GCE

Applied ICT

Advanced GCE **AS H515**

Advanced Subsidiary GCE **AS H115/H315**

Report on the Units

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H115/H315/MS/R/09J

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Advanced Subsidiary GCE ICT (Double Award)(H315)

Advanced Subsidiary GCE ICT (H115)

REPORTS ON THE UNITS

Chief Examiner's Report

While the performance in G041 and G055 was similar to previous sessions, it was pleasing to see a marked improvement in the responses to G054. However, responses in section B of all papers continue to limit the marks that can be awarded. Centres are reminded of the need to teach the concepts covered in the What You Need to Learn section of the units, as well as preparing candidates to complete the pre-released tasks.

Generally the quantity and organisation of pre-release work was appropriate. Fewer candidates than in previous sessions failed to specifically identify their responses to the marked tasks, although there were still some who failed to do so. If tasks are not clearly identified, it is difficult for Examiners to locate these tasks in order to mark them. Please ensure that each task is clearly labelled and that the work is submitted in task order. Draft copies of tasks are **not** required and should **not** be included. If there are several copies of a task, it makes it difficult for the examiner to determine which one they should mark.

Centres are reminded that candidates should only submit work carried out in response to the tasks for use in the examination. In particular, task 1 must **only** include what is specified within the task in the candidate instructions and be clearly applied to the relevant case study. General class notes based on the What You Need to Learn section of the unit or material downloaded from the WWW must **not** be taken in to the examination. However, **all** work taken into the examination room **must** be attached to the examination paper and submitted to the Examiner. Those invigilating the examination need to be given clear instructions to do so. A worrying number of candidates failed to submit their notes for task 1. In some cases this was the case for all candidates in a Centre. It was not clear whether this task had been completed or not. Failure to complete task 1 puts candidates at a significant disadvantage when answering section A of the papers.

Centres are reminded that the work submitted in response to the tasks must be each candidate's own unaided work. It is the Centre's responsibility to ensure that the work is carried out in conditions that allow the Teacher to confirm this is the case. It should not, for example, be given as homework. Care is needed to ensure that candidates do not share electronic files and that Teachers do not provide too much direction when helping candidates to understand what they have to do.   Some diagrams will inevitably be similar if they are drawn correctly. However, if candidates produce these individually, there will be subtle differences in the length of lines, positioning of items etc. Whilst they must not mark the work, deadlines for handing in the work should be set so that there is time for the Teacher to check the work before signing the Authentication Statement.

All Centres should by now be aware of the Joint Council ruling regarding Centre authentication of coursework. This applies to both the pre-release tasks in the examined units and the Centre assessed units. Whilst most Centres submitted Centre Authentication Forms (CCS160) for the Centre assessed units, again, a significant percentage failed to include them in the script packets for the externally assessed unit. This should be done as a matter of course. Candidate Authentication Statements must be signed, but should be retained in the Centre and **not** submitted to the Examiner or Moderator.

Please ensure that all pre-release work is attached to the question paper using a treasury tag. Please also discourage candidates from tying treasury tags in knots or wrapping them several times through the punched holes. It is essential that the Examiner can separate the pre-release work from the examination paper easily to mark it.

Centres need to consider carefully whether candidates will be ready to submit work for G048 in the January session. The work seen this session was considerably weaker than in the summer

with very few candidates scoring 80 or above. Disappointingly, it was, again, necessary to adjust the marks of many centres, some by a considerable amount. Please refer to the Principal Examiner's Report for guidance on what is required.

Whilst most work submitted for moderation was of an appropriate standard, the standard of some work at AS level was more appropriate to GCSE and the standard of some work at A2 was more appropriate to AS level. Centres need to ensure that the depth and breadth of the work submitted is appropriate for an A level qualification.

There has been a worrying increase over the last few sessions of instances of plagiarism in coursework portfolios, be this copying and pasting material from websites or copying printed material word-for-word. Candidates need to be taught the difference between using material from websites and other sources to inform their responses and simply copying it. They also need to be taught how to quote existing sources and how to reference them properly. Providing a reference should not be seen as a means of making it acceptable to copy large amounts of material and Teachers need to ensure that marks awarded reflect the candidates' own work.

The importance of Centres getting marks to the Moderator by the deadline cannot be over-emphasised. Failure to do so may result in delays in the publication of candidates' results. If there are **10 or fewer** candidates entered, **all the work** must be sent to the Moderator with the MS1. Prompt submission of the work requested and responses to other correspondence such as clerical error letters is also vital.

The importance of a fully and accurately completed unit recording sheet cannot be over-emphasised. Moderators must be able to match the work to the mark on the MS1, so both candidate name and number should be completed. It is also vital that the total mark is indicated, that it correctly totals the individual task marks and that the total on the unit recording sheet and the MS1 match.

As with pre-release tasks for examined units, plastic pockets, folders and particularly ring-binders should not be used to send unit portfolios. Work should be hole-punched and secured with treasury tags.

G040-47 Principal Moderator's Report

General Comments

As in previous sessions, due to accreditation, only a percentage of work was moderated. The standard of the work submitted was generally acceptable, although scaling had to be applied in a number of instances, with significant scaling being required in a few. Worryingly, it was necessary to adjust the marks of several of the accredited centres that were randomly sampled. Assessors in accredited centres need to ensure that they check the required standards by attending INSET and apply these standards when assessing work. Accredited centres are reminded that their work may get called for moderation as part of the random sample. A letter is sent to selected centres shortly before the moderation session and centres are urged to take note of this and act accordingly.

Worryingly, there seems to have been an increase in plagiarism this session, with some candidates simply copying material from books, websites or other sources, or copying from each other. Candidates need to be taught how to use information to inform their own work, when it is appropriate to quote a source and to what extent and how to cite and reference the sources they use. They also need to recognise that, even if they have referenced the source, producing work that is substantially copied from books and websites does not demonstrate their understanding and is unlikely to gain marks. Centres should make the consequences of plagiarism clear to candidates and be vigilant in ensuring that instances of plagiarism by candidates are identified.

The importance of meeting deadlines for the submission of mark sheets cannot be over emphasised. The moderation window is not very long and failure to submit marks on time causes delays to the whole process. Centres are also reminded of the need to submit the requested portfolios promptly on receipt of the sample request.

Moderation was hampered again this session by the number of inaccuracies in recording marks on the mark sheets and other administration issues. For moderation to progress smoothly the task marks on the unit recording sheet must be added correctly, the total recorded in the box provided and this total must be transferred accurately to the MS1 mark sheet. If the marks are changed through internal moderation, or additional work being submitted by candidates, please ensure that both the individual task marks and the total are changed and that it is clear which the final marks are. Centres are reminded that, once marks are recorded on the MS1 and submitted, candidates **must not** have access to the work to make further amendments until after the results are issued.

It is also vital that the moderator can read the marks awarded on the MS1 to select a representative sample. Changes made on the top copy are not always readable on the moderator's copy, resulting in delays while these are clarified. When centres use electronic methods to submit marks to OCR, a printed copy of the marks submitted must be sent to the moderator.

As is often the case in January, there were some centres where all candidates entered had been withdrawn. Where centres have withdrawn all candidates for a unit or units, it is vital that the moderator is made aware of this, either by sending the MS1s with the candidates marked as absent, or by sending a note letting the moderator know the candidate(s) have been withdrawn. If moderator address labels have been sent to the centre, the moderator will be expecting mark sheets from the centre and is required to chase the centre if these do not arrive. This can waste valuable time, especially when there is no work to moderate.

Similarly, centres are reminded that, where there are **10 or fewer** candidates, **all** the candidates' work **must** be sent to the moderator with the MS1 by the deadline. However, where **more than**

10 candidates are entered, please do **not** send the work with the MS1. The moderator will request the 10 they want to see on receipt of the MS1.

Centres are also reminded of the need to complete and include Centre Authentication forms (CCS160) with the work. The Joint Council has indicated that centres who fail to authenticate a coursework unit will not receive marks for that unit. Only one form per unit is required – it is not necessary to attach a form to each candidate's work. Also, whilst candidates must sign a Candidate Authentication form, these should be kept securely in the centre and not submitted with the work.

In many cases unit recording sheets had been completed thoroughly. There were helpful comments as to why a particular mark had been awarded and page numbers to direct the moderator to the evidence. However, a significant number of centres had included little comment and no page referencing. This essentially means that the work has to be re-assessed, rather than moderated, and the moderator may not be able to locate all the evidence claimed, resulting in scaling. Centres are also encouraged to annotate the work to indicate where there is evidence for a particular task and mark band. A simple 'a3' in the margin, to indicate there is evidence for task a, mark band 3, is very helpful, as are comments to indicate where different parts of a task have been evidenced.

Pages should be numbered uniquely from the start to the end of the portfolio, even if this is done by hand when the work is finally assembled. Representative page numbers on the unit recording sheet are more helpful than attempting to indicate every page that contributes to the evidence.

Some work was very poorly organised, making the moderation process more difficult. Candidates need to be taught how to assemble a portfolio, rather than merely collect together a number of different pieces of work for assessment. They should be encouraged to organise the work in a logical order, use suitable section headings and to include a contents page. However, it is not necessary to scan in hand-drawn designs. When these are drawn in pencil, the scanned image is too feint to be read. Remember, the moderator is checking the content of such designs. It is far better to simply include the original versions. The volume of work submitted should also be considered. Portfolios that are hundreds of pages long are counter-productive, as it makes it more difficult to locate the evidence required. It is the quality, rather than the quantity, of the work that is being assessed and candidates need to be selective about what they include.

Although most centres are using treasury tags or other suitable methods to secure the work sent, plastic pockets, plastic folders and occasionally ring binders are still being used by some centres. These should be avoided.

Comments on Individual Units

G040 – Using ICT to communicate
Although most centres had assessed this unit accurately, there was considerable variation in the quality of the work seen. Some was of a very high standard, while some was little better than would be expected at Intermediate GNVQ/GCSE level.

Some centres continue to provide assignments that require candidates to create standard business documents such as letters, invoices, memos and agendas. These do not give candidates sufficient opportunities to demonstrate their abilities to use the range of software, facilities and media required for this unit.

Where candidates have not created all six of the required communications, they can still be awarded marks in task b. However, the mark awarded is likely to be significantly lower than the quality of those communications created would suggest.

