GCE

Applied ICT

Advanced GCE **AS H515/H715**

Advanced Subsidiary GCE **AS H115/H315**

OCR Report to Centres

January 2012

1531533614 **H115/H315/R/12J**

Oxford Cambridge and RSA Examinations

This report on the examination provides information on the performance of candidates which it is hoped will be useful to teachers in their preparation of candidates for future examinations. It is intended to be constructive and informative and to promote better understanding of the specification content, of the operation of the scheme of assessment and of the application of assessment criteria.

Reports should be read in conjunction with the published question papers and mark schemes for the examination.

OCR will not enter into any discussion or correspondence in connection with this report.

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OCR REPORT TO CENTRES

Overview

It was pleasing to see that the improvements noted in the June series have continued into this series, including in the work presented for G048 and most of the coursework units and in teachers' understanding of the marking criteria.

While candidates continue to find it difficult to access the highest marks on all three of the written papers, there was evidence of a better understanding of some of the underlying concepts. However, responses in section B of most papers continue to limit the marks that can be awarded. Centres are reminded of the need to teach the concepts covered in the Unit Content section of the units, as well as preparing candidates to complete the pre-release tasks.

Generally the quantity and organisation of pre-release work was appropriate. Please ensure that each task is clearly labelled and that the work is submitted in task order. If tasks are not clearly identified, it is difficult for examiners to locate these tasks in order to mark them.

In some cases, task 1 notes were not submitted with the marked tasks and examination paper by any of the candidates in a centre. If task 1 is completed and made available in the examination, it must be submitted to the examiner with the examination paper. Candidates who do not complete and have access to task 1 notes may find themselves at a disadvantage when answering questions in section A of the examination papers. When completing task 1, candidates need to structure their notes to make them easily accessible in the examination. On some occasions it is apparent that, whilst candidates have made extensive notes, these have not been referred to when answering questions.

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. 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.

Most work submitted for moderation was of an appropriate standard. There was, however, some work that lacked the depth and breadth to be appropriate for an A level qualification. In particular, candidates need to be taught the analytical skills needed for A2 units.

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 sample on Moderation Manager, so both the candidate name and correct candidate number should be included. 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 (or equivalent) match.

The tendency for candidates to submit excessive amounts of material for moderation was evident again in this series. This can be counter-productive, especially when the work is not page numbered with the evidence referenced on the unit recording sheet. In such instances, moderators may well be unable to locate evidence in order to confirm the marks. Candidates should be encouraged to be selective in what they submit and only include what is required by the tasks to demonstrate their coverage of the mark bands.

Moderation Report GCE Applied ICT (AS Units)

General Comments

The accuracy of assessment by centres was generally higher than in previous series. Where candidates' work was just within a mark band, most centres were correctly awarding the lowest mark in the mark band; the highest mark in mark band 3 being reserved for work that was the best candidates could expect to achieve at this level. Assessment of re-submitted work tended to be more lenient. Some consideration needs to be given to the benefits of re-working and re-submitting unit G040, in particular, as it becomes difficult for candidates to demonstrate the consistency required for higher marks.

The entries for the double award units (G043 – G047) were limited to a very small number of centres. As such, it is not possible to make valid generic comments. Centres are advised to look at the reports from previous series for guidance on these units.

Administration by centres has also improved this session. Most mark sheets and work were received on time. There were fewer clerical errors – some teams reported none at all – and a centre authentication form (CCS160) for each unit was nearly always included either with the mark sheet or with the work.

There were still a few centres this series that used the wrong component code. Component code 01 should only be used where the centre plans to uploaded the sampled work onto the OCR Repository; the code for postal submission is 02. Please ensure that the correct component code is used for all future sessions.

When submitting work via the Repository, candidates should be encouraged to save their work in as few files as possible and to use file names that reflect the file content. Guidance on this issue is given in the Repository Checklist on the GCE Applied ICT page of the OCR website. It is particularly important that the file containing the unit recording sheet is clearly named, so that the moderator does not have to open a number of files to find it. It is often beneficial to submit work as PDF files as it avoids issues with software versions.

Where centres operate as a consortium it is vital that OCR are informed of this arrangement so that all the centres involved are assigned to the same moderator and the consortium as a whole can be moderated as one centre. It is, therefore, vital that internal moderation takes place between all teachers involved so that invalid 'order of merit' issues are avoided.

