necessary, refer to a Senior Moderator or AQA to sort it out.

If it is necessary to get permission from AQA to obtain all coursework from a centre because of discrepancies in marking, it is important that this is done as **early as possible in the process because if you leave it until later, the centre may be shut for the holidays**. This is why you are recommended to start first with the larger centres in your allocation. Never request all coursework without following the *Instructions to Moderators* for the correct procedures to follow.

The effect of sampling work from centres

IMPORTANT: Procedures for sampling coursework are explained in detail in the *Instructions to Moderators*. What you need to remember is that normally the final marks awarded to candidates in a centre, if adjustments are needed, will be based on the sub sample or full sample that you moderate and the rank order of the centre's marks. If a poor sample is taken initially, which does not represent the mark distribution in the centre, any statistical adjustments may be inaccurate and unfair to the candidates. It is most important, for example, that you call for **and then moderate** a candidate on the highest mark given by the centre and a candidate on the lowest (non zero) mark.

N.B. Regression always reinstates the rank order of the candidates as marked by the centre and so if there is any reason for this to not be the case you must discuss the course of action that you need to take with your senior moderator.
We all know of cases where we have one or two candidates whom we consider to be outstanding within the group and it is easy to over mark their work relative to other candidates. This needs to be considered when looking at the overall standard of marking in the centre and, if necessary, a Special Report Form should be completed to highlight such incidences. If the centre has got the standard of marking right for the other candidates, then you do not want to be recommending large adjustments overall.

Do remember that in many cases you are dealing with samples, and not all of the work from the centre. If one project's assessment seems out of line, whereas the rest of the sample is assessed correctly, then look at an extra one or two pieces to satisfy yourself that overall the centre has got it right and that the one candidate is a "blip". This sometimes happens when the odd one or two candidates use different pieces of software from the majority of the group.

In order to avoid bias, it is a good idea to start with the weakest projects in the sample and work your way up the rank order (frequently the ones at the bottom end will be correctly assessed and you can then pinpoint where problems start to occur).

Always remember that you are looking for an **overall mark for a project.**

Moderating projects

There are several points that should be born in mind when actually considering the marks that have been awarded for individual sections of the marking criteria and for the coursework overall.

1. There is a tolerance for coursework marking of ±4 for the ICT3 work and ±6 for the ICT6 work.

2. There are 5 marking criteria for the ICT3 project and so, if a Moderator is to disagree by one mark on each section of the marking criteria, the overall mark for the work will be outside tolerance. For the ICT6 project there are 7 criteria and the same comment applies.

3. It is generally a good idea to look through the whole project first. Candidates often put evidence in odd places and you may need to use the user guide and testing sections as evidence of implementation or the test plan may be in the testing section rather than the design. If you look through the whole project first, it will save you time searching for things later on.

4. Where there are several criteria to consider for each mark band, it is easy for teachers, and Moderators, to perhaps mentally weight one with more significance than others and thus get the mark for the section slightly out.

5. When deciding on a mark to award, the work actually done must be credited i.e. candidates gain marks by doing things; they do not lose marks for not doing things. This is what is meant by positive marking.

6. The teachers have been asked at the autumn standardising meetings, to draw the moderator's attention to where candidates have achieved criteria to explain the marks that they have awarded. The suggestion has been for teachers to include an extra sheet with the CRF or they may have annotated the coursework itself. It is most important that moderators read these comments.

7. Remember that students may compensate for poor achievement on one criteria by high achievement on another and the mark awarded should reflect this.

8. Moderator Check Sheets (those completed by the Moderator for each candidate in the sample) are designed to reflect this idea of positive marking as the candidate can be moved up the mark bands as they meet the marking criteria.

9. A Moderator is seeking to agree with the marks awarded and must only disagree if he/she has **sufficient evidence** to state that marks are being awarded by the centre for criteria which have not been met.

8. Look at the mark that the teacher has given for the section and ask yourself, "are they about right?" If you answer, "yes," then agree with the mark awarded, rather than putting down a mark that is perhaps one mark different. If you put down a mark that is one different from the centre's every time then you will immediately put the moderation for the project as a whole out of tolerance. Remember how much arguing there can be over one mark when discussing standardising projects! This does not mean that you just accept everything that the teacher has put down as a mark, but that you look for where they are consistently awarding more or less marks than they should be for the agreed standard. It is the overall standard of assessment that you are checking.

9. You will need to review the overall mark once you have looked at each section and may need to adjust your marks accordingly.

10. Moderation is not an exact science. The criteria as published must be followed but, as every project is different, they make the moderation more liable to judgement. In any such cases, the benefit of doubt must be given to the candidate.

11. The feedback forms are the place where you can point out to the centre where it is perhaps putting all candidates in one mark band too high.. For example, one could say that, if the marking was too high in testing, the candidates would need to include tests to prove the solution works to warrant awarding marks in the higher band, rather than use simple " push button" tests. Notice how this is phrased in such a way that it refers to the assessment and candidates' work; not their teaching.

12. Remember you may need to increase the centre's marks to bring them in line with the standard – moderation is definitely not just about "lopping marks off".

NB The making of rough notes on key areas where assessment is too harsh or too generous on the back of each Moderator mark sheet will help when writing the feedback forms and when there are too many projects for you to look at in one session of your own work.

Diverse projects, software etc

Moderators can find themselves faced with a wide range of projects based on different types of software. Sometimes it may be the same software that they use with their own students, sometimes the software may be something with which they are totally unfamiliar. Some points to remember in such instances are:

- Not all students will approach their coursework in the way that your own students do.
- Even if they use the same software as your own students, different features or different tasks may be undertaken and you should never expect them to be the same.
- You are looking at the standard of marking to the criteria as set out in the specification; not at your own criteria as to what makes a good project.
- Sometimes candidates have undertaken tasks which do not allow them to meet the criteria very well, or they carry out tasks which are too large and which put unnecessary burdens on themselves. If this is the case, then advice should be given on the feedback forms to this effect.
- If you receive project work that is based on software with which you are unfamiliar, seek guidance from a Senior Moderator. If necessary, they may advise you to pass the work "up the line".
- It is not the choice of software in which to implement the solution that is your concern, but the marking of the work achieved using it. You MUST NOT allow the choice of software to influence your assessment and must be extremely careful as to what comments you make on feedback forms – everyone does not have to use a spreadsheet or database for their work.
- It should be noted that the use of scripting languages, such as VBA or Javascript, show the use of only one function of the software, BUT should be credited as such.
- Remember that some centres may use the project work as a means to teaching some of the theory work so you should not be " put off" by what seem like chunks of unnecessary theory in the middle of a piece of coursework. Some centres will also use the AS project as a vehicle for teaching the skills needed for A2 project work and so again you may see evidence of skills not needed at AS level.