Some of the unit portfolios produced for this unit were very extensive. This can be

counterproductive as it becomes difficult for the moderator to locate the required evidence. Unless the comparative report for task a is being used as one of the six original communications, which is not recommended, it is not necessary to include planning or draft copies of this document, neither are draft copies of evaluations required. Draft copies of other documents should be carefully selected, labelled and annotated to show development. Two or three drafts should be sufficient. Also, whilst the collection and analysis of existing documents to inform the design of the candidates' documents is good teaching practice, these do not need to be included in the portfolio. However, the documents compared in task a must be included in the portfolio, so that the moderator can judge the accuracy of the descriptions given.

Task a
The requirement for this task is that candidates describe and compare two types of document from each of three organisations, for example a letter and a brochure from each. Care is needed in the choice of documents. As candidates have to identify good and bad points about writing style, it is important that documents have some content. Blank letterheads, business cards etc are not suitable documents for comparison. The two types of document should also be sufficiently distinct. Comparing two different pages of websites or two types of leaflet is not acceptable. Candidates can still be awarded some marks if they fail to describe all six documents, although the mark will need to be reduced to take account of this.

Other than when discussing house style, candidates should be comparing the similar documents from the three organisations, i.e. comparing like with like. When discussing house style, they should be considering common features used in the two documents from each organisation.

Writing style was too often confused with text style. Candidates need to consider the type of language used, i.e. whether it is formal or informal, informative, persuasive etc, not whether it is emboldened or in too small a font size.

Some candidates had produced very detailed descriptions and comparisons of the documents but had included little indication of what was good or bad about them or how well they met their purpose. Discussion of house style and suggestions for improvement were also limited. Candidates tend to score better if their report is structured under headings that relate to the task requirements.

Centres are reminded that the quality of the candidates' written communication is assessed through this task. In some cases, too little account was taken of poor spelling, punctuation and grammar when deciding what mark to award. It is not sufficient for candidates to simply run the spell checker, although this should be used as a matter of course, they should also proofread the work and correct errors not identified or those of punctuation or grammar.

Task b
Tasks bi to iv should be assessed across all six communications created. To achieve the top of a mark band, candidates must demonstrate the requirements of that mark band consistently across most, if not all, of the six communications. Too often, candidates had produced good planning and drafting, good quality final communications or detailed evaluations for a few communications but had 'gone off the boil' and failed to demonstrate the required consistency. The 'presentation' on methods of communication must be one of the six communications. It should, therefore, be planned, drafted and evaluated as well as the other five.

It is not necessary for candidates to produce excessive documentation to explain how each document has been created, although a few screen prints showing evidence of using templates, master slides, sound or video clips would make the moderation of task biii easier.

Task bi
There are several aspects to this task; planning, development of drafts, accuracy checking and listing of sources. Lack of any of these aspects should reduce the mark awarded significantly. It

is expected that even at mark band 1 the documents have been checked so that few obvious errors remain. This was often overlooked. Planning needs to be included for all six documents to achieve mark bands 2 or 3. For mark band 3 the planning must be detailed. Candidates should consider the layout, content and aspects such as font style and colour schemes. Only one hand-drawn plan is required for each communication. All drafts should be computer generated.

It is not sufficient to merely include draft copies. These need to be annotated to show what the candidate intends to do to improve them. This should include improvements to the layout and positioning of elements as well as proof reading the text. Again, annotated drafts should be included for all documents. In some cases, candidates had provided step by step guides with screen prints to show how the documents were created. This is not what is required and does not fulfil the requirement for annotated draft copies. The listing of sources was often the poorest aspect of this task. At mark band 3 a detailed bibliography is required. This should include at least title, author, publisher and date published for printed material and, for web-based material, exact URL, date accessed, author (if known) and date last updated (if known). This was rarely seen in candidates' work.

Task bii
Although it is not necessary to include extensive before and after printouts to show how information was located and adapted, annotation of the work to indicate which information had been located and how it had been adapted would do much to aid the moderation process.

To reach mark band 3, the communications should be of near professional standard. Whilst some very high quality communications were seen, some were quite poor but still awarded marks in this mark band. For maximum marks all six communications should be of a consistently high standard.

There were a number of instances this session of candidates including screen shots of documents, rather than printing out the final copy. This often resulted in a reduction in the quality of the image, making it difficult for moderators to confirm the marks awarded for this task.

Task biii
Again, annotation would help to show the moderator where the automated features required by mark band 3 have been used. Alternatively, a few well chosen screen shots would help the moderator to confirm that automation had been used.

Centres are reminded that the key terms in this task are 'appropriate use', 'suit the purpose' and 'improve impact'. Candidates should not be awarded mark band 3 simply because they have used mail merge or a template. In addition, to achieve this mark band, candidates need to use a wide range of graphics and other media throughout the portfolio that are both appropriate and improve the impact of the communications.

As mentioned in the introductory paragraphs for this unit, the types of communication candidates are asked to produce will do much to aid or limit them in achieving marks in this task. More varied communications, such as multimedia presentations, web pages or newsletters, will give candidates greater opportunities to achieve higher mark bands. Assessors should consider the use of detailed witness statements to evidence the appropriate use of sound and video.

Task biv
Candidates need to evaluate the communications they produce and their own roles and actions. The latter aspect was frequently missing. Mark band 3 requires candidates to carry out ongoing evaluation of their draft communications. Too often a mark in this mark band was awarded when the candidate had only evaluated the final versions of their communications or where they had simply described how the drafts had been developed. Candidates need to describe the strengths and weaknesses of each draft and their own performance in detail to achieve high marks in this task.

Task bv
This task should form the content of one of the six communications created, rather than being addressed as a separate entity. It requires an explanation of the methods of communication listed at the top of page 5 in the What You Need to Learn section of the unit specification. To achieve mark band 2 or 3, candidates would be expected to describe at least six of the communication methods listed. There was some confusion between types of information and communication methods. The technologies that support communication methods were often omitted or lacking the detail required.

Candidates are unlikely to be able to provide the level of detail required by mark band 3 in a slide presentation alone. The required detail could be provided in presenter notes to accompany the presentation. However, these need to expand on the information shown on the slide, not simply repeat it. Centres are reminded that the term 'presentation' is used in its widest sense. Candidates might find it easier to provide the detail required by mark band 3 if they presented the information in a report or newsletter, rather than a slide presentation. The best work for this task was seen when candidates had produced a report, rather than a PowerPoint presentation.

Although candidates should be encouraged to research the methods of communication and the technologies which support them - including their relative advantages and disadvantages – they should not simply copy and paste articles from the internet. Note taking and rewriting text from a number of sources into the candidate's own factual account should be promoted, as these are vital study skills which candidates will require at university. The sources used should also be referenced properly.

G042 – ICT solutions for individuals and society
Although better than in previous sessions, this unit, again, probably attracted more scaling than any other. This was largely due to a lack of suitable evidence to show what candidates had actually done. Candidates need as much guidance on how to present their evidence as they do on how to search for information, analyse it and present results. In some cases, candidates had aimed their evidence at mark band 3 and failed to include the required evidence of development through the task. However, some centres had 'got it right' and candidates had produced excellent evidence.

Centres are reminded that all of the tasks, with the exception of task b, should relate to a single investigation. Guidance on the evidence required for this unit has been given out at OCR training events and is available in the documents section of the e-list. This can be accessed at http://community.ocr.org.uk/lists/listinfo/ict-gce-applied. The document 'Unit 3 – Further Guidance' can be found in the Public Documents and Resources section, so can be accessed if you have not yet subscribed to the e-list.

Task a
Although some good evidence was seen for this task, some was very poorly structured, making it difficult to determine what searches candidates had carried out and what information they had found. Screen shots were often too small for the moderator to read the search criterion entered or the screen shot did not include the criterion. In some cases, candidates were using a totally different search topic to 'test' which search engine is best before using one for their investigation. This is not appropriate as the results will be subject specific and the search engine they find the best in their testing may not be the best for the subject of the investigation.

Candidates need to be systematic, starting by clearly defining what they are looking for and then initially using simple searches, progressing to the use of the advanced search facilities and then building their own search strings using logical operators. Whilst it is not necessary to print out and include all the information found, candidates do need to indicate the results obtained from each search and to compare the results of similar searches using different search engines. This refinement of searching will also allow candidates to address the criteria for mark band 3 of task g.

To reach mark band 2 the advanced search facilities must be used, while mark band 3 requires the use of logical operators in the standard search box. Many candidates had approached this task 'back to front' by using logical operators and then going back to using advanced search facilities. The intention was that candidates use the advanced search facilities and discover the functions they offer before realising that similar searches can be carried out by using logical operators in the standard search bar. In some cases, mark band 3 had been awarded when it was clear that the logical operators were those included by the search engine as a result of carrying out an advanced search. Too often, logical operators were being used within the fields of the advanced search option when the whole point of the task is that more efficient searching is carried out by using these operators in the standard search box, rather than using the advanced search options.

Too often also, poor use had been made of both the advanced search facilities and logical operators. Entering a single word in the 'exact phrase' box, for example, is unlikely to make much difference to the search results, as is the use of AND in Google or any operator in lower case. Google and other search engines provide useful help on the use of operators and candidates should be encouraged to follow this guidance. Candidates should also be encouraged to use a range of operators including OR or NOT (-), as well as AND (+).

Mark band 2 requires a comparison of results as well as the use of advanced searches, while mark band 3 requires justification of the most appropriate search engine. We would expect candidates working at mark band 3 to show progression from mark band 2, i.e. they need to show the use of the advanced options of more than one search engine and compare the results to inform their choice of the most appropriate.

Task b
There was some misunderstanding of the requirements of this task. It requires discussion of the impact of the availability of electronic information, not the impact of ICT in general or the advantages and disadvantages of the internet. This session again produced a number of reports entitled 'How organisations communicate', i.e. centres had addressed the mark band 3 criterion, rather than the banner of the assessment evidence grid which asks for 'an explanation of the availability of electronic information on individuals and society'. The resultant report often related more to the requirements of task bv in G040 than this task.

Candidates tended to describe how the internet is used for shopping, banking and other tasks, rather than the impact on the people using these services. The impact on society for mark band 2 was rarely more than a generalisation of the material discussed in relation to themselves and their family. Mark band 3 requires detailed explanations of the methods organisations now use to communicate with individuals and society and how this affects people who do not have or want access to electronic communication. Whilst candidates could often identify those who don't have access and why this is so, explanation of the impact this has, was often limited.