Whilst it is acceptable to provide guidance that breaks down the assessment criteria into more candidate-friendly language, care is needed that candidates are not provided with instructions, templates or writing frames that provide more detailed guidance than this. Where the quality of candidates' written communication is being assessed, for example task a in unit G040, the provision of a template would prevent candidates achieving the highest mark band, which requires a well-structured report, as the structure will have been provided for them. Centres should also take into account section 2 of the JCQ 'Instructions for conducting coursework' when they are providing interim feedback to candidates.

Comments on Individual Units

G040

Most of the work seen was appropriate for this level and realistically assessed, although there was some lenient assessment. Candidates need to ensure that they provide appropriate detail in planning, annotations and descriptions, and appropriate depth in explanations and evaluations.

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. Draft copies of 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

This requires candidates to write a formal report which compares two documents from three organisations. It is vital that candidates choose the same two types of document from each organisation and that a comparison between the three similar documents is actually made. Too many candidates described and evaluated each document separately and then provided a very brief comparison at the end. By doing so they often 'ran out of steam', with descriptions of the later documents lacking the detail provided for the first one or two. Candidates should consider discussing all three documents together so that they can identify the similarities and differences as they complete the report. As well as improving comparisons, this would reduce the repetitive nature of the task and overcome the problem of a document being too good to need improvement, providing others were not.

House style should be considered in relation to the two documents from the same organisation, so that similarities of colour, fonts and use of logos can be discussed. There was a tendency for candidates to discuss house style in relation to a single document, where what they were really discussing was consistency. Although more candidates were able to discuss writing style correctly, they often failed to identify the good and bad points of the writing style used in relation to the purpose of each document.

For mark band 3 candidates need to ensure the reports produced critically analyse the documents and that presentation style, writing style and house style are compared. Critical analysis requires candidates to explain why particular features are good or bad. The explanation should be based on accepted standards wherever possible, rather than just the candidates' own opinions. It is also essential that improvements suggested are relevant, fully justified and related back to the purpose of the document.

Task b

This requires candidates to plan, draft, create and evaluate six original communications. One of the six communications should describe different methods of communication and the technologies which can be used to support them. This must be planned, drafted and evaluated along with the other five. Most candidates did this but there were some that did not. Part of the banner requirement is that the communications produced should be communicated by different methods. Most candidates are producing more than one electronic communication, such as webpages, slide presentations and online forms. Centres may also like to consider interactive PDF forms that can include calculations and be validated.

To achieve beyond mark band 1 of task b(i), candidates need to show evidence of planning for all six communications, with some planning being detailed. They also need to have annotated draft copies to show development. Many candidates provided excellent planning and drafting of some of their communications but their work lacked the consistency required for the mark awarded. Detailed planning should include plans for layout (including component positioning and possibly measurements), details of the font styles, colour schemes and content (text, graphics and other media) to be used, along with a possible source of this content. Draft copies to be annotated should be electronic copies of the complete communication to match the designs. Some candidates misunderstood this requirement and produced and annotated several hand-drawn 'drafts' or provided partially completed stages as drafts. Neither is acceptable evidence. Candidates should annotate each draft to indicate changes that they will make to improve it prior to implementing these changes to produce a further draft or the final copy. A hand-drawn exact copy of the final communication is not detailed planning and suggests that this was produced retrospectively. For mark band 3 communications need to be fully planned and drafted. Planning too frequently lacked the required detail so that somebody else could make the communication as planned and annotation of draft documents was poor. Centres are also reminded that drafting is a natural process and should certainly not be manufactured – including versions of communications with words 'accidentally' spelt incorrectly although in previous versions they are not, is not a draft. It was pleasing to see that the bibliographies produced by candidates in more cases than usual included the required detail for mark bands 2 and 3, however some candidates are not including all sources used throughout the work, as required by mark band 2 – a better teaching strategy is to include six bibliographies, one for each communication, so no sources are omitted – rather than one large one at the end. Mark band 3 requires the precise URL of the web page, the date it was accessed, the date it was last updated and the author (if known).