ICT 3 Projects

Make sure that you are familiar with the specification for projects and with the guidance given in the Teacher Guide, you may be able to refer to these when you write your feedback comments. This gives more weight to the comments.

Remember that we are looking at work produced by candidates who are generally 16 or 17 years old. We cannot expect perfect professional solutions to problems. We are looking for evidence of the skills and knowledge as outlined in the Assessment Objectives in Sections 6.1 and 6.2 of the specification.

As in some other subjects e.g. geography, in ICT we are looking for achievement in a whole range of criteria and are expecting a wider set of skills than may be the case in some other GCEs . This does make it harder for candidates to achieve good marks so we need to ensure that full credit has been given where they demonstrate their skills and knowledge.

The key point for ICT3 coursework is that the candidates should be tackling, "a task related problem which will have limited scope and will be self-contained." This means that candidates should not be tackling systems at this level and that tasks such as producing a website, presentation or a leaflet are as appropriate as an invoice or quotation.

Also remember that the solution does not have to be reusable (although to achieve this the candidate will probably have used more advanced functionality in the software) and can incorporate multiple pieces of software.

For each of the criteria you should be working from the bottom marks upwards, continually looking for evidence that moves the project up into the next mark band.

Remember to look through the whole project first before trying to look at the marking of different sections as frequently all evidence will not be neatly presented in order and you may have to look for implementation evidence in the user guide and testing in the implementation!

Specification

We are looking for the candidates to demonstrate the following.

1. An understanding of and ability to produce a requirements specification: does the candidate explain clearly the task for which they are trying to produce a solution? What problem is the solution attempting to solve? Can you understand what they are trying to do and for whom they are doing it? This links through to theory work on what ICT can do for organisations and businesses.

2. An appreciation of the stages in an ICT solution: what is meant by basic terms as used in the theory modules and applied to their projects? An appreciation of the level of detail needed in describing inputs, outputs and processes should be shown. An understanding that these are central to every ICT solution, no matter what software is used should also be demonstrated.

   For example, a **simple** description for a solution which produces an invoice might be as follows.

INPUTS	Customer name
	Customer address
	Invoice number
	Description of item
	Price per unit
	Number of items
	Total cost
PROCESSES	Enter customer details
	Calculate amount owing
	Print two copies of invoice
OUTPUTS	Hardcopy of invoice for customer
	Hardcopy of invoice for business to file
	Saved copy of invoice on disk

If you start working through the marking criteria from the bottom upwards so that you are awarding credit for what has been done, the candidate has stated the input, processing and outputs. Thus, on this criterion, the work must fall into the 8-10 mark band. The candidate has not, however, given sufficient detail, for example, as to what format the customer name and address actually takes or where the inputs will be obtained from and so would not move up to the 11-13 band.

For a DTP based project that is seeking to produce an advertising leaflet a similar standard of description would include something as follows.

INPUTS	Map of location of business
	Prices of services offered
	Contact details for business
	Photo of manager And company building
	Company logo
	Sketch of sample work produced by business
PROCESSES	Format map and insert arrows
	Link to Excel spreadsheet to allow update
	Set as separate fields for telephone code and number to allow update in future
	Colour and resize, crop to include only head and shoulders
	Logo inserted from file on disk
	Print finished leaflet
OUTPUTS	A4 tri-folded leaflet to fit in foolscap envelope printed in colour

Here the candidate has had more difficulty in considering the actual processes that the solution will incorporate because of the nature of the software chosen, but they still show that they understand that they are trying to solve a task which will need certain inputs and produce a specified output and that they will need to use software to adjust inputs to produce outputs i.e. process them.
N.B. With "presentation style" projects the difference is that much processing takes place during the implementation for data that will be fixed in the solution. For example a student may start by scanning a map in and then processes the image produced by adding labels, colour, an outline and labels. Here the initial input is the map and the processing involves the changes made to it, the output is the map as it appears as part of a leaflet or website.

3. Effective designs: this criterion is about whether the candidate understands what is meant by designs, why they are needed, what level of detail is needed for good designs and what needs to be included for someone else to follow them. Designs can be retrospective in AS projects as the guidance notes encourage a prototyping approach. However, what needs to be looked at is, "could you produce the final solution from the design work included?". Often candidates will include design work and achieve the 8-10 mark band but do not include sizes or positioning of items on leaflets, or designs for the actual processes involved, thus failing to make the top band. Deciding on whether a design is effective requires careful judgement – remember the age of the candidates and the fact that this is a learning process.
4. Test strategies and plans: you should be asking yourself does the candidate show understanding of the testing process? Do they see the need for a range of tests carried out in a logical sequence? Are they conducting tests to see if the solution works and actually produces what is required, i.e. that it fulfils the requirements specification? The test strategy lays out the sequence or structure of testing and the plan fills in the detail. Test data is what will be used to conduct the tests. Remember that credit can be given if the testing design is seen later on in the project and has not actually been included in the design section (although a note recommending the latter could be included on the feedback form). Also remember that quantity does not necessarily mean quality!
5. N.B. At the autumn standardising meetings, guidance was given to teachers specifically aimed at reducing the number of repetitive tests on, for example, validation and "pressing buttons". Moderators are advised that they must not expect to see all such tests and that candidates should be explaining in the testing strategy that they are showing examples, although they recognise that all of the validation rules etc should be tested. It is extremely important that centres do not get contradictory advice on this.

N.B. For all the work that you look at, the key question is: does the mark that the teacher has awarded reflect the ability of the candidate over the criteria for the specification? If, "yes," then leave the centre mark to stand. If the mark does not reflect the ability of the candidate, why is the marking not correct? What or where is credit being given/not given? The answers to these questions are what should be going on to an FB form as guidance.

Implementation

The difficulty here is always in what makes a good implementation? Probably the easiest way to look at this is to say, " Does the solution do what it is supposed to do?" There is no easy formula to say the candidate must use x "advanced features" of the software to prove they have fully employed package specific skills. In fact the criteria does not mention **advanced** features, only **generic and package specific skills**. Think about whether they have shown a level of skill in using the software that demonstrates they know what features are available to them, which are **appropriate** for the task they are undertaking. Have they, for example, used one parameter query instead of five separate select queries, used an auto sum feature rather than separate cell additions, customised the interface in such a way that it is harder for the user to enter incorrect data by using drop down lists or validation rules – either way may be appropriate. In a DTP project have they simply incorporated clip art pictures as they are provided with the software or have they used photos and cropped, sized or manipulated them in some way that shows they know you can do this with the software – they are using it to achieve what is required **effectively.**

The criteria regarding justification of hardware and software used is meant to elicit whether the candidate has actually thought about why using a spreadsheet package is the most sensible for the task or what effect the characteristics of the printer available may have on the implementation of a leaflet, or the browser or modem speed on the viewing of a website. The type of project chosen will affect the importance of this criterion. A good spreadsheet or a database project that scores highly on the other criteria should not be penalised for not including much on this criteria – they are gaining the marks on the other criteria and will not reach the top marks but can still have produced a first class project.