As with task a in G040, insufficient account was taken of poor spelling, grammar and punctuation when awarding marks for this task. A few centres had required candidates to concentrate on one particular website or method of using electronic information. This does not meet the requirements and limits candidates' discussion. A more general report is required. Similarly, detailed descriptions of different public service websites and how they might be used does not fulfil the requirements, although this may provide a good teaching strategy.

Task c
This task requires evidence of the use of a large website to find required information. The information required needs to be identified and candidates then need to provide evidence of how they located it. Candidates should include screen shot evidence of how they found the required information. A witness statement should also be included to confirm that this was done independently or that the candidate needed help to find it.

Task d
This task requires evidence of complex searches involving both relational (= > < etc) and logical (AND, OR, NOT) operators. For mark bands 2 and 3, both on-line and local databases must be evidenced. Evidence of searching on-line databases may be linked with task c if an internal search engine has been used, but not to the use of generic search engines in task a. Most on-line databases will provide an internal search engine. Where it is possible to select two or more criteria, this is equivalent to AND, and if several options are selected within one criterion, this is equivalent to OR. We would expect to see complex searches of this nature, so candidates should be encouraged to use websites that provide an advanced search facility.

As with some of the other tasks in this unit, screen prints to show the search criteria used must be large enough for the moderator to read without resorting to a magnifying glass!

For the local database, it is not sufficient to use a table in a spreadsheet as it is not then possible to easily demonstrate the required complex searches or to present the results as a database report. Whilst logical and relational operators can be used in custom filters in a spreadsheet package, candidates are limited to mark band 2 due to the lack of reporting facilities – a pivot table, for example, does not meet this requirement.

Some care is needed in developing local databases for candidates to search. These need to contain sufficient data to make searches meaningful. It is not necessary for candidates to create their own local database. Indeed, when they do, they tend to concentrate on this aspect, rather than the required search techniques. Candidates must include screen print evidence of the queries they set up in design view. For higher marks we would expect to see a number of different complex searches. Reports produced to achieve mark band 3 must be fit for purpose and must be printed out, rather than simply screen printed. For maximum marks, the database reports produced must have meaningful titles and suitable layouts to ensure the data being presented is visible and understandable. Rather than simply using the report wizard, candidates should access reports in design view so that they can adjust column widths and the alignment of data, and edit titles and column headings so that it is clear what the report shows.

Task e
Although some good spreadsheet evidence was seen, many did not demonstrate sufficiently complex analysis. The document mentioned at the beginning of this section provides guidance on the types of functions and processing expected for mark bands 2 and 3. Candidates must evidence the functions and formulae they use by formula printouts or other suitable methods. They also need to show **evidence** of testing, not just a table stating that the results were 'as expected'. The testing should show that formulae and functions return the expected result, not just that macro buttons work. This is a task where candidates would benefit from guidance on how to present their evidence. Too often it was difficult to determine what the spreadsheet was designed to do, how it appeared on screen or how the various sheets were linked, if at all. Macros need to do more than simply move from sheet to sheet. The mark band 2 criterion requires macros to speed up the input of data and the production of results.

Task f
This task requires candidates to draw all the information they have found together to answer the investigation question. As such it should be a stand-alone document. As in G040, the term presentation should be taken in its widest sense. The task cannot be assessed across the whole portfolio.

The presentation should present what the candidate has found out, not how they have gone about finding the information, which is the subject of the rest of the portfolio. Although better than in previous sessions, too often, the presentation for task f simply repeated the methods used, with screen prints of searches and how the spreadsheet was created. In some cases the headings were the six types of information listed in section 3.2.6 of the unit specification. Whilst this may ensure that all six are included, it will not produce a well thought out presentation that

presents the investigation results coherently. Where candidates have not addressed an individual investigation, it becomes difficult for them to produce the evidence required for this task. Also, if candidates have not listed their sources it is difficult to award any marks for this task as it is impossible to ascertain how many they have used. Mark band 3 requires a detailed and correctly structured bibliography. The same details are required here as for task bi in unit 1. This should relate specifically to the presentation of results and not the whole portfolio.

Task g
Evaluations for this unit were weak. It is the methods used to find information and present results that should be evaluated, rather than the outcome or a task by task evaluation. Too often, evaluations were simply descriptions of what candidates had done. For mark band 3, this evaluation should be ongoing rather than just at the end. Some evidence may appear in task a, but this must be clearly identified and cross-referenced if credit is given. Even when candidates had provided ongoing evaluation of their search methods, ongoing evaluation of and refinements to the presentation of results was often omitted.

G043 – System specification and configuration
Tasks a and b are two separate stages of the specification process and cannot be interwoven. Task a requires candidates to investigate and describe in detail what the user wants to do with the system they will specify. This should include detailed descriptions of all tasks together with details of what data will be input and how the output will be presented. This should **not** include consideration of input and output **devices** or the software required, which form part of task b. For maximum marks in task a, all types of input and required output should be included. In task b, candidates should use these detailed requirements to specify a system that can carry them out. The hardware specification should be complete – a processor without a motherboard or tower unit is not much use – up-to-date and include full details of each component being recommended. However, candidates should be discouraged from simply copying and pasting the technical specification from a website. Rather, they should indicate the size, speed etc and why this particular component meets the user requirements. As well as specifying the hardware and software required, candidates must include the specification of any required configuration and, for mark band 3, designs of toolbars, templates, menus and macros. All of this should form a stand-alone document that could be presented to the user for their approval. Too often high marks were awarded when the specification lacked detail and the configuration requirements had been omitted.

Photographic and/or screen print evidence backed up by a detailed, signed and dated observation record would improve the evidence for the practical tasks in task c. However, to be of value, observation records need to include individual comments on the tasks each candidate has performed and need to reflect the mark awarded. The evidence must include configuration as well as installation of both an operating system and applications software. Whilst it is recognised that practical activities may be limited by the equipment available in the centre and, consequently, may not match the system specified in task b, candidates still need to create a working system that matches the user requirements as closely as possible. Candidates must include a test specification and evidence of testing to go beyond mark band 1. To achieve mark band 3, the testing must be thorough and there should be clear evidence of how candidates overcame problems found as a result of testing. Testing seen often lacked the detail required for the marks awarded.

Similarly, candidates need to include clear evidence of the design of templates, toolbars, menus and macros and annotated screen prints or printouts of those that they create. Any screen prints must be large enough for the content to be read. All four items must be evidenced and, to go beyond mark band 1, there must be evidence of testing. For mark band 3, the installed templates, toolbars, menus and macros must be those designed by the candidate and must demonstrably improve the efficiency of the user. An explanation of how the user's efficiency would be improved would be helpful here.

Task e is best evidenced by a report or handbook for the user on health and safety and security issues. It should cover the content of section 4.2.4 in the unit specification. While most ergonomic issues were covered, management issues were rarely covered in sufficient detail. As with task a in G040, insufficient account was taken of poor spelling, grammar and punctuation when awarding marks for this task.

More centres are correctly addressing task f, although a little more detail is required. Centres should refer to section 4.2.3 of the unit specification. However, some candidates are still including descriptions of the stages of the Systems Life Cycle. This is not acceptable.

Evaluation was weak for task g. Candidates must evaluate both their specifications and the methods they used for installation, configuration and testing. It might help if these were treated as two separate evaluations. The first could appear immediately after the specification and consider how well it meets the needs of the user as identified in task a. The second could be produced immediately after completing the practical tasks and consider how they went about them, any problems that arose, how these were overcome and how they might approach a similar task in the future. As with other units, for mark band 3 this should be ongoing.

G044 – Problem solving using ICT
There were insufficient entries for this unit for generalised comments to be made.

G045 – Software development – design
Again, there were insufficient entries for this unit for generalised comments to be made.

G046 – Communicating using computers
The work submitted for this unit was generally appropriate and in most cases had been accurately assessed, although there was some lenient assessment.

Suitable organisations had been investigated for task a, although candidates did better when they investigated a real organisation, such as their school/college, rather than using case study material. However, whilst it is clearly convenient to base this task on the centre's use of the internet and intranet, candidates should be given the opportunity to investigate other organisations' use of these facilities where possible. The organisations' objectives were rarely stated overtly. Candidates must describe advantages and disadvantages of both internet and intranet use, as well as suggesting improvements to both to achieve mark band 3. Some candidates had confused an intranet with a shared network drive, particularly when describing their own centre's use. The two are not synonymous and candidates must be taught the distinction between them. It should also be noted that it is the use of the internet and intranet that is to be evaluated, not the organisation's website and the structure and layout of its intranet.

Centres should refer to section 7.2.6 to identify what is meant by internet technologies for tasks bi and di. Discussion of HTML is not sufficient. In task bii, marks were awarded somewhat leniently. Candidates need to do more than simply identify that a particular section of code produces a table or a hyperlink to reach mark band 3. They should explain how the various tags are used and how they translate into the features seen in the browser. Candidates do not need to include the entire code for each of the three pages. They could include a screen print of the page as shown in the browser along with **a number** of relevant sections of the code that they can then explain in relation to the browser image. However, care is needed that a sufficient range of different features have been explained. The web pages annotated should be part of the website discussed in task bi, rather than an entirely different site or one they have created.

Task c was often the least well evidenced. Candidates tended only to consider the costs of hosting the site online. Frequently, bandwidth was given little consideration and candidates failed to describe a range of connection methods, hardware and software. The hardware and software should be that required to produce the website and host it locally. This will include a web server and software, as well as web design software. As in other units, insufficient account

was taken of poor spelling, punctuation and grammar. This task should be a single coherent report, rather than a number of disparate sections including material downloaded from websites.

In task di, candidates must identify the internet technology they have used in their web page to achieve mark band 2. Evidence that the site has been uploaded is required for mark band 3. Task dii is about evaluating how they approached the development and uploading of the web page, rather than the web page produced. There was insufficient detail in some cases.

Centres should endeavour to ensure that candidates have the opportunity to install three pieces of communications software so that they have the opportunity of achieving mark band 3 in task e. It is not possible to cross reference the descriptions of hardware, software etc for this task to those for task c, as task c relates to hosting a website, while this task relates to simply accessing the internet and sending and receiving emails. For maximum marks, candidates need to produce a high quality user guide for installing and configuring the communications software. This should be separate from the evidence that they actually carried out the installation. A detailed witness statement is helpful to confirm the installation and configuration tasks. Care is needed as to what is considered communications software. Compression software, for example, is not communications software, although it may be beneficial to reduce the file size of attachments. Likewise, virus checking software, while essential on any computer connected to the internet, is not communications software. Also, simply configuring an email client that already exists on the system is not installation. There are many freely downloadable browsers, email clients and instant messaging applications that can be installed for this task.