While some very professional communications were seen, others lacked the quality and consistency required for mark band 3 of task b(ii). Spelling and grammar errors often remained in the final communications which detracted from their quality. Communications need to be of a consistently high standard with borders and shading used appropriately. Presentations should have simple bullet points and not paragraphs of text in a small font which, on a screen, would be very difficult to read from the back of a room. Documents printed in black and white should have font and background colours chosen carefully to aid viewing. There needs to be some evidence of how information from existing sources has been adapted. This was provided in some portfolios but missing from others. A few selected screen shots showing the original material and the outcome after manipulation is sufficient – for example a picture may have been cropped, re-coloured and merged with other images to create a logo. Prints of the original images and the final logo should provide adequate evidence in this case. Mark band 2 of this task requires that communications are mailable. A letter without such standard content as a date and the recipient's address does not fall into this category.

There was more evidence that a range of automated features has been used, including mail merge, auto contents pages/indices and styles, which candidates had created themselves. To award high marks in this task, in addition to a solid range of graphics and other media, appropriate automation should be used at every opportunity. Overt evidence should be included to prove automation has been used. It should also be noted that some candidates are unsure of what a template is. Templates are the base of a standard communication which can then be populated with content to ensure a consistent style is achieved. It is not, therefore, appropriate for candidates to simply save a final communication with content in it and then claim it is a template, nor is it appropriate to include mail merge fields within a template. A letter template's purpose is to be able to be used to write a letter to anybody about any issue from anybody within the organisation – it cannot be assumed that every letter will be a mail-shot to all customers. A template will contain all the common elements and graphics and then have placeholders prompting the user to add content in the correct position. Placeholders can easily be created in word processing packages as empty macro button fields.

Evidence for task b(iv) is improving with many candidates showing on-going evaluation through annotation and reflection on their draft communications as required by mark band 3. Other candidates just provided a description of what they did or only evaluated the final copies and not the drafts. Evaluations should be consistent for all six communications. Evaluation of their own performance was not included by some candidates or it focussed on time management issues. There was also very little on how they would approach a similar task in future in some cases. Centres could encourage candidates to write a final evaluation at the end focusing on how they worked during the whole unit, including the comparison of documents in task a.

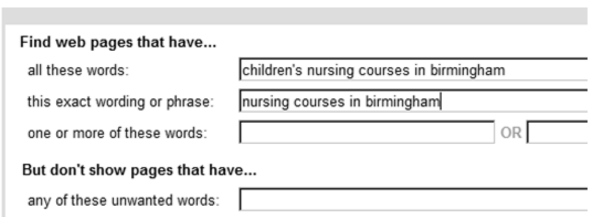
The requirements of task b(v) were better understood than in previous sessions, although some candidates discussed types of information (written, multimedia, graphical, video, audio and web-based), rather than methods of communication (eg, paper-based, screen-based SMS, e-mail). These are included in the second bullet list on page 15 of the qualification specification. This list is now quite extensive and candidates are advised to initially select at least six methods from this list. They should then also explain how the technologies listed at the bottom of page 15 support their chosen communication methods. There was sometimes confusion between methods of communication and technologies or the technologies were simply identified, rather than described. Some candidates had provided very detailed descriptions of the communication methods but limited the mark that could be awarded by providing little detail about the technologies. The evidence frequently lacked the depth required for mark band 3. Mark band 3 requires candidates to describe at least 6 of the communication methods listed within the specification and their relative advantages and disadvantages. Technologies utilised should be linked into the method rather than being a separate section. It is worth repeating that evidence for this task must form the content of one of the six communications created with suitable planning, development and evaluation. The detail required is more easily achievable if candidates present the information as a report or newsletter, rather than a slide presentation.

G042

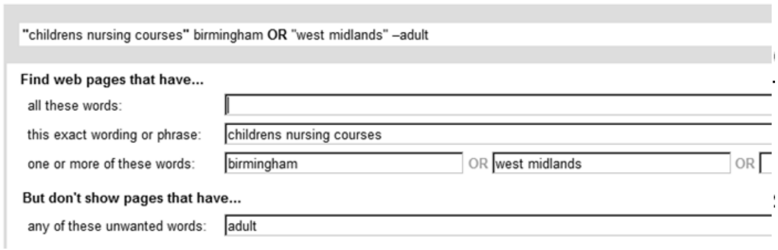
The evidence produced for this unit and the accuracy of assessment continues to improve. The majority of centres provided suitable assignments that gave candidates the opportunity to meet all the assessment requirements, with many using or adapting one of the sample assignments available from the OCR website.