One of your biggest problems in this section may be in finding the evidence to support the marks awarded. Remember to look at the teachers comments to help you to find it. Don't forget to use any part of the project as supporting evidence – the user guide is often a great help, or the testing section. Remember that you are looking for what they *have done*; not what they *haven't done,* so don't expect particular features and reduce the marks if they aren't there. Annotated screen

shots of design views and formulae are obviously the most effective evidence of implementation and, again, if not used then give an indication on the feedback form that to use these would "help the candidates in providing evidence".

Testing

The main issue here tends to be whether or not the testing carried out shows evidence of corrective action and whether the testing is carried out using a range of typical, erroneous and extreme data. Remember in this section you are not looking for the design of the test plan – that is credited earlier. Here you are looking for evidence that shows that testing has been carried out in a systematic, logical manner with evidence cross-referenced to the test plan. Have they followed their own test plan? Can you see that they have done the testing? Some candidates may show here the corrective action they have explicitly taken, whilst others will have done so during implementation. Be aware to look throughout the project for hard evidence of this.
N.B. Some candidates may have amended their test plans in the light of the work that they have done – there is an example of this in exemplar B, and this must be taken into account when looking at the marking of this section.
If you feel that the testing section has been over or under marked, can you clearly justify why this is, in a manner that will enable a centre to improve their marking of the testing next time? The sort of thing you need to pick up on is the centre where candidates have done pages and pages of tests, but they don't actually prove that the **solution works,** that it does what it is supposed to do – just show validation rules, input masks etc are effective and buttons "work".

N.B. Remember that real end user testing is not essential for an ICT3 project – it is not one of the criteria. This does not mean that a candidate who has done end user testing should be penalised – they happen to have been able to carry out a "live" project and the centre may have decided to encourage this as a learning process for ICT6 or to enable a better understanding of the process.

Evaluation

Candidates do not have to actually specify performance or evaluation criteria for an ICT3 project in the specification section (unlike an ICT6 project). Some candidates will do as it may make it easier for them to see what they are trying to achieve, or to test the solution. What you are looking for is that a candidate understands what it is that the solution was supposed to do, and has assessed whether it does it effectively i.e. it meets the requirements specification. The candidate should by this stage of the project, and because they will have looked at such things in the theory modules, be able to see what suitable criteria would be and to assess the solution in an appropriate way. The candidate should show that they recognise that testing is what is used to assess the solution. They should be able to be critical of their own work and discuss any limitations that the solution has. The 4-6 mark band is designed to accommodate work that shows this. Candidates who have a basic grasp of whether the solution works (or doesn't work) and why, will achieve the 1-3 band. As there are only two mark bands here it is important to ensure that the centre is using the full range of marks within the bands. If not, explain on the FB form that they haven't done this.

It is important to remember the target audience for the specification – at a candidate's age, learning to evaluate realistically what you have done is an important skill, but it is not always the easiest of skills for a 16 or 17 year old to acquire!

User Documentation

This is often the first thing that you look at when moderating work. It tells you what the solution actually does! Generally centres do not find this as difficult to assess as other parts of the project. Again, remember to credit what is there and be able to justify any change to marks on the basis of the published criteria.

For example, if the centre has awarded 8 marks and you decide only 7 are warranted – why is this? It may be a change of only one mark on this section but the overall effect of each little change is much greater than sometimes you can anticipate. The centre will need to know why marks have been adjusted.

FINALLY

Look back and consider, look at other projects, is this one out of line with the general standard of assessment – if so don't let it affect your overall judgement. We all have candidates who we think have worked hard and deserve good marks and those that we consider to be lazy and not worthy of the marks they have actually achieved. These things can affect a centre's internal assessment, but they must not affect your judgement as a Moderator – you are looking at the application of the assessment criteria on the basis of the evidence presented.

Most teachers take the assessment very seriously. Some provide notes either on the work or separately to justify the marks they have awarded. It is important that you respect these notes and read what they have written. It also means that they

need to know why marks have been adjusted, and what they can do to ensure better assessment or achievement next time more accurate assessment, to the criteria set, next time. Now that candidates can re submit work this is crucial to the centres as some candidates will not cash in their award in the summer but improve their project work and get it re submitted. For many teachers the only feedback they will get is the FB forms – think about how you would feel if you found them totally unhelpful or negative.

ICT 6 Projects

Make sure that you fully understand the difference between ICT3 and ICT6 project work. You need to be familiar with the guidance in the specification and the Teachers' Guide as well as the marking criteria.

Key points to remember are:

1. The whole thrust of the A2 course is to look at problems from a company perspective, rather than an individual perspective.
2. The candidate is expected to have a real end user for the problem.
3. The candidate is supposed to be producing a system, not a solution to a task.
4. The emphasis is on a Systems Development Life Cycle approach – this is to complement the theory modules.
5. There are separate sections for analysis and design and, to quote from the specification, "the emphasis in the project will be on the candidate's ability to produce a high quality analysis and design, and to document the solution in a comprehensive manner".
6. This time candidates are expected to identify end user requirements and suitable marking criteria.
7. Candidates can get advice on their proposed work through the use of the Project Advice Form and the Moderator should read what advice has been given to the candidates from the centre before looking at the assessment. This advice must be recognised by the Moderator.
   On no account should there be anything on the FB forms that contradicts advice given previously.
8. Not all centres have Access. If they do have Access, not all centres will have the version of it that you may use. This means that the documentation produced may be quite different, and even the terminology can be different – don't expect the word "tables" to be used by everyone. You are looking at the assessment standard against the published criteria – not what you expect your students to do using Access.

NOTE If the Moderator has concerns about the advice that has been given on the project advice form, they should contact AQA.

Analysis

Some basic questions that you can ask yourself when looking at the analysis are:

1. Do I understand what the problem is?
2. Can I see who the end user is and what they are capable of using?
3. Can I see how the candidate is going to measure the success or otherwise of the system produced?
4. What constraints are there on the system the candidate can produce?
5. Does the candidate understand the basic principles of Input, Process, Output i.e. the "information flow and data dynamics"?
6. Can you understand the documentation?
7. Have they tried to use suitable techniques in analysis?
8. What does the teacher say?

Bear in mind the following.

1. The marking criteria do not specify what techniques the candidates should use. A whole range of techniques are available, some of which you may not be familiar with (which is why the criteria are written like they are so don't expect specific techniques).
2. Perfectly accurate well-presented analysis will deserve the very highest marks but where the candidate has tried to use techniques and understands their use, credit should be given even if there are inaccuracies/omissions.
3. There may be considerable constraints that the candidate has to work within.
4. Analysis is one of the most difficult tasks an ICT person has to undertake – professionals find it difficult.
5. You have to take the teacher's word about how much assistance has been given – there is no other way that you can realistically determine this.