G047 – Introduction to programming
Again, there were insufficient entries for this unit for generalised comments to be made.

G041: How Organisations Use ICT

General Comments
Although performance on this paper was somewhat better than last January and more on a par with the June 2008 paper, candidates are still failing to access the top 20% of the marks available.

Many candidates appeared to have a good understanding of the general requirements of the questions asked. However there are some sections of the exam where candidates had misinterpreted what was actually required of them. This could possibly be because some candidates did not spend enough time familiarising themselves with the case study. For example, candidates seem to have some difficulty in extracting information about processes from the case study itself and were not as familiar with the case study as they could have been.

Some candidates appeared to have only completed task 2 and 3 (ignoring task 1 as it is unmarked). The type of candidate that took such risks was generally unprepared for the exam and was not familiar with the case study. Consequently, these candidates found it difficult to answer the questions based directly on the case study.

Some candidates also lost marks because they did not apply their responses to the question set – not reading / not understanding the question / not giving the type of response required. The skill of picking out the key points required is something that needs to be taught.

Although some centres had prepared their candidates very well so that candidates had followed the case study and answered questions clearly, candidates from some centres were poorly prepared and some answers did not match the case study.

Centres are encouraged to use the What You Need To Learn section of the unit, as well as previous Examiner Reports, question papers and mark schemes when preparing candidates for the examination. Candidates should also be taught examination techniques to help them provide appropriate answers to the questions. The content of the What You Need To Learn section of the unit must be taught before candidates sit the examination. Questions in Section B can ask about any of the topics covered. Too many responses to the questions in this section suggested that insufficient emphasis had been placed on teaching the content of the specification for this unit.

The work taken into the examination **must only** include the candidates' responses to the tasks set. Class notes, hand-outs and worksheets on aspects of the What You Need to Learn section of the unit **must not** be taken in to the examination. Teachers need to set deadlines for completion of the tasks so that they have sufficient time to check (but not mark) the work carefully prior to the examination. Centres are also reminded that **all three** tasks must be submitted to the Examiner with the examination paper.

Most pre-prepared work was word processed and most candidates had clearly labelled tasks 2 and 3. Task 3 requires a word-processed report and no marks are awarded for this task if it is hand-written. However, hand-drawn diagrams for task 2 are acceptable and candidates may benefit from hand-drawing the information flow diagram, or at least hand-labelling the information flows, as marks were lost due to candidates' inability to manipulate text boxes. However, please discourage the use of paper larger than A4 for producing the diagram.

It would be helpful if Centres could clearly distinguish between Task 1, Task 2 and Task 3, and put the tasks in order. Candidates should be encouraged not to tie the treasury tag into a knot or wrap it through the hole several times – this leads to the examiner having to cut the tag to mark the paper! There were instances where the work submitted for the tasks was not fastened

together / named etc. Although most Centres had secured the work with a treasury tag as requested, there were still some who used plastic pockets to hold the pre-released tasks. Please do not do so. The work should be hole-punched in the top left hand corner and secured with a treasury tag. Unfortunately, this session the exam paper did not have a pre-punched hole, although many centres had punched one to attach the tasks.

In addition to checking for material not related to the tasks, centres are reminded of the need to check the work carefully for authenticity before signing the Centre Authentication Form. There were, again, a number of instances of identical information flow diagrams this session. Candidates should also be warned that it is very obvious when they simply copy and paste from a website for task 3. While most candidates included the required list of sources, some still failed to do so.

A number of centres failed to send a Centre Authentication Form but did send individual candidate authentication forms. A Centre Authentication Form **must** be included with the scripts. If no Centre Authentication Form is received, candidates will not receive their results. The candidate authentication forms, however, should **not** be submitted. These should be retained securely in the centre until final results are published.

Care is needed to ensure that candidates are not given too much guidance when carrying out the tasks. Whilst it is acceptable for Teachers to ensure that candidates understand the content of the case study and the requirements of the tasks, they should not give help that relates directly to carrying out each task. Too often, the diagrams created for task 2 and the topics addressed in task 3 were similar for all candidates within a Centre.

Where candidates run out of space when answering a question, they should be encouraged to ask for a supplementary sheet, rather than writing the answer elsewhere on the paper. If they do use a supplementary sheet, they must indicate to the Examiner that they have done so. Such sheets easily get mixed in with the pre-released tasks and may be overlooked.

Comments on Individual Questions

Question No.	
Task 2	This task was not as well answered as the corresponding question in previous sessions with fewer candidates than normal gaining full marks. Although most candidates gained the five marks for the boxes, marks were mainly lost due to leaving out parts of the information, having arrows going in the wrong directions, or having poorly organised diagrams. A lot of marks were lost through labels being too vague. Also, too many flows contained a description of the process. However, most candidates presented a correctly structured information flow diagram. There were very few examples of complete centres submitting incorrect diagrams. Many candidates had the arrows pointing in the wrong direction between the salesperson and the branch manager, perhaps demonstrating an inability to understand the verb obtains as opposed to gives. Also the flow of information between the customer and the salesperson was often misrepresented with the customer giving the appointment card to the salesperson, rather than the other way round. Most candidates were able to correctly identify when two arrows are needed to represent information flowing at different times but some were still confused by this and lost marks for labelling more than one flow on a single arrow. Candidates need to be taught to use nouns, rather than verbs, when identifying the information and method. Whilst 'emails final design and quotation' may be acceptable, 'prints final design and quotation and posts them' is not. If

	candidates get into the habit of writing 'final design and quotation - email', 'final design and quotation – post' and so on, they are less likely to fall into the habit of describing processes. There was some misunderstanding of communication methods. Verbal and written are types of information, not methods of communication. Verbal information can be communicated face-to-face or by telephone, for example, while written information can be passed by hand, by email or by post. Page 25 of the unit specification lists communication methods.
Task 3	Although many candidates were able to reach the middle mark band in this task, few gave well applied benefits and limitations to progress into the top mark band, while others discussed 'products' and 'services' generally with no application to the case study, limiting them to the bottom band. Some of the responses observed relied heavily on describing features of websites (e.g. colour schemes, scrolling marquees, hotspots) rather than the additional facilities that the website could offer. Application to the case study was not always explicit. Many candidates were able to identify some facilities, and usually name benefits, but the majority did not identify limitations to their suggestions other than stating it would be more expensive. Marks were lost because candidates did not provide significant benefits or fuller extended explanations of why the benefits or drawbacks mattered and the effects. A significant number of candidates discussed what they had found on other websites without linking this to the case study. Some candidates talked about kitchens rather than bedrooms because the websites they used for research were kitchen sites. Many candidates gave excellent answers which failed to score in the high category because they were unable to identify problems which e-commerce, on-line booking of appointments and bedroom design packages could cause. The realisation that using computer systems have advantages as well as disadvantages is something many centres need to concentrate on. Most candidates gained some marks for their AO4 evaluation but the most common mark was one, for identifying the method used. In some centres, the majority of candidates limited their marks by not addressing the AO4 point, or simply listing the websites visited. There was also confusion in evaluating the websites for the company, rather than the method used by the candidate to complete the task.
1	This question was generally well answered, although the distinction between job function and job title is not understood by many, for example giving 'salesperson' rather than 'sales'. Some candidates scored zero marks here by identifying the wrong job function or because they did not know the difference between a function and a task. The tasks were mainly described correctly. Those who failed to score full marks generally summarised the tasks too much.
2	This was fairly well answered, with most candidates gaining three or more marks. However, candidates did have a tendency to be too vague with some of their answers or summarised too much and missed the marking point. Few gained full marks because to do so meant that they had to include information from different parts of the case study. Candidates are not reading the case

	study as a whole document - rather they just pick out the paragraph that they believe gives the complete answer to the question.
3	This was very well answered by the majority of candidates, with many gaining full marks. However, some candidates did not attempt to answer it. More candidates wrote about house builders than the general public. Where candidates did lose marks it was because they described who the customer was, rather than how they interacted with the company, or they described a supplier to the company rather than a customer. A few gave a correct type of customer but went on to describe the interaction of the other type.
4	Few candidates gained all 14 marks for this question. If the candidates correctly identified the items of information in a(i) they usually gained marks for a(ii), although a number of candidates confused the two input methods or were too vague. However, only about half of candidates were able to identify the items of information in a(i), which also lost them the marks for a(ii). Frequently, the answer for part c started with the very information that would have gained them marks in part a, showing a lack of understanding of input, process and output. Some candidates were able to identify the required information correctly in part b. However, some who omitted one of the items from a(i) put it in as their answer to part b, while others gave totally irrelevant answers such as customer details or installation date. Of those who gained the mark, more gave installation/labour costs than cost of ordered items. Most candidates were able to gain some marks for part c, although many were not accurate enough and gave answers to show that, although they were extracting information from the correct part of the case study, they did not really understand what they were writing down. As indicated above, the difference between input and process is not understood and many candidates simply copied the word 'calculate' rather than stating what the calculation was. For example, very few recognised that the item totals were added to give the subtotal. Many candidates gained a mark for 'invoice' but then went on to describe how it was produced, rather than what it included. However, some candidates failed to recognise that an invoice was the final output and tended to describe the process of producing an invoice. Some candidates only copied the relevant section of the case study, which was not enough for full marks, without referring to the sample invoice in the appendix. A few confused the invoice with the quotation.
5	Many candidates were able to gain maximum marks on this question, although there was some confusion between the system used for design, the other systems in the showroom and, in some cases, the sales order processing system. The weakest candidates put down the hardware used as an answer for each part. The hardware section was very well answered on the whole, with around half the candidates gaining three or more marks (some gained five or six). However, the omission of the docking station reduced the marks for many candidates. In the software section, most candidates were able to identify the design package, although many did not give a description to gain the second mark.