Task a

Candidates must make correct use of the advanced search facilities of search engines and construct their own search strings using operators correctly to gain high marks in this task. It is vital that candidates are taught these skills and that they are assessed accurately. The evidence provided and the assessment of this task improved again in this series but there are still instances where candidates are awarded high marks in mark band 2 for advanced searches where the same search terms had been entered into each box, which is unproductive.

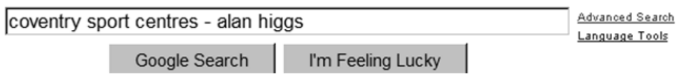


INCORRECT The same words have been used in both boxes.

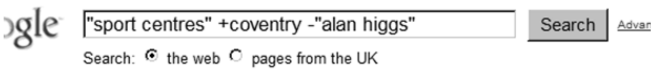


CORRECT The candidate has thought about what they are looking for and used the advanced search boxes properly.

While some good use of logical and other operators was seen, some candidates struggled to make correct use of these techniques. Typical errors to be avoided include: using NOT in Google with the first few results including the word which they wanted to omit, not using quotes around phrases, not using spaces properly around + and – operators, entering logical operators in lower case and placing logical operators within quotes. Errors need to be taken into account when awarding marks for this task as both bands 2 and 3 require the techniques to be used correctly.



INCORRECT Quotes are missing from phrases and spacing for the – sign is incorrect.



CORRECT Quotes have been used around phrases and the spacing round the + and - signs is correct.

For high marks within mark band 3, candidates need to use a wide range of operators and other search aides within their own constructed search strings.

Task a also requires candidates to list the information required before they go looking for it, a detailed comparison of search results and a recommendation of which search engine is the best to use for the investigation. Candidates need to ensure they take a logical approach to this task to ensure that evidence is not missed out. Candidates need to start off by listing the information required – this helps them to focus on the investigation and understand exactly what they are looking for. The next step should be to use simple searches and then the advanced search facility of three different engines in an attempt to find some of the information required. After a few such searches have been carried out it is then expected that a detailed comparison is written which not only compares the number of results yielded but also the quality of the results in terms of the relevance and validity of the information being displayed. It is sensible to suggest that candidates carry out a few identical searches in the different engines to make any comparisons fair. Using a table often aids the comparison. Candidates then need to recommend which search engine they intend to use for the rest of the investigation and why. For higher marks this needs to be in detail and explanations should draw on the results from the searches and the comparisons made. At this point candidates should use Boolean and other search aides, (listed on page 31 of the qualification specification), within the chosen search engine only, to find all the information required to complete the investigation. These searches should be documented clearly with screen shots showing the terms used and the results.

Task b requires candidates to use large websites to find information for their investigation. Candidates must start off by listing what information is required, as it is otherwise difficult to determine whether the information found demonstrably meets their needs, as required by mark band 3. Not all had done so. It is expected that the online database used is separate from the large website. In some cases candidates had used different parts of the same website to evidence both aspects, which is not acceptable. Candidates need to provide overt evidence of using menus and other navigational aides, rather than concentrating on the use of internal searches. Also, some simple searches using an internal search facility is expected to be included for mark band 2. Many candidates had provided evidence of at least one search of an online database using an advanced search facility but few had provided the range of complex searches required for higher marks or failed to show that they had found the required information.

Most candidates had been provided with a suitable local database to interrogate for task c – a range of suitable databases for most of the commonly used assignments can be found on the OCR social community, which can be accessed through the OCR website. In most cases a good range of operators had been used in searches but reports were not always well-presented. Reports produced should be customised so they present data clearly and neatly – they need to have the correct page orientation for the data being displayed, meaningful titles and ensure fields are wide enough for the data to be fully displayed. It should be clear exactly what the report shows without reference to any other material. It is also expected that reports are printed or, if work is being submitted electronically, output to a portable document file for both mark bands 2 and 3 of this task. Candidates must provide screen print evidence of their queries in design view. However, it is not necessary to include a step by step guide to how they built their queries or, indeed, how they created and edited their reports.