Design

The key differences from ICT3 work are that:

1. The candidate is expected to consider a range of possible approaches to a solution – these do not necessarily have to be using different types of software, but could be alternative designs using the same piece of software – often a more practical approach for centres to take. See page 50 of the specification.
2. The candidate is expected to show that they have broken the complex system into sub-tasks or parts to enable effective design. How they have done this is up to them; you are looking at whether they have done it and how they are going to deal with each sub-task?
3. The candidate is expected to show the ability to plan and organise his/her work. Is there evidence of this?
4. By "competent person" it means someone with a minimum of the same level of skill and knowledge as the candidate.

Notice that some of the criteria are repeated for different mark bands or are only slightly different. (for example, the difference between "compelling reasons" and "reasons" for the final choice of solution). This is to allow for the candidate who really understands how the proposed solution is going to meet the end-user's requirements and be within the constraints set, as opposed to the candidate who knows the sort of things that make a good solution, but who has not related these directly to their own work.

For good marks on design, the candidate must be producing designs that consider the processes involved in the system, not just the I/O. Do not be swayed in your judgement by large quantities of pages that show endless screen layouts, again quantity does not mean quality.

Implementation

In this section we are not looking for any specific usage of software skills but rather for whether the system has been implemented in the most effective way, using the relevant features of the software. Again, this means looking at things like the type of queries used, the effectiveness of the implementation of reports – has the candidate simply used wizards or has he/she tailored the report formats using the design views to meet the user's requirements?

Notice that for the 6-10 mark band there is the alternative that a candidate has implemented a simple design fully. This is to allow for the candidate who has done just that, chosen to implement something that is not as complex, but has done it well. The idea being that they are still learning the skills required even if the system produced is not that complex.

Testing

The key difference here is the need for evidence to be provided of end user involvement in testing. The teachers will often make reference to this in their comments. Evidence can take many forms, from the token letter to photographs or printed evidence of tests carried out by the end user. The really good candidate will probably have planned the testing with the end user so that the end users can clearly state whether their requirements have been met.

The important thing from a Moderators point of view is that evidence of end user testing can take many different forms.

Look for the proof that the system works, with a full range of test data, and that test outputs are fully annotated.

Cross referencing comes under the preparation of the report mark this time, not in the testing section itself.

N.B. There is no criterion covering corrective action as a developmental approach is not expected as in ICT3.

User Guide

The marking criteria are virtually identical to ICT3 criteria, except that the usage of a system needs covering. This means backup and recovery, installation archiving of data etc as appropriate. Again, this fits in with what is being learnt in the theory modules.

Evaluation of the project

More is expected from the candidates than for ICT3. They should have learnt about criteria whilst undertaking the ICT3 project work and now they should apply the criteria. This is why in the analysis they are expected to come up with the criteria that they will use to assess the system.

As with ICT3 projects, candidates are expected to be able to recognise the limitations of the systems that they have produced and this time should be able to include enhancements that they would make to it if they had the opportunity. Remember this is a piece of examinable work achieved over a limited time period and not a professional product and there will be enhancements that could be included. The important thing is that the candidate can recognise where the system is not effective and show how they found this to be the case and why it is.

Poor analysis work often leads to poor evaluations and this fact is covered by the marking criteria as for the 3-5 mark band the criterion states, " this may be because the original specification was poor."

The report

This concerns things like the cross referencing, being able to follow the logical development of the system through and ensuring that there is sufficient evidence to back up the statements made. The report must not be overly long and it should be possible to find each item/section easily. Sample documents should be referred to and not just "stuck in". If appendices are used, the material in them must be referenced. It is not about the quality of the paper/colour/printing, but about the readability of the work.

REMEMBER

Disagreeing by just one mark in each section of the marking criteria means 7 marks overall and with weighting this is nearly 10 marks difference for the candidate in their overall mark and that is without any regression.

You are seeking to agree with the centre's assessment and you must therefore be able to give clear, accurate evidence from the work seen as to why your moderation differs and how the centre has failed to apply the marking criteria correctly.

Moderation is a responsible job. It is not easy, although the more you do, the easier it gets. Mechanisms are in place to help each of you. You do not shoulder the responsibility alone; your Team Leader is there to help you. All that you can do is carry out the job responsibly to the best of your ability ensuring that you treat the candidates' work and the centre in the same way as you would wish your own to be treated.

And finally…

Ask your Team Leader for help if you need it or have any concerns at all. The Moderator who asks questions is the one we prefer; those that keep quiet are the worrying ones!!

ICT6 Moderator's Check Sheet[NB:]

Centre	Candidate	Moderator
General Comments:		

Total Mark	Moderator	Senior Moderator

Analysis	0	1 2	3 4 5	6 7 8 9	10 14	15 18
Appropriate problem specified independently and in conjunction with the end-user?	No analysis submitted	No, simplistic problem	Yes, but considerable guidance needed	Yes, but some guidance needed	Yes, but only with reference to the end-user	Yes
Problem statement is clear, covering nature and context?		Not stated	superficial outline only	simple outline only	Clear outline	Yes
Requirements of the end-user clearly identified?		Minimal	Only some are given	Attempted	Many are recognised	Yes
Capabilities and limitations of resources are fully recognised?		Minimal	Only some	Attempted	Many are recognised	Yes
Info flow and data dynamics have been identified …		Not stated	Not identified	Only as a limited subset	Partly	Fully
User skills and training needs identified?		No work	Minimal	Little work	Partly	Yes
Evaluation criteria are fully identified?		No work	None	Few	Some	Yes

Analysis	Moderator /18	Senior Moderator /18

Design	0	1 2	3 4 5	6 7 8	9 10 11 12	13 16
Range of approaches is relevant and detailed?	No detail of chosen solution provided	Little work	one approach	Limited	Relevant but lacks detail	Yes
Choice of solution has compelling reasons?		invalid	Reasons are vague	Reasons are weak	Justified	Yes
Solution is detailed and third party implementation is possible?		Superficial	Candidate only could replicate but with difficulty	Candidate only could replicate	Third party but with difficulty	Yes
Schedule and work plan are …		Vague or missing	Included but poorly thought out	Included but limited	Included	Well defined
Test plan		Vague or missing	Present but poor	Present	Devised with some test data specified	Effective & full

Design	Moderator /16	Senior Moderator /16

[NB:] This check sheet must be used in conjunction with the marking criteria in the published specification.