	The inputs section was also reasonably well answered, with 'dimensions of bedroom' being the most common answer given but few went on to give the detail required for a second mark. Answers in the outputs section were slightly weaker, with some lack of precision in answers, for example '3D-image' without stating what it was an image of. As with the inputs section, candidates rarely went on to give sufficient description to gain the second mark. The process section was the most poorly answered. Few candidates answered in the detail necessary and the 1st mark was often missed. Most indicated that processes related to customer decisions or processing paperwork, rather than software calculations or processing the image.
6	The majority of the candidates misinterpreted question 6(a) meaning they were unable to score marks for 6(b). Candidates tended to focus on changes in manufacturing or processes rather than working practices. Many transcribed the final part of the case study and made no further comments or gave improvements to the systems. Candidates failed to note the focus of the question and automatically stated possible changes to the system rather than working practices. Those who did manage to gain marks in task a did not all go on to gain marks in part b because the impacts given related to the organisation rather than the employee, as required.
7	Although the majority of candidates gained a mark for identifying the Data Protection Act, few went on to gain marks in part b. Most candidates did not seem to understand the Act's implications in terms of how information is used. They failed to describe actions for the most part and just quoted some of the data protection principles without explicitly stating an action the company should take in order to observe each principle.
8	Part a was fairly well answered, with many candidates gaining at least one mark, although some confused training records with HR records and gave items of personal data. Responses to part b were often vague. Candidates did not expand answers well nor make more than one point. Many candidates discussed training, not training records and a number wasted half of the answer space by repeating or paraphrasing the question.
9	This was poorly answered with little understanding of the distinction between research and development. Research was normally interpreted as market research, rather than a technical activity within R&D, and hence gained no marks. Development descriptions were often vague and tended to show little or no understanding of what is involved in the development of a product - the most common correct answer given was related to prototyping. Some candidates did recognise the link between market research and the testing and prototyping of products.
10	In part a, the most common answer given was related to the rate of pay, or the salary. However, candidates often gave answers that did not relate to the calculation for payroll for example employee's name or bank details. Candidates often showed a lack of understanding of system data. Storage and use of that data is an important area for study within this unit. Many candidates appear to be unaware of the types of data that are stored within different company records

and included the hours worked as one of their answers.

The majority of candidates did not understand the distinction between salary and hourly pay in part b(i). Most wanted to multiply the number of hours by rate of pay to gain the monthly salary. In part this will be due to the nature of jobs to which candidates have access at their age but, if they had been taught about payroll systems, they should have been aware of the distinction. Despite this, many were able to pick up marks for subtracting tax, pension and other deductions. A worrying number of candidates wanted to deduct VAT from the salary.

Most candidates probably have experience of being paid and know that they receive a payslip, gaining the mark in part b(ii), but very few had any idea of how it is produced beyond the fact that it is printed, so part b(iii) was very poorly answered. Many repeated the answer given in part b(i) or worse, gave an answer here that would have gained them marks in part b(i)

Part c was well answered with many candidates giving several examples of actual situations which could result in the change of the data. Generally, candidates gained two marks. Often, if only one mark was gained, it was because the candidate had repeated an answer.

Principal Moderator's Report GCE Applied ICT

The introduction to the report for the A2 units should be read in conjunction with the introduction to the AS reports as many, if not all, of the issues are common.

Centres are reminded of the importance of meeting the deadlines for the submission of marks to the Moderator and the Board as well as the requirements to send the sample of coursework requested within the timeframe specified in the correspondence. The majority of Centres this session met the deadlines.

Unit G049 Numerical Modelling Using Spreadsheets

For this unit candidates were required to produce:
- a design specification that analysed a suitable problem and described how they would solve it by numerical modelling;
- evidence of implementing their solution using suitable entry aids and processing facilities;
- a record of how they overcame their problems;
- a specification for testing their spreadsheet, and evidence of the results of these tests;
- technical documentation that explained how their spreadsheet works, and user documentation that explained how it is used;
- an evaluation of the effectiveness of their solution and their personal performance.

A small number of Centres continue to fail to identify that the emphasis of this unit is on numerical modelling rather than data manipulation. However, it is pleasing to note that the proportion of Centres in this category is lower than the previous sessions. The problem that the candidates attempted to solve must provide the opportunity for significant numerical processing. Using a spreadsheet to simply store and present information, e.g. database solutions that involve little or no data processing, are not suitable for this unit.

The design specifications produced by a number of candidates lacked the necessary detail. At the simplest level, these must incorporate consideration of user requirements, data sources, processing to be carried out and output to be generated. More able candidates incorporated ideas for screen layouts, identification of spreadsheet layout, spreadsheet facilities to be utilised and considered how the numerical processing aspects of the solution met the user requirements. Candidates achieving high marks for task a must produce a specification that is detailed enough to enable a competent third party to implement it independently.

The solution implemented by some candidate showed clear evidence of the use of complex spreadsheet facilities, as listed in section 10.2.3 of the unit, as well as clear evidence of a range of spreadsheet functions appropriate to the solution of the problem. Annotation of printouts or a commentary detailing the spreadsheet solution provided clear evidence of the use of the spreadsheet facilities and functions. This in turn provided evidence towards task c, the strategy for implementing the solution. Where no clear evidence could be found, often due to lack of annotation, marks were adjusted downwards as the Moderator could not easily locate the use of the functions within the spreadsheet solution.

For task c, the evidence presented often lacked details of the problems encountered by the candidate whilst developing the spreadsheet solution and how these were surmounted. Testing the spreadsheet solution was carried out poorly by the majority of candidates. There should be clear evidence of planning the testing to be performed. This should address testing functionality with the use of normal, abnormal and boundary data.

The technical and user documentation need to be separate documents as they are for different readers. The technical documentation must be sufficiently detailed to allow somebody to

maintain or amend the spreadsheet. In some cases the documentation provided would not allow this to happen.

Few candidates performed well in mark band 3 in task f. In most cases the evaluation was descriptive rather than critical. Candidates must refer back to the initial requirements of the problem and, in order to access the higher mark bands, consider feedback from users and relate to the design specification.

G050 Interactive Multimedia Products

For this unit candidates were required to produce:
- a review of two commercially produced interactive multimedia products showing how their design influenced the design of the interactive multimedia product that they produced;
- detailed designs, of which one is chosen as the design for the final product;
- a multimedia product to meet the client's requirements;
- a detailed test plan;
- a detailed user guide;
- a review of both the interactive multimedia product that they produced and their personal performance.

Centres need to give careful consideration to the software used to evidence this unit. Section 11.2.4 indicates the types of interaction that could be incorporated into the final product. Not all multimedia software will facilitate the majority of these. A greater proportion of Centres are using appropriate multimedia software to produce a product appropriate to this level, rather than use presentation software.

The design of a website is not appropriate; candidates wishing to design websites should undertake G053 Developing and Creating Websites. The unit specification makes it clear that this should be a standalone product; task e requires evidence of the system requirements and how to install and use the product, none of which are fitting for a website.

In order to access the higher marks in task a, candidates must evaluate the commercial multimedia products, rather than describe them. There must also be a detailed explanation of how the product influenced the design of the product that the candidates produce. A number of candidates evaluated websites rather than multimedia products. This disadvantaged candidates as many of the sites only demonstrated hyperlinks and the candidates did not have the opportunity to consider the user documentation, bearing in mind that they have to create user documentation for their own product in task e.

If a candidate chooses to evaluate a web-based product for one of the products, Centres must ensure that it contains elements outlined in section 11.2.4 of the unit; otherwise the candidate will not be able to incorporate such elements into the design, based on the evaluation of the product. Evaluation of two web-based products is not appropriate as candidates are unlikely to appropriate exposure to sufficient user documentation for multimedia products, disadvantaging candidates.

Task bii required a critical analysis of the designs in order to access higher mark points, not just a description of the designs. Good and bad points of each design need to be identified and a reasoned argument presented to explain why the final design was chosen by the candidate and how it met the needs of the client.

Task ci required evidence of the use of a variety of ICT skills to produce a multimedia solution. The nature of these skills is identified in section 11.2.4 of the unit. Candidates should annotate their evidence to explain how the skills have been used and the how the skills are aiding the development of the multimedia product.

Task cii required the candidate to bring together the various components into a complete solution. This is where the nature of the multimedia software may restrict the nature of the product developed.

The testing of the product for task d was carried out well by more Centres than in previous sessions. The candidates needed to test not just the functionality of the product, but the fact that the product met the requirements of the design specification.

Task e required candidates to incorporate installation instructions as part of the user guide for the product. Candidates are encouraged to incorporate images within their user guide in order to clarify the steps within the user guide. As already indicated, the user guide needs to include details of the system specification for the product and details of how to install the product.

For task f the candidates must critically analyse their solution in order to access the higher mark points. More able candidates provided evidence of obtaining feedback from users that tested the product, as well as providing clear evidence of linking the product to the design specification.

G051 Publishing

For this unit candidates were required to produce:
- notes taken during an initial, and any subsequent, meeting with a client, evidence of negotiating and amending a brief for the production of a camera ready copy (CRC) document;
- evidence of the drafting and production of a CRC of their final document to meet the brief and, in so doing, show that they could create and capture images, as well as import material from other packages, utilise object libraries such as clipart, and select and further develop images to meet the style and content of the final copy, as negotiated with the client;
- a CRC document, of at least ten pages, that combined different types of information presented to the client for approval, together with a letter which correctly described the final production stage and external factors which may affect completion of the final published document;
- an evaluation of both the layout and content of their final copy and their performance.

The evidence for task a, documenting the meeting(s) with the client varied greatly. If the candidates cannot access real clients, then the teacher, or other suitable person, should act as the client. The absence of such a client frequently causes difficulties for the candidate in later tasks.

Evidence for task bii frequently lacked evidence of the design stage processes. To access marks in mark band 2 there must be explicit evidence to include the following:
- sketching different initial document designs;
- following housestyle;
- creating master page layouts;
- presenting page proofs;
- producing artwork sketches;
- setting text orientation;
- creating style sheets.

Annotation of evidence generated enabled candidates to access mark band 2, whereas an accompanying explanation will enable candidates to access mark band 3.

Higher marks in task ci required clear evidence of using more than four text styles, more than two text attributes and editing a piece of imported text. This is best evidenced through careful annotation of the evidence as the evidence should be explicit rather than implicit.

Task d requires analysis of the CRC and how the solution was refined to meet the client's needs. Candidates in mark band 3 will produce a critical analysis of the development of the product. The will be an evaluation, not a description, of the candidate's role in the development of the solution.