Some well-designed spreadsheets were seen for task d that made good use of complex formulae and functions and used well constructed macros to speed up the input of data and the production of results. Other spreadsheets were too simple for this level of qualification with macros mainly used for navigation. The Amplification of Criteria on page 158 of the qualification specification suggests the types of formulae and functions expected for mark bands 2 and 3. Macros should replace more than one action to be of value. Creating a macro to print a whole sheet is fairly pointless, as the user would only need to click the print button on the toolbar, but creating a macro to print a selected area of the sheet would reduce the number of actions required. It was not always possible to determine whether the spreadsheet was well-designed, as candidates had produced a report on the production of the spreadsheet, with cropped screen shots of the relevant areas of the spreadsheet or the functions used. Such detailed documentation is not required. Candidates should provide printouts or screen prints of each sheet in both value and formula view and only describe and evidence those features that are not obvious from these printouts. Some very thorough testing tables were seen that covered all aspects of the spreadsheet but not all candidates went on to provide evidence that the testing had been carried out, other than a comment in the table. Candidates should provide screen print evidence to show that the tests have been carried out. Other candidates based their testing on whether the macros worked, rather than the accuracy of results produced by formulae. A simple way of illustrating that formulae work would be too replace the data found with dummy data, ie, 1s 2s or 10s, so that it can be easily seen that the formulae work as intended. Alternatively, candidates can do some manual calculations, showing their working out, using the actual data.

Most candidates now understand that the emphasis of task e is to report on the findings of their investigation. Others provided a description of what they did, rather than what they found out. Mark band 3 requires candidates to produce a well-structured presentation of their results that effectively combines at least five types of information from at least five different sources. The term ‘presentation’ is used in its widest sense and candidates might find it easier to provide the coherence and quality required by this mark band if they presented the information in a report or newsletter, rather than a slide presentation. As far as possible, candidates should import or copy and paste data from spreadsheets, web pages and other sources into their presentation.

It is not sufficient to simply include screen prints. It is the ability to combine different types of information that is being tested. If all the information is included as screen prints, candidates are effectively only combining text and graphics. Some candidates forgot the design and presentation principles learnt in G040 and included far too much information on each slide of a presentation. Candidates must list their sources to be awarded marks in this task and this list should be an integral part of the presentation. Some had created a separate list of sources for the whole unit or had failed to list their sources. Mark band 3 requires a detailed bibliography, which requires the same information included as in task b(i) of unit G040. In task f candidates need to comment on the way in which they refined the presentation of results. The inclusion of an annotated draft of the 'presentation' with relevant reflective annotation would be helpful to secure marks for the evaluation task.

Task f requires candidates to evaluate the methods used to search for and present information. This was evidenced well by some candidates but others provided a task by task evaluation or focused only on search methods rather than the techniques used to both search and present the results. Ongoing reflection is required for mark band 3 and, although this was present in some case for searching, candidates often forgot too evaluate over time how they were presenting what they had found. Although presenting results mainly refers to task e, candidates could also gain marks for evaluating how they adjusted the reports made in task c to suit their purpose better and how, in task d, they adjusted the charts they had automatically generated with a wizard, so the information displayed was easier to understand. Care is needed that candidates actually evaluate the methods used, rather than simply describing what they did.

Task g requires candidates to discuss the impact of the availability of electronic information. There was a tendency for candidates to either focus on generic benefits of the internet or on how their friends and family use it, rather than considering the impacts. Others discussed the impact of the increased availability of ICT and technology in general, rather than focussing on electronic information. However, some improvement was seen in this series in terms of the focus of this task. For mark band 2, candidates need to research the issues related to electronic information being available outside their daily life. At the very least, this may include looking for a house to buy and how electronic information has speeded this process up, although for higher marks wider issues should be considered such as early warning systems and political restrictions. Page 159 of the qualification specification suggests other aspects that could be covered. Mark band 3, in addition, requires candidates to consider what the impact of organisations communicating electronically has on society. This should relate to the use of websites, email, text messages and other electronic methods that organisations now use to communicate with society as a whole and individuals within it, rather than the use of electronic communication within a business or for business to business communication. They also need to analyse the consequences for people who do not have or do not want access to electronic information. Too often candidates were able to identify who these people were without considering the impact this lack of access might have.