Centre	Candidate

Implementation	0	1 5	6 10	11 15
Implementation is …	There is no evidence provided	Partial	Reasonable effective and contains the essential elements	Full and effective with no obvious defects
Software and hardware facilities have been …		Exploited few features	Exploited some features	Appropriately and fully exploited
Documentation is …		Largely missing	Lacks detail	Clear and thorough

Implementation	Moderator /15	Senior Moderator /15

Testing	0	1 5	6 10	11 15
Test data used …	There is no evidence of testing	Limited and not always relevant	Covers a range of relevant eventualities	Covers most or all eventualities
End-user involvement is …		Evidenced but involvement is limited	Evidenced but only partial involvement	Clearly evidenced and reflects full participation
System …		Fails to meet the design specification	Works with a limited range	Works with a full range of test data

Testing	Moderator /15	Senior Moderator /15

User Documentation	0	1 2 3	4 5	6 8
User guide is …	No user guide present	Poorly described	Illustrated and useable	Comprehensive and well illustrated
All relevant aspects covered?		Partial	General use only	Yes

User Guide	Moderator /8	Senior Moderator /8

Evaluation	0	1 2	3 4 5	6 7 8	9 10
Have a full range of quantitative and qualitative criteria been considered?	No attempt made at evaluation	Minimal	Partially	Partly	Yes
Is it fully evaluated against the needs of the end-user?		Little attempt made	In Part	Mostly	Yes
Modifications/enhancements fully discussed?		Minimal	In a limited way	Specified	Yes

Evaluation	Moderator /10	Senior Moderator /10

Presentation	0	1 2	3 4	5 6	7 8
Written style	No report submitted	Weak	Satisfactory	Good	Excellent
Illustrated		Weak	Satisfactory	Well	Very well
Organisation		Weak	Satisfactory	Good	Excellent
It describes the project accurately and concisely?		Considerable omissions	Deficiencies & omissions	Reasonable but limited	Yes

Preparation	Moderator /8	Senior Moderator /8

The Principal Moderator's Report on the June 2003 Series of the Examination

Unit 3 The Use of Generic Application Software for Task Solution

General Comments

The projects were, on the whole appropriate, in this session. The vast majority seen were spreadsheet or database orientated with some use of word-processing packages. Often software types (e.g. HTML) were limited but centres are reminded that the use of such software is acceptable. However, centres are also reminded that they should consider carefully the whether the packages that they intend to employ do have the features required for this level of examination e.g. that databases do facilitate relational tables. Also, it must be remembered that the main thrust of ICT3 coursework is a task-based solution, but the solution must also be realistic in its scope and titles. For example, in the case of a project based on a payroll, it would not be truly useable in the working environment unless all the correct NI and PAYE procedures are followed.

It is pleasing to note that generally the standard of centre assessment had improved in this session with more centres embracing the advice given at meetings and in AQA's documentation. However, there are yet still some centres which do not appear to demonstrate a clear understanding of the standards required for AS level.

Administrative procedures are often well attended to, but centres should be aware that commenting fully on the Candidate Record Forms would aid the moderation process for a centre. Securely tagging work without the use of plastic wallets or ring binders is also very important.

Supervisors are again reminded that marks can only be awarded of supported by evidence i.e. in the documentation available in the hard copy projects submitted to the Moderator.

Specification

A number of centres are clearly using ICT 3as a training tool for ICT6 e.g. making use of data flow diagrams. Overall these have in fact been well done and as a training tool for ICT6, is good practice. However, extensive work of this nature is not credited as such within the published marking criteria except where a candidate demonstrates the input, processing and output needs of the solution. The extensive interviews and questionnaires carried out with end users is commendable, along with the consideration of software and hardware, and user's ICT skills. However, these do not really add to the credit that can be awarded in the specification section for this module. Much greater emphasis in giving full details on the end user's requirements and the input, processing and output needs would help candidates more.

Design work must be capable of implementation by a third party if a high mark is to be awarded in the specification section. At times candidates attempted only the visual aspects of design. This was particularly true of database work where critical components (such as queries and report designs) were neglected. Many more centres have addressed a weakness previously commented upon in showing the design of macros and also annotating the coded solution to explain clearly how those macros work. The design work has also shown when those macros are to be activated.

Good evidence has also been seen in the testing of the "before" and "after" situation of using the macros. It is noticeable, however, that there is much greater reliance by centres on the use of macro coding. Some centres relied rather too heavily on this single feature to the detriment of demonstrating other software facilities. Centres are reminded that candidates should be able to demonstrate a wide range of the features available within the generic software packages selected.

Implementation

Candidates must provide a commentary of the implementation work with evidence of the software features and formulae used. This is essential as commentary adds to the evidence derived from the testing and/or user guide sections to allow the moderator to judge accurately the quality of the implementation effort.

Testing

It was clear that centres had responded to previously issued advice and the quality of the testing design and execution was overall much stronger by most centres this year. Testing was focussed more on the proposed functionality of the solution and greater attention was given to the test data to be applied. There was still the tendency for some candidates to concentrate on trivial testing of buttons or numerous validation tests of every field/cell rather than demonstrating the overall effectiveness of their solutions. It was made clear at the centres' Standardisation Meetings in the autumn of 2002 that *a sample* of tests should be done, rather than excessive testing. When testing the output of queries it is expected that data sets will be provided and it should be made clear which records match the criteria given so that the outcome can be properly evaluated.

Evidence of testing must be backed up with annotated full printouts or screen shots (large enough to be legible to the Moderator!) cross-referenced to the original plan. Candidates must detail the corrective action they have carried out with screen dump evidence to support their statements. Centres are reminded that planning for testing should be done before implementation and the test plans applied as the solution is developed. This should provide adequate scope for all candidates to show corrective action within their reports.

User Documentation

User documentation is improving and many centres are assessing this section more accurately. A few centres are still awarding full marks, even when there are clear omissions e.g. common problems are not being clearly identified.

It was pleasing to note that user documentation which dealt with the customisation of a generic package but which failed to explain how the user would operate the customised solution were less in evidence than in previous sessions.

Evaluation

Evaluations are usually well assessed at the centre. However some candidates still tend to evaluate their own performance, rather than the standard of the solution they have produced. Candidates still seem unsure of the general criteria that are to be applied to assess the viability of the solution they have developed.

Unit 3 - The Use of Generic Application Software for Task Solution (24191 candidates)

Grade	Max. mark	A	B	C	D	E
Scaled Boundary Mark	60	42	36	30	24	18
Uniform Boundary Mark	120	96	84	72	60	48

Unit 6 The Use of Information Systems for Problem Solving

General Comments

The vast majority of work seen in this session was based on the development of a solution in Microsoft Access. In the main, the nature of the problems was sound with candidates attempting solutions that were dynamic in nature and which provided clear opportunities to demonstrate the processing of data.

Generally the standard of presentation was good, as was centres' attention to the administration processes. Reports were generally well ordered and structured following the specification carefully. Good organization, use of illustrations and the style of written commentary are pre-requisites of a good report, as is the ability to be concise and describe the development of the project clearly from analysis through to its implementation and testing.