G052 Artwork and Imaging

For this unit candidates were required to produce:
- a portfolio of artwork samples produced to demonstrate a range of artwork skills;
- evidence of the development of computer artwork, using a variety of graphics software, following negotiation of a brief from a client, from initial ideas to final product accepted by the client, to include:
  – a range of initial proposals in response to a complex problem;
  – development of a final product, showing editing techniques;
- an evaluation of both the final product, including consideration of the hardware and software used, and their own performance.

Insufficient candidates entered in this moderation series in order make substantial comments.

G053 Developing and Creating Websites

For this unit candidates were required to produce:
- an evaluation of commercial websites that have been downloaded;
- design notes for their website of at least three pages together with detailed plans for publishing your website;
- annotated print outs of their own web pages in WYSIWYG format identifying the features and techniques used in the web page;
- annotated printouts of their own web pages in HTML format identifying edits to script commands to change page layout;
- documentation of website testing;
- an evaluation both of their website and the tools used to produce it and of their own performance.

This optional unit remains the most popular with students.

For task a many candidates failed to explain the reasons for choosing, or not choosing, features in web pages examined, as required to mark band 2. In order to access mark band 3, there must be a critical analysis of the web pages examined. Frequently, the evidence provided was solely a description of the web pages visited, meeting mark band 1.

In task b, candidates were required to identify domain names suitable for the site and, in order to access higher mark points, explain the reason for this name and provide alternative options. Although not mandatory, it was pleasing to see that a number of candidates had actually uploaded the site designed; this aids their understanding of publishing websites. Task b also required structure diagrams, a story board, an index of pages and a task list/action plan. Frequently some of these components were missing from the candidate work; the most common omission was the index of pages in the website.

In task c, candidates incorporated a variety of the features listed in section 14.2.4 of the unit specification.

Evidence of understanding HTML script in task d was implicit rather than explicit in a number of portfolios. For mark band 2 candidates were required to edit script commands. Evidence to support this could include a before and after screen shot of the implications of the changes as well a narrative to describe the changes. Mark band 3 requires evidence of adding script commands to include at least two from graphic, table or hyperlink. A number of candidates

concentrated on embedding scripting language code, such as JavaScript, rather than editing (mark band 2) and adding (mark band 3) HTML script.

In task e a small number of candidates failed to ensure that the website met the design specification; explicit evidence of this is required.

Task f required candidates to produce a critical analysis of their website in order to gain higher marks. An analysis of their own performance was also required. In many cases the evidence was a description of what they had undertaken, rather than a critical analysis.

G056 Program Design, Production and Testing

For this unit candidates were required to produce:
- a program specification to meet the given requirement and describe how the specification meets the program requirements and how user's needs have been considered;
- a program design arising from the specification;
- an annotated modular program to realise the design;
- test documentation including a test plan with valid, invalid and boundary data, expected results, actual results and changes identified as a result of testing;
- a program review and evaluation report including an evaluation of their own performance.

Insufficient candidates entered in this moderation series in order make substantial comments.

G057 Database Design

For this unit candidates were required to produce a relational database to meet a given specification requiring at least three related tables supported by design and analysis notes, technical and user documentation and an evaluation of the database produced.

Their evidence to support this should include:
- design and analysis notes, including normalisation of the data model;
- a user interface, including data input forms and methods of obtaining output;
- a working relational database;
- user and technical documentation;
- testing of the database produced;
- an evaluation of the database;
- an evaluation of their own performance.

In order to access mark points beyond mark band 1, candidates must produce a correct entity relationship diagram and, for mark band 3, define the data model clearly and show that it is correctly normalised to 3rd normal form (3NF). Some candidates failed to provide clear details of the entities, attributes, keys, relationships and internally generated or processed data. It should be noted that the use of 'autonumber' primary keys in all entities is unlikely to be an appropriate solution to the database problem; this was less common than in previous sessions.

The data input forms for task b required evidence of data validation and should have been fully labelled in order to access mark band 2. These should also incorporate pull-down lists and labels. More able candidates demonstrated the use of forms allowing data entry into multiple tables and customised the database to hide the underlying software.

Candidates were required to evidence the manipulation of data in the database and use queries and reports. More able candidates designed reports with evidence of grouping, arithmetic formulae and used data from more than one table, accessing mark band 3.

The database documentation must enable somebody else to maintain the database. The use of software generated technical documentation does not demonstrate an understanding by the

candidate of the evidence generated; such reports need to be annotated if they are used. Design documentation created by the candidate often showed a greater understanding of the design of the database for task d.

Testing of the database must included evidence of testing both functionality and rejection of data outside the acceptable range. Where input masks have been used as part of the solution, these must also be tested.

The reflection of how well the database met the specification needed to be a critical evaluation, rather than a description, if the higher mark points are to be accessed. Likewise, the analysis of the candidate's performance needed to be more than descriptive in order to access higher mark bands.

G058 Developing and Maintaining ICT Systems for Users

For this unit candidates were required to produce records of specifying, upgrading and repairing ICT systems, to include:
- records of interviews with two different users to identify their key requirements;
- detailed specifications for an ICT system for each user along with explanations of the reasons for selecting particular components in non-technical language;
- records of carrying out an upgrade involving selecting and adding a new component to a system;
- records of carrying out an upgrade by replacing a component in a system;
- records of troubleshooting procedures carried out to identify faulty components;
- an evaluation of the information sources used to find information on components;
- an evaluation of the specifications and approaches taken to specifying, upgrading and repairing systems.

Insufficient candidates entered in this moderation series in order make substantial comments.

G059 ICT Solutions for People with Individual Needs

For this unit candidates were required to produce evidence that:
- showed an understanding of legislation and the rights of each of the individuals in connection with the ICT solutions suggested;
- showed a clear understanding of the disabilities or limiting factors, and resultant needs, identifying and showing suitable items of equipment and software as appropriate;
- for at least one case study, provided a specification for a complete system, to include configuration and customisation of software and equipment as appropriate and demonstrate that they could customise the available operating system and applications;
- evaluated the viability and effectiveness of your proposed solutions , indicating how the solutions would enhance the quality of life for each individual;
- presented their reports or presentations in a way that is suitable for the needs of the individuals outlined in each case study or for a carer if the case study is that of a young child or a person with very limited understanding.

Insufficient candidates entered in this moderation series in order make substantial comments.

G054: Software Development

General Comments
It was pleasing to note that many centres had actioned the issues raised in the reports on previous examinations. Once again, there was a wide range of marks on this paper with many candidates accessing the marks available for the pre-release tasks.

Centres are reminded that all answers given to questions in Section A must be applied to the case study; in this case Rods Recycling, and are not theoretical. However, the performance of the candidates on section B of the paper continues to be disappointing

The majority of candidates had attempted all of the questions producing good quality pre-release material to help them in Section A of the examination paper. Centres are reminded that the work for Task 1 must only cover the topics listed in the instructions to candidates. A minority of candidates had not fully prepared the pre-release tasks failing to submit at least 1 of the tasks. This strategy disadvantaged those candidates who are unable to access all marks available for the tasks.

There were very isolated instances of candidates not producing work for Task 1 of the pre-release material. There were also some instances where the pre-release tasks for the June 2009 session had been completed. This disadvantaged candidates who were unable to access the marks available for Tasks 2, 3 and 4. Centres are reminded that, although the case study and Task 1 are the same for both examination sessions, Tasks 2, 3 and 4 change from January to June. It is, therefore, vital that the correct candidate instructions are used.

It would be helpful to examiners if Centres could clearly distinguish between the tasks, and put the tasks in order. Candidates should be encouraged not to tie the treasury tag into a knot or wrap it through the hole several times – this leads to the examiner having to cut the tag to mark the paper! There were instances where the work submitted for the tasks was not fastened together / named etc. This may cause problems during transit.

Some questions were poorly answered due to the students not reading / understanding the question. The need to read the question carefully and answer accordingly cannot be over-emphasised. Centres should give candidates some guidance on the key words that are used in a paper i.e. describe, explain and discuss, and the requirements of these key words.

Care is also needed to ensure that candidates are not given too much guidance when carrying out the tasks. Whilst it is acceptable for Teachers to ensure that candidates understand the content of the case study and the requirements of the tasks, they should not be given help that relates directly to carrying out each task. Too often, the work produced for all tasks was very similar for all candidates within a Centre.

Centres are reminded that Section B of the paper can focus on any part of the unit specification. It was obvious that some centres had concentrated on the requirements of the pre-release tasks and the case study and had not fully covered the requirements of the specification. This strategy disadvantages candidates when they are attempting to answer Section B of the paper.

Comments on Individual Questions

Task 2	*The task required candidates to produce a Rich Picture diagram (RPD) with the start point being given as when a customer contacted Rods Recycling and ends when the recycling payment is sent to the customer. Most candidates managed to start and end the RPD at the appropriate points.*
	The standard of the RPD's submitted in response to this task was, generally, pleasing. It was obvious that many candidates had thought about the pictures they should use to ensure that the RPD was easy to read and understand. Most candidates used pictures taken from the Internet or provided in graphics packages.
	One of the main failings on this task was incorrect or vague labelling of the flows. For example, the generation of the booking reference number and the creation of the invoice occur at different times during the process in Rods Recycling. Many candidates defined these processes as occurring at the same time.
	A few candidates failed to clearly identify the customer and the yard.
	Most of the RPD's produced used pictures consistently. For example, the same picture was used throughout the RPD to represent the customer.
	Some of the RPD's produced by candidates were simply a set of isolated pictures and flows with no representation as to how the complete system being represented by the RPD linked together.
	Too many candidates failed to achieve any marks for AO4, as they had made no attempt to evaluate the methods used to produce the RPD.
Task 3	This task required candidates to produce an ERD for the proposed system for Rods Recycling. Most candidates were able to access the marks available for the consistent representation of the entities. However, many candidates failed to access al marks available for the representation of the relationships between the entities with many instances of M:M relationships being present.
Task 4	Candidates were required to design an input screen for the administrative staff to input phone bookings. The emphasis of this task was on the design of the form and not the implementation of the design.
	There were a large number of candidates who had produced the evidence for this task using some form of software package. This was accepted unless the screen showed any form of population of fields. If this was present then no marks were awarded for this task.