The standard of centre internal standardization was generally satisfactory, although some centres still need to consider carefully the material supplied by AQA at the Standardisation Meetings which are intended to support the assessment process before completing the Candidate Record Forms.

Analysis

The analysis section is a significant area of the project report and, when a centre does overmark a candidate's work, it most often occurs in this section. Critically, the analysis must provide adequate information from which to complete the design phase. Thus, when a database solution is envisaged, there must be an analysis of the data in the system which may be represented in a number of ways, e.g. a data dictionary, but it must be adequately documented as this will be the starting point for the normalization process within the design. A common issue is the allocation of high marks for data dynamics when the only evidence that has been provided is a lone data flow diagram. Such diagrams should be accompanied by a description that can fully explain the processes shown in the diagrams. Ultimately, the analysis has to lead to a clearly defined specification, which should include relevant assessment criteria. The use of questionnaires is obviously a valid tool of investigation, but the candidate must reflect on these questionnaires and draw valid conclusions from them.

Design

The design work seen in this session showed that a number of centres had continued to embrace the advice given at the given at the Standardisation Meetings for centres held in the autumn of 2002.

Faults with design plans include the over attention to interfaces (typically the menus and forms in Access) at the expense of processing tasks (e.g. query design). Report design was not always thoroughly completed and too often macro designs were neglected when the candidate included these in the implementation.

Pleasingly, many candidates presented their designs as a series of sub-tasks. Less pleasing was the fact that many candidates had not always included evidence to indicate the order or timing of these plans.

Candidates planning for testing need to consider the assessment criteria which is founded on whether the solution is ultimately useable for the intended purpose. Tests must address the main functionality of the solution. If one of the main objectives was to re-order stock automatically then this should be the main thrust of the testing, rather than a series of small tests to input values into fields or check validation methods. Data sets are necessary when testing the output of queries. In the above example, we need a list of stock to which the process will be applied and which items from this list are the expected output.

Implementation

If a clear set of sub-tasks is presented in the design section, the sub-task will facilitate cross-referencing to evidence of each task being implemented. At times, the evidence provided carried too much description of how to use the software, rather than detailing the work done by the candidate. For example, if a wizard was used to generate a report, then often that which was documented and screen dumped was every wizard driven dialogue box. This is not necessary; evidence to show how the candidate has produced the end result, entered design mode and tailored the solution is what is required.

When database solutions are used, candidates are expected to develop relational databases and make use of those relationships in queries, forms and reports.

Testing

Certain aspects of testing were encouraging and there was more focus on providing data sets and trying to provoke failure. Test plans were generally presented neatly, often in tabular form. However there was still a lot of "button" testing and test plans which lacked data.

Many centres tried to address end user testing. However, evidence was limited and was offered as little more than a letter/note or a questionnaire commenting on the end product.

The end user has to work through the system. This has to be evidenced and analysed. Successful candidates would have had an end user test plan detailing a set of operations for the user to undertake, or the user would work through the user guide or parts of it. This form of involvement provides real comment upon which the candidate can reflect during their evaluation.

User Guide

User guides were generally well attempted with many candidates presenting instructions for using their system. Increasingly, this is a stand-alone document often presented in booklet format. Guides that incorrectly show how to use the generic package seem to have largely disappeared. Many candidates used the "FAQ" approach successfully in the troubleshooting section of their user guide. However, candidates do need to be reminded that installation, backup and troubleshooting are all necessary for high marks to be awarded in this section.

Evaluation

Evaluation work should be documented against a clear set of measurable criteria which ideally should be negotiated with the end user from the start of the project and so returned to at the end. The absence of a real end-user, the formulation of weak assessment criteria and lack of involvement of the end-user in the testing process will detrimentally affect the work done in this section.

Unit 6 - The Use of Information Systems for Problem Solving (13258 candidates)

Grade	Max. mark	A	B	C	D	E
Scaled Boundary Mark	90	59	50	42	34	26
Uniform Boundary Mark	120	96	84	72	60	48

ICT 6: Key issues for candidates to consider when preparing coursework

ANALYSIS

- Who is the system for and what do they do?
- What is the problem to be solved and where are its boundaries?
- How does information move around the existing system and what processing is done at the moment?
- What are the tasks that need to be done in solving the problem?
- What, in detail, does the user require?
- What is the potential of available hardware and software for the problem?
- Who is going to use it and what are their training needs?
- How will the results of my solution be judged?

DESIGN

- What are the alternative methods of producing a solution?
- Why have I chosen the one I am going to use?
- What is the hardware and software I will use in my solution and why am I using it?
- How will data be stored and why in this manner?
- What processing will take place and when?
- How will the interface and printed output appear?
- How will my user and me see if the solution does what it is supposed to do?
- How am I going to set about implementing my solution?

IMPLEMENTATION

- This is how I've solved the problem.
- This is how I **prove** what I have built and that I understand what I have had to do.

TESTING

- Proving that my solution does what it is meant to do.
- Showing that my solution will work in most circumstances.
- Showing that I understand the results of my testing.
- Proving that my end user has fully participated in the testing of my solution.

USER GUIDE

- Can the user follow and carry out the tasks they need to do with help from the guide?
- Could the user install the system on his computer?
- Can the user back up his data with help from the guide?
- Are all users catered for by the guide?

EVALUATION

- Does the solution do what the end user wanted?
- Is there evidence of the users acknowledgement of that?
- Does the solution do what I said it was going to do and is there evidence of that?
- Are there any other considerations which should be discussed?

Internal Standardisation and the QCA GCE Code of Practice

1. According to the GCE Code of Practice, the examining group responsible for the GCE award, "must require centres to standardise assessments across different assessors and teaching groups. This is to ensure that … all candidates in the centre have been judged against the same standards…," (para. 84). In other words, the internal standardisation of coursework must be carried out where more than one teacher is responsible for the assessment of coursework so that candidates' marks can be submitted to AQA in a single rank order for the whole centre. The following information has been prepared to assist centres in the fulfilment of this requirement.

2. **It is the responsibility of the teacher representing the centre at the Standardisation Meeting to make sure that the standard set by AQA is used at the internal Standardisation Meeting. Centres which fail to conduct *effective* internal standardisation run the risk of jeopardising their candidates' marks.**

Internal Standardising: Proposed Method

3. Internal standardisation can be undertaken by centres in a variety of ways; the method chosen is at the discretion of the centre. However, whichever method is used, it must involve the use of reference materials and trial marking of common pieces of work by the teachers concerned until a common standard of marking is reached. One method of internal standardising is suggested in paragraph 4, below.

4. The Coursework Exemplars supplied by AQA set the standard for the marking of the ICT 3 and ICT 6 components. It is therefore these Exemplars which should be used as reference material in centres' internal standardisation of coursework assessment.