Section A	
1	Many candidates answered this question well. There were, however, still instances of generalised purposes such as 'to improve/modernise the business'. Some candidates appeared to be confused about the difference between the purpose and the functions of the new system.
2	Part (a) of this question focussed on the functional requirements of the new system that relate to the customers of Rods Recycling. Many candidates failed to link their answers to the customers and so failed to access the marks available for this part of the question. The focus of part (b) of this question was the non-functional requirements relating to software. A worrying number of candidates provided answers to this question that related to hardware. This showed that some candidates failed to read the question correctly. There were isolated instances of candidates providing a definition of non-functional requirements instead of relating their answer to software. Many candidates failed to define that the applications software should be standardised and that the *vendor* of the operating software should remain the same.
3	The focus of part (a) of this question was on the defined time constraint. Most candidates were able to provide answers relating to the time scale of 25 weeks being defined however, many failed to explain that the system was to be implemented within this timescale as an event was planned to promote recycling. Part (b) of this question then required candidates to identify and describe a further constraint that had been defined by Rods Recycling. Despite the question stating that hardware should be excluded in the answer given a high proportion of candidates provided answers relating to hardware.
4	Many candidates were able to describe the problems caused by the current system at Rods Recycling. However, the majority of the answers given by the candidates were not linked to the customers of Rods Recycling. Candidates who failed to link their answers to the customers failed to score marks.
5	Candidates were required to describe the defined requirements that related to the system being able to adapt to future changes within Rods Recycling operations. Most candidates were able to identify that a website, with a secure area, would need to be developed to enable customers to book on-line. They were also able to describe the other changes that had been defined by Rods Recycling such as the expansion of the business to supply, for example, water butts and wormeries.
6	To achieve the marks allocated to this question candidates had to identify the device, part (a) or the software, part (b), before they gained any marks for their justification. The focus of part (a) of this question was on the device required to produce the delivery notes. Many candidates were able to identify the most suitable device. The justification of the choice of device was, in the most cases, weak with candidates failing to access the marks allocated for the justification.

	Part (b) of this question required candidates to identify the most suitable software to be used to calculate the recycling bonus. A worrying number of candidates provided an answer of database or provided specific brand names such as Excel. Both these strategies failed to access the marks available for this part of the question.
7	To achieve the marks allocated to this question candidates had to identify the investigation method they would use before they gained any marks for their justification.
	The question asked candidates to identify, providing reasons for their choice, an investigation method that could be used in the head office of Rods Recycling. Most candidates were able to identify a suitable investigation method providing good reasons for their choice.
8	This question assessed the candidates' quality of written communication.
	Candidates were required to explain how logical *and* physical security could assist in increasing the level of security at Rods Recycling. The question asked candidates to relate their answers to Rods Recycling. Candidates who did this gave some excellent and insightful answers.
	There seemed to be a good general understanding about security. Most understood that they had to do more than list the possible security measures and there was some attempt to link their answers to the case study. Few however provided an explanation, covering physical and logical security that clearly linked to Rods Recycling, in enough depth to score the highest mark band.
	Good answers, relating to logical security, often talked about, for example, a range of access levels, giving examples of which groups of people within Rods Recycling would have access to which files. The better answers would then go on to explain why those access rights were needed by each group and to differentiate between different types of access such as Read/Write for some files and Read Only for others. Answers relating to physical security often included putting blinds at the windows in the yard office and locking computer towers in cages to prevent them being stolen.
	A minority of candidates failed to use examples from Rods Recycling as to how an increased level of security could be achieved. This strategy limited candidates to the lowest mark band.
9	To achieve the marks allocated to this question candidates had to identify the implementation method they would use before they gained any marks for their justification. The majority of candidates could identify a suitable implementation method, providing a reasonable justification as to their choice.
	Some candidates provided definitions of the implementation method they had identified but failed to explain why this should be used at Rods Recycling.
	It was, however, evident from some of the justifications provided by the candidates that there appears to be a general confusion as to the different implementation methods that are available.

Section B	As stated previously in this report it was obvious that some centres had not fully covered the requirements of the unit specification and had simply concentrated on the requirements of the pre-release tasks and the case study. This strategy led to candidates being unable to gain marks on Section B of the paper.
10	Very few candidates scored marks on this question. A list of the components of an output specification is given in the unit specification.
11	Part (a) of this question required candidates to explain the term validation. There appeared to be many candidates who were either unsure as to what validation is or who confused it with verification. Validation does not ensure that the correct data is input into the system. Part (b) of this question required candidates to identify two methods of validation. This part of the question was, generally, poorly answered. This tended to stem from the general lack of knowledge about the process of validation demonstrated in part (a) of the question.
12	This question focussed on a fundamental development tool, decision tables, which can be used within the area of software development and the systems life cycle. Most candidates were able to gain some of the marks allocated for part (i) of this question. A common error was to identify the journey time incorrectly - the journey time was 6 or more hours. Some candidates were unable to identify the 4 possible rules required in the decision table. Most candidates were able to identify the correct lorry as required in parts (ii & iii) of the question.
13	This question focussed on the use of the on-site/on-the-job training methods for the end-users of the system. Many candidates were able to provide reasonable descriptions of these training methods so accessing a maximum of 2 marks. However, most candidates were unable to provide an evaluation (advantages and disadvantages) of the use of these types of training staff in a large organisation.

G055: Networking solutions

General Comments

Candidates were generally well prepared. Very few were missing pre-release material this session. Candidates' notes for Task 1, however, were not sufficiently applied to the case study. As a result, candidates were often unable to relate the questions to the case study, answers given were general and, as a result, failed to access the higher marks. Candidates need to focus their preparation on the application of their knowledge to the case study.

Tasks – general

Tasks 2 and 3 were clearly identified, it was obvious where each started and ended. Candidates had used the diagram provided for task 2 and produced a report for task 3 that did not exceed 250 words and included, in most cases, a word count. Marks for the tasks were above the average for the mark for the whole paper.

Task 2

This task was answered well. Most candidates gained all six marks for the diagram. Those who lost marks on this part of the task tended not to have connected anything together and were vague in identifying servers.

Candidates gained significant marks in the section where they identified the components they had used. A number of candidates did, however, produce a fairly standard list of components, a number of which were not included in their diagram and were not explained in relation to the case study.

A significant number of candidates did not include an evaluation. Where candidates did include an evaluation, a few evaluated their network design rather than the methods used to carry out the task, these candidates were awarded no marks for this section. Where an evaluation of the methods was present, candidates often described what they had done without attempting to assess any strength or weakness.

Task 3

Candidates were aware of the difference between client-server and peer-to-peer networks. In the majority of cases, however, there was no attempt to relate knowledge of client-server networks to the needs of SIC as described in the case study. This resulted in most candidates accessing only those marks in the lower mark band.

Question paper – general

Candidates tended, on average, to score better in Section A than in Section B.

Section A

Q1   This question was poorly answered. Candidates were largely unsure about what an intranet is. Many described networks services such as file and resource sharing. Those who gained marks identified the intranet as an information sharing system but rarely expanded upon this.

Q2   Some candidates described advantages or disadvantages instead of features. They were able to identify there were no physical connections (cables) a wireless hub was used more often than any other feature.

Q3   This question was poorly answered.   Many candidates described advantages of broadband rather than functions of a broadband modem. Candidates who gained marks described the modem converting signals between computer and communications link.

Q4a   A number of candidates described hardware required for connecting to the internet.

Q4b   There was a general lack of understanding of what a VLAN is and why it is used.

Q5   This question was answered well.

Q5a   Most candidates were able to draw a correct diagram, most added at least one label. Those candidates who did not gain all three marks generally did not label the direction of flow. A small number of candidates showed a server as the central connection device and lost marks as a result.

Q5b   Many candidates were able to identify a central device, a cable or a workstation. This question was generally answered well. Those who lost marks were not specific in the parts of the network that would be affected.

Q5c   A large number of candidates made a statement about the network not being affected by one node breaking or being easy to expand. This gained no marks if they had not identified the feature (ie each node is isolated and separately connected).

Q6   This question was poorly answered.

Q6a   Many candidates were not able to provide a definition of e-commerce.

Q6b   Where a standard definition was given for part a, candidates often described general uses of the internet such as web based advertising, searching for products, etc. Of those who identified a relevant service, such as online banking, there was often a lack of application to the case study.

Q6c   Most candidates were able to identify an item of hardware needed for communication over the internet.

Q7   This question was poorly answered.

Q7a   While most candidates were aware that FTP software is used to transfer files, many described it being used to transfer files between server and client.

Q7b   While most candidates were able to describe the purpose of web page editing software (to create web pages) they were often unable to identify the functions in terms of what the software does.

Q7c   Candidates gained more marks on this part of the question than on a or b. Many were able to identify that the firewall prevented unauthorised access. A small number were able to expand on this.

Q8   This question was well answered. A variety of pieces of information were given.

Q9   A number of candidates described risks to security of the network either instead of or alongside safety risks. Lower scoring candidates described minimisation of risks without identifying the risk itself or the causal factors. Candidates who accessed the higher marks had generally organised their answers so that a risk was identified, its cause described and the minimisation method for it explained.

Section B

Q10   Part (i) was answered well. Some candidates did, however, lose marks for part (ii) because their justification only included one factor affecting the choice and this was only briefly explained.

Q11   This question was very poorly answered. Few candidates were able to identify the protocol in terms of requesting web pages or interpreting them. A significant number of candidates described the function of browser software, thereby failing to illustrate an understanding of what a protocol is.

Q12   This question again was very poorly answered. The majority of candidates showed no understanding of the term, often mistaking it for moderation. Of those candidates who did understand the term a number lost the final mark as they didn't give an example of where modulation is used.

Q13   This question was very poorly answered. Candidates displayed little or no knowledge of the term 'subnet'.

Q13a The most popular answer to this question was a description of an IP address. Candidates gained no marks for this.

Q13b Where candidates had some idea of what a subnet mask is they were able to describe a mask containing 255 in the first two octets at least.

Q14   This question was about communication logs.   A significant number of candidates described the purpose and content of a problem log. Where candidates had noted the focus of the question they were able to access at least half marks.

G048: Working to a brief

General Comments:
Candidate's responses to the set briefs were generally as expected. In a few instances, candidates either completed one of last year's briefs or reinterpreted the current briefs to such an extent that they were deemed to have not followed the brief. Where candidates have misinterpreted the brief, candidates were not awarded marks for Task A or Task G, as both of these tasks are considered to be the most brief specific.