   The same method used at AQA's Standardisation Meeting should be adopted for internal standardising in the centre. The stages are as follows.

   First Stage Study the marked exemplar for ICT 3.

   Second Stage With pencil marks erased from when it was used at AQA's Standardisation Meeting, mark and annotate the "clean" exemplar for ICT 3 against the criteria of the appropriate mark scheme.

   Any discrepancies between the marks given by individual members of staff and AQA's mark for this exemplar should be discussed and resolved.

   Third Stage Return to the coursework of your own candidates and apply the AQA standard.

   Fourth Stage Repeat the process for ICT 6.

   This process can be extended to work generated by the centre until a common marking standard is reached between the teachers concerned.

Certification of Internal Standardisation

5. The Head of the Centre and participating staff are required to confirm that assessments have been internally standardised across different teachers by completing a *Centre Declaration Sheet*. This sheet must then be sent to your Moderator with the sample of your candidates' coursework. If you do not have a copy of the *Centre Declaration Sheet* one can be obtained by writing to, telephoning or emailing AQA at Publications Department, Aldon House, 39 Heald Grove, Rusholme, Manchester. M14 4PB (Tel: 0161 953 1170: Facsimile 0161 953 1177) or photocopy the sheet at the back of the specification.

Information about AQA's Method of Sampling and Moderation

- Teachers meet together in the autumn for a Standardisation Meeting to discuss the coursework exemplars provided by AQA. (Coursework exemplars are usually drawn from the previous year's cohort of candidates.) Teachers will then return to their centres to mark their candidates' work.

- In December and April in the year of the examination, centres will be sent a Centre Mark Sheet (CMS). Centres must insert the coursework mark for each of ICT 3 and ICT 6 for each candidate and send the top copy to AQA, and the second and third copies to the Moderator, together with the *Centre Declaration Sheet.*

  All Centre Mark Sheets must be sent to *arrive no later than 10 January for the January series of the examination or 15 May for the June series.*

- Moderators then attend a training meeting at the offices of AQA in the Autumn and Spring terms before the January and June examinations to discuss administrative procedures, to mark further coursework exemplar material chosen by the Principal Moderator, and to remind themselves of the standards of marking .

- When the Moderator receives the CMS he/she will then return a copy of the Centre Mark Sheet to the centre to indicate which candidates' coursework, duly marked and annotated, must be sent to him/her. Each item in each ICT 3 and ICT 6 sample must be prefaced by a *Candidate Record Sheet* (completed by the candidate) and, if used, an ICT 6 Project Advice Form. Further samples of work may be requested later.

- The Moderator's marks for the sample are sent to the Manchester offices of AQA. Centres' coursework marks are then adjusted by a computer using a process known as regression. Please see *The moderation of centre-assessed components: an explanation for centres,* below, for more information about regression.

- When the results are published, centres will receive a computer print-out providing details of any adjustments to their candidates' marks. All centres will also receive a written report on the sample of work submitted to AQA.

- Additional feedback to centres is provided through the Principal Moderator's Report and at the subsequent year's Standardisation Meeting.

- Attendance at future Standardisation Meetings will, for most centres, be at their discretion. However, for certain categories of centres, attendance at the following year's Standardisation Meeting will be compulsory. The types of centres whose attendance will be compulsory are given in para. 22.1 of the specification.

Annotating Coursework

All coursework submitted in the sample of work sent to the Moderator at the end of the course should be annotated "to identify, as precisely as possible, where the relevant assessment criteria have been satisfied to that the reasons for the award of marks are clear," (GCE ICT specification, section 20.4 and QCA's GCE Code of Practice, para. 82). It is understood, however, that teachers may not wish to permanently annotate coursework and that marks are not necessarily achieved at one point in the work only. It is therefore acceptable to write these notes on the C*andidate Record Form* (using supplementary sheets of paper, if necessary). By annotating in this way you will be directing the Moderator to the exact points in the coursework where you consider that your candidates are picking up marks.

A Word about the Word Count

Candidates will not be penalised by AQA for exceeding the ICT 6 word recommendation of 8000 words, although candidates will find it a useful discipline if they can keep the Report to within this volume. The word count of the Report comprises the substantive text which candidates write in the coursework submitted for assessment. It does not include such things as the text in screen dumps, the content of cells, annotation of screen dumps, and such like.

There isn't a volume recommendation for ICT 3, but it should be brought to candidates' attention that the time spent on coursework for any subject should not exceed the equivalent weighting of that component in the examination, taking into account both its practical/skills element, and the extent to which it allows candidates to learn about any theory associated with both question papers and coursework. For example, if the weighting of a unit comprises 30% of a qualification, it should take up no more than this amount of class and personal study time.

Candidates Working as Part of a Group: What You Need to Know

Candidates can participate in group activity in any aspect of work relating to coursework provided that, for an activity which is to be submitted to AQA for assessment, the teacher can observe the individual's contribution to group work and award an appropriate mark. Any aspect of coursework provided by the teacher cannot be credited to the candidate.

Magnetic and Optical Computer-based Material: Not Creditable

Please note that Moderators are instructed not to view any magnetic or optical computer-based material. Such material cannot therefore contribute to the marks.

The Bulletin Board

Finalised dates of the 2004 examinations

January Series:

ICT 1	1 h 30 m	13 January	Afternoon Session
ICT 2	1 h 30 m	13 January	Afternoon Session
ICT 4	2 h	22 January	Morning Session
ICT 5	2 h	26 January	Afternoon Session

June Series:

ICT 1	1 h 30 m	11 June	Afternoon Session
ICT 2	1 h 30 m	11 June	Afternoon Session
ICT 4	2 h	22 June	Morning Session
ICT 5	**2 h**	**25 June***	**Morning Session**

*Note the change to the date of the ICT 5 examination.

The use of brand names in answers to questions in ICT 1, 2, 4 and 5 will not gain credit

This has been the mantra in GCE ICT question papers for some time now and candidates should be made aware of this. For the 2003 examinations, a statement to this effect appeared below each question in which the examiners consider candidates might be tempted to use brand names in their answers. For the examinations in January 2004 and thereafter, the statement, "The use of brand names in your answers will **not** gain credit," will appear **only** on the front cover of all question papers. Please ensure that your candidates are made aware of this.

Consortia: the centre's responsibility to inform AQA

A consortium is formed when the candidates of two or more centres are assessed by the same teacher or group of teachers.

As the marks of such groups of candidates must be submitted to AQA in a single rank order, it is the responsibility of the Heads of the Centres concerned to ensure that all the teachers involved undergo internal standardisation procedures, and that the centres report to AQA the names and numbers of the centres taking part in the consortium arrangement at the time entries for the examination are submitted.

Clarification of the terms “Code of Practice” and “Code of Conduct” in Module ICT 4: 2004 examinations and thereafter

AQA is aware that the use of the terms “Code of Practice” and “Code of Conduct” in section 13.9 of the specification is in need of some clarification.

With effect from the January 2004 examination, the following definitions will apply.

Code of Conduct: how a professional person should conduct himself or herself within an industry in terms of their ethical responsibilities. A Code of Conduct is often established by a professional body for application across the whole of the industry to which that professional belongs.

Code of Practice: a set of rules which governs the use of ICT systems (hardware, software, data, procedures). These rules, established by an organisation, must be followed by that organisation's employees and may refer to the responsibilities of employees, set out penalties for misdemeanours, etc. The Code of Practice is separate from any legal or ethical considerations.

Minor correction to the marking criteria for ICT 3 in the specification for 2004 and thereafter

On page 44 of the printed version of the 2004 specification under the marking criterion for "Specification", the wording in the 8 -10 mark range in the third paragraph reads, "…thereby presenting an independent third part implementation of the solution ..." This is incorrect. The text should be amended to read, "…thereby *preventing* an independent third *party* implementation of the solution …"

The specification for 2004 and thereafter

This copy of the specification contains a number of changes from that for 2003. However, these changes are merely *clarifications;* not changes of substance. Order forms for new specifications are sent to your Examinations Officer in approximately March each year, but copies of the specification can also be ordered on headed centre paper for use by members of staff directly from **AQA Publications Department, Aldon House, 39 Heald Grove, Rusholme, Manchester M14 4NA,** provided no similar order for the same year of the examination has been previously received.

☎ **0161 958 1170** **Fax 0161 958 1177** 💻 **publications@AQA.org.uk**

The Teacher Guide

The Teacher Guide first issued on the launch of the 2001 specification has been withdrawn from the September 2003 Publication Catalogue. However, the sections in the Teacher Guide which relate to coursework will appear on the website.

All communications from AQA to your centre about GCE ICT are sent to…

…your Examinations Officer. For contractual reasons, anything about an operational examination must be sent to the Head of the Centre who (usually) delegates this responsibility to the Examinations Officer so all our correspondence is addressed to the EO, with the enclosures addressed to the Head of GCE ICT. The EO should therefore be your first point of contact about any correspondence which you are expecting from AQA about ICT.

Sending coursework to the Moderator

The following coursework deadlines must be strictly observed:

- 10 January for the January series;
- 15 May for the June series.

Your marks must **ARRIVE** with the Moderator and AQA by the above dates. This means that you must call in the coursework from your candidates sufficiently early to allow you time to mark all their work so that you can meet these deadlines.

VERY IMPORTANT: if your centre has 20 or fewer candidates entered for a coursework component, all the coursework for your centre must also be posted to the Moderator to **ARRIVE** with him/her by the above mentioned dates.

If your centre has more than 20 candidates your Moderator will write to you to request a sample of your candidates' work.

ICT events to look out for on the AQA web site

AQA has recently held a short series of two fee-paying INSET courses - one for AS, the other for A2 - for teachers new to the AQA specification. We are planning to offer a further series of INSET course during the summer term, 2004, although the content has yet t be decided. You will be able to find information about the course on http://events.aqa.org.uk/ebooking/ .

Revised arrangements for the submission of Project Advice Forms for the examinations to be held in 2004 and thereafter

1. The Project Advice Form (PAF) has been re-designed to make it easier and quicker for centres to complete. The revised version of the form is attached as Appendix A to this document and they have been sent to centres which entered candidates for the June 2003 examination for ICT 6. The revised form can also be viewed on the AQA website: http://www.aqa.org.uk/admin/p_course.html .

   Section A of the PAFs (the Section to be completed at the centre) will be issued by AQA in September 2003 on four-part carbonated stationery. Centres must complete the form and send all four parts to their Coursework Adviser. He/She will then complete and return a response, Section B, to the centre (attached, for information as Appendix B to this document).

   If a copy of the PAFs is downloaded from the AQA website, four copies of the completed Section A must be sent to the Coursework Adviser.

2. To date centres have been able to send any number of PAFs for consideration by their Coursework Adviser. However, for candidates entered for the 2004 examinations and thereafter, the maximum number of PAFs that can be submitted will be restricted to 10 per centre per year.

   The only exceptions to this will be new centres and centres which receive, in either the previous June or January examinations, a significant adjustment to their internally assessed marks for ICT6. A significant adjustment is identified as one which merits the issue by AQA of the more discursive Feedback Continuation Form, in addition to the standard feedback form.

Centres falling into the latter category can submit PAFs as before for candidates entered for the subsequent year of examinations. Should Coursework Advisers be sent a number of PAFs which exceeds the new quota, they have been instructed to look only at the first 10 presented.

Please note that the deadline for the receipt of PAFs by Coursework Advisers is 1 December**.**
Please note also that the submission of PAFs is not a requirement of the examination; they are submitted at the discretion of the centre.

AQA
ASSESSMENT and QUALIFICATIONS ALLIANCE

Centre-assessed Coursework

Project Advice Form

2004

GCE A2 Information & Communication Technology – Unit 6 (ICT6)

Centre name: .....

Candidate name: .....

Supervising teacher: .....

Section A is to be completed by the candidate and the supervising teacher. **FOUR** copies of this form must be sent to your Coursework Adviser to arrive not later than 1 December in the year prior to the examination. **Section B**, the Coursework Adviser's comments, will be sent to the centre by the Coursework Adviser. **Sections A and B** must both be attached to the front of the completed project when sent to the Moderator.

SECTION A

Project title: .....

Problem statement: You must provide a clear statement of the problem to be solved. It must state what the content is and the nature of the problem. The statement should not be the solution to the problem.

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Background to the problem: You need to explain how the problem arose and give some background to the organisation concerned (e.g. number of customers, transactions or volumes of work) to justify that this problem merits an IT solution.

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Signature of candidate: ..... **Date:** .....

This part must be completed by the supervising teacher.

Advice to the candidate:

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The centre is responsible for ensuring that appropriate hardware and software facilities will be available to the candidate throughout the course.

Signature of supervisor: ..... **Date:** .....

AQA
ASSESSMENT and QUALIFICATIONS ALLIANCE

Centre-assessed Coursework

Project Advice Form

2004

A2 Information and Communication Technology - Unit 6 (ICT6)

Name of Centre _____ Centre No. | | | | | |

Candidate Surname _____ Candidate No. | | | | |

Other Names _____

SECTION B: To be completed by the Coursework Adviser (Please tick ✓ the appropriate box)

The project appears to be appropriate ☐

The project appears to be appropriate subject to the advice given below being taken into account in the completed project ☐

The project is not appropriate for the reasons given below ☐

Sections A and B must both be attached to the front of the completed project when sent to the Moderator. Copy completed Section B as necessary if it applies to more than one candidate.

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Signature of Coursework Adviser: ..... Date: .....