As with previous years, the quality of administration of paperwork by Centres has improved during this session. Candidate front sheets were generally completed correctly, with clear indication of the marks for each subsection shown.
Centres' assessment was found to be more accurate than in previous years, although some Centres still had difficulty in assessing accurately, which did result in some large adjustments to the marks that had been awarded. These issues are discussed further below.

Comments on Individual Assessment Objectives:

(a)   For this task, candidates are expected to review current working practice within their chosen area of focus. This review must allow the candidate to identify issues of which account needs be taken when the candidate sets up their own system. This may be problems which need avoiding, or examples of excellent practice that could be used.

In some cases, the reviews of current working practice were in great detail and allowed candidates to clearly state the areas for consideration. However, in others, candidates produced basic notes on what happens currently, or, in extreme cases, a statement that "nothing happens at present", followed by maybe one or two issues that need noting. Such work is best given a mark from Mark Band 1 or the bottom of Mark Band 2. In some cases, such work was marked correctly. However, in others, Centres incorrectly interpreted this as being sufficient for MB3.

(b) (i)   Whilst some Centres clearly understand how to mark this aspect of this task, many others are still over awarding. For candidates to be awarded anything other than a mark from MB1, there must be evidence that the candidate has used formal planning techniques in order to plan their solution. Such techniques are generally limited to Gantt and Pert charts and Critical Path Analysis. These techniques are considered formal, as they include clear evidence of the inclusion of timings. Other techniques that model tasks against time are also acceptable.

To be considered for MB3, candidates should use a minimum of two formal planning techniques.

(ii)   As has been stated in previous reports, marks for this task are differentiated by detail. For MB3, candidates need to present a plan which works with detailed tasks, rather than allocating huge periods of time to one major task.

The usual error here was for candidates to work with major tasks – such as "produce web site" and then to allocate a large period of time to the task. Candidates need to show the sub tasks which make up this major task and allocate quite small chunks of time accordingly. Comments of such a nature would restrict candidates to a mark from MB2.
Some Centres have now adopted the practice of creating an over arching plan to cover the life time of the project, with sub plans to cover the specific tasks. Typically, Centres are using meetings with clients as watershed events, as these

often allow for reviews and redevelopments of the task. By following this process, Centres are allowing candidates the opportunity to create a general plan to cover the whole time allocation for the project, and then develop further, more in depth, plans which, by definition include more detail.

This should be seen as an example of good practice.

(c) (i) Candidates need to show that they have developed their ICT skills. This may be shown in the diary, with an explicit column or entry aimed at this one issue, or by a self-analysis task completed before and after the project. This may be considered the first part of the diary task.

In many cases, there was a clear link between the structure of the diary and the quality of the candidates' responses. Where candidates had adopted a formal, planned structure, it was clear that this structure had allowed candidates to address all areas.

In order to achieve MB3, candidates need to show initiative in their development. This could be that candidates show that they have used other sources of information and learning which they have identified, or that they have used resources which they themselves identified as being of use. However, this mark band does allow for some variety in the degree to which initiative has been shown. Where a candidate has shown minimal initiative, this should be given a mark from the bottom end of the band, whilst extensive use of initiative in developing ICT skills should be awarded a mark from the top end of the band.

It is also worth stressing that this task specifically deals with how candidates have developed and extended their ICT skills. Many Centres have awarded initiative in working on other aspects of the project – such as finding names to add to a spreadsheet or finding names for a document, for example. Whilst this may be considered to be showing initiative, this is not evidence of showing initiative when developing ICT skills, and many Centres had their marks reduced because of this misinterpretation.

Similarly, this task is one where candidates need to show that they have both developed and extended their skills, before they may be considered for MB3. It is not acceptable for Centres merely to concentrate on the use of initiative and ignore the need for development and extension of skills.

(ii) There were some very good examples of candidates using a good range of skills during the life of the project and these were usually awarded accordingly. However, the majority of candidates failed to evidence this task well. For candidates to be awarded marks in MB3, there must be clear evidence of the use of a range of skills, with a clear indication that the candidate is fully aware that their work affects both other team members or others they are working with and the end user.
In many cases, Centres awarded marks for this task which did not reflect the quality of work submitted.

(iii) Marking of this task has improved year on year, with many Centres now looking for clear evidence that the candidates are considering long term issues. However within MB2, there is still a wide spectrum of marks available and Centres need to show a degree more subtlety when awarding within such wide mark bands. The major discriminator within MB2 is the extent to which the candidate has dealt with complex tasks. Whilst the extent to which such tasks may occur may differ depending on the task completed, it is still possible to identify the possibility for complexity within each

task and centres are encouraged to look for evidence of this within their candidates' work.   It is worth noting that there is often a clear implication that candidates have dealt with complex issues during the lifetime of their work, but this has not been made explicit in their work

(d)   As with previous sessions, there was still a tendency for Centres to award production of the main task as production of supporting materials. Supporting materials support the task and are not the subject of the task.

Similarly, many candidates have been awarded marks above MB1, despite producing no evidence that they have developed or extended their ICT skills. This development may be evidenced via the diary or a separate report.

(e),(f),(g)   For the purpose of this report, the final three evaluative reports are best considered as a group, as they involve similar skills. However, candidates are strongly advised to deal with these three tasks separately.

Reports E and F deal with planning and implementation respectively. Despite the clear difference between these two focus areas, candidates are still straying from one theme into another. In many cases, this results in reports which do not fit the task. Candidates must concentrate on each theme separately if they are to make progress in these areas.

Similarly, Centres must be looking for correctly themed critical analysis if they are to award anything above MB1. All too often, moderation highlighted Centres that had awarded marks from MB2 and above for relatively weak discussions of elements of the planning and implementation, rather than a full analysis of the strengths and weaknesses of the work completed. For MB3 to be awarded for Tasks E or F, candidates must identify a wide range of issues and suggest clear ways that such issues would be avoided in future.

Task G is slightly different, in that candidates must review their completed product against success criteria. In the best cases, these criteria were negotiated with the client (often the teacher acting as client). These criteria then gave the candidates something concrete against which to assess their work. However, in many other cases, candidates simply discussed what they liked about their work. For MB3 to be considered, candidates are expected to involve the client in the evaluation of the work. This involvement is expected to be somewhat more than peripheral, and should play quite a central role in deciding whether the project has been a success. To this extent, the inclusion of simple user feedback, especially when it appears to have been an afterthought, is no guarantee that the candidate should be awarded a mark from MB3. However, where the candidate has made the feedback from the client the pivotal point of this report, such a report would be considered appropriate for MB3.

Grade Thresholds

GCE Applied ICT (H115/H315/H515/H715)

January 2009 Examination Series

Coursework Unit Threshold Marks

Unit		Maximum Mark	A	B	C	D	E	U
G040	Raw	50	46	41	36	31	26	0
	UMS	100	80	70	60	50	40	0
G042	Raw	50	46	41	36	31	26	0
	UMS	100	80	70	60	50	40	0
G043	Raw	50	45	40	35	30	26	0
	UMS	100	80	70	60	50	40	0
G044	Raw	50	44	39	34	30	26	0
	UMS	100	80	70	60	50	40	0
G045	Raw	50	44	39	34	30	26	0
	UMS	100	80	70	60	50	40	0
G046	Raw	50	44	39	34	30	26	0
	UMS	100	80	70	60	50	40	0
G047	Raw	50	46	41	36	31	26	0
	UMS	100	80	70	60	50	40	0
G048	Raw	100	84	74	64	54	45	0
	UMS	100	80	70	60	50	40	0
G049	Raw	50	46	40	35	30	25	0
	UMS	100	80	70	60	50	40	0
G050	Raw	50	46	40	35	30	25	0
	UMS	100	80	70	60	50	40	0
G051	Raw	50	46	40	35	30	25	0
	UMS	100	80	70	60	50	40	0
G052	Raw	50	46	40	35	30	25	0
	UMS	100	80	70	60	50	40	0
G053	Raw	50	46	40	35	30	25	0
	UMS	100	80	70	60	50	40	0
G056	Raw	50	46	40	35	30	25	0
	UMS	100	80	70	60	50	40	0
G057	Raw	50	46	40	35	30	25	0
	UMS	100	80	70	60	50	40	0
G058	Raw	50	46	40	35	30	25	0
	UMS	100	80	70	60	50	40	0
G059	Raw	50	46	40	35	30	25	0
	UMS	100	80	70	60	50	40	0

Examined Unit Threshold Marks

Unit		Maximum Mark	A	B	C	D	E	U
G041	Raw	100	72	64	57	50	43	0
	UMS	100	80	70	60	50	40	0
G054	Raw	100	71	65	59	53	47	0
	UMS	100	80	70	60	50	40	0
G055	Raw	100	69	61	53	46	39	0
	UMS	100	80	70	60	50	40	0

Specification Aggregation Results

Uniform marks correspond to overall grades as follows.
Advanced Subsidiary GCE (H115):

Overall Grade	A	B	C	D	E
UMS (max 300)	240	210	180	150	120

Advanced Subsidiary GCE (Double Award) (H315):

Overall Grade	AA	AB	BB	BC	CC	CD	DD	DE	EE
UMS (max 600)	480	450	420	390	360	330	300	270	240

Advanced GCE (H515):

Overall Grade	A	B	C	D	E
UMS (max 300)	480	420	360	300	240

Advanced GCE (Double Award) (H715):

Overall Grade	AA	AB	BB	BC	CC	CD	DD	DE	EE
UMS (max 600)	960	900	840	780	720	660	600	540	480

Cumulative Percentage in Grade

Advanced Subsidiary GCE (H115):

A	B	C	D	E	U
2.7	14.5	38.4	69.3	92.7	100
There were 594 candidates aggregating in January 2009.					

Advanced Subsidiary GCE (Double Award) (H315):

AA	AB	BB	BC	CC	CD	DD	DE	EE	U
0	0	4.8	19.0	38.1	66.7	81	90.5	95.2	100
There were 22 candidates aggregating in January 2009.									

Advanced GCE (H515):

A	B	C	D	E	U
18.2	36.4	59.1	68.2	100	100
There were 26 candidates aggregating in January 2009.					

Advanced GCE (Double Award) (H715):

AA	AB	BB	BC	CC	CD	DD	DE	EE	U
50	50	50	100	100	100	100	100	100	100
There were 2 candidates aggregating in January 2009.									

For a description of how UMS marks are calculated see:
http://www.ocr.org.uk/learners/ums_results.html

Statistics are correct at the time of publication.

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