Moderation Report GCE Applied ICT (A2 units)

General Comments

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.

Some centres provided clear details of their assessment decisions. All portfolios should have a fully completed Unit Recording Sheet (URS) with a comment to explain the marks awarded for each task. Page numbers should be completed on the URS.

Although annotation of candidate work is not essential, its appropriate use is very helpful and is an example of best practice.

The volume of evidence presented by some candidates was considered to be excessive. On the whole, portfolios produced by candidates that focused on the evidence required frequently scored better when assessed by the teacher. Surplus evidence is more difficult for teacher s to assess and moderators to moderate.

Centres are reminded of the importance of meeting the deadlines for the submission of marks to Moderator and OCR 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.

Centres need to take care with administration for this qualification. There are two component codes, one for OCR Repository entries and one for Postal moderation entries. A number of centres made Repository entries when they intended to make postal moderation entries.

A number of centres made careless mistakes with marks resulting in amendments to marks submitted. This slows down the moderation process and centres risk delays to the issue of results while these issues are resolved.

Unit G049 Numerical Modelling Using Spreadsheets

More centres correctly identified that the emphasis of this unit is on numerical modelling rather than data manipulation, as has been fed back in previous Principal Moderator reports for this unit. It is pleasing to note that the proportion of centres failing to focus on numerical modelling was lower than in previous sessions. The problem that the candidates attempted to solve, in many cases, provided the opportunity for significant numerical processing with a small number of centres focussing on spreadsheet tasks with little numerical modelling. Using a spreadsheet to simply store and present information, eg, database type solutions that involve little or no data processing are not suitable for this unit as candidates are unlikely to be able to access the marks relating to numerical modelling in the various tasks.

The design specifications produced by many candidates were detailed while in other instances they lacked the necessary detail. At the simplest level, design specifications 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 produced a specification that was detailed enough to enable a competent third party to implement it independently.

The solution implemented in task b(i) and task b(ii) by some candidates showed clear evidence of the use of complex spreadsheet facilities, as listed on page 63 of the qualification specification, as well as clear evidence of a range of spreadsheet functions appropriate to the solution of the problem. Some centres correctly recognised that functions such as lookup functions were part of the common built-in spreadsheet functions and not specialised built-in functions and the candidate was, correctly, restricted to marks in the lower mark bands. 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 detailed the problems encountered by the candidate whilst developing the spreadsheet solution and how these were surmounted, allowing the candidate to access the marks for this task. The teacher may have been aware of some of these problems over the period of time that the portfolio was generated and encouraged candidates to include the evidence within the portfolio to support the marks awarded.

Testing the spreadsheet solution, in task d, was carried out well by a small proportion of candidates, but evidence was generally better than in previous sessions. Such portfolios included clear evidence of planning the testing to be performed and addressed testing functionality with the use of normal, abnormal and boundary data.

The technical and user documentation produced for task e need to be separate documents as they are for different readers; this was correctly presented by the majority of candidates. The technical documentation usually provided sufficient details to allow somebody to maintain or amend the spreadsheet structure. In a small number of cases the documentation provided would not allow this to happen.

A small number of candidates performed well in mark band 3 in task f. In many cases the evaluation was descriptive rather than critical, restricting marks that should have been awarded. Candidates that performed well ensured that the evaluation referred back to the initial requirements of the problem and, in order to access the higher mark bands, considered feedback from users and related the evaluation to the design specification.

G050 Interactive Multimedia Products

Many candidates used appropriate software for this unit. In the vast majority of evidence seen, candidates are using software that allows candidates to produce appropriate evidence for this unit. Page 69 of the specification indicates the types of interaction that could be incorporated into the final product. Not all multimedia software will facilitate the majority of these. It was noticeable this session that more centres appeared to use more appropriate software for the production of the interactive multimedia product that allowed the candidate the opportunity to incorporate a variety of interaction within the final product. 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. Evidence for task e often was of a higher quality than in previous series.

There must be a detailed explanation of how the product influenced the design of the product that the candidates produce. A smaller number of candidates than previous sessions evaluated web-based multimedia products rather than non web-based multimedia products. Some candidates produced evaluations that were descriptive in nature rather than a critical analysis of the products; this restricted the marks awarded to a maximum of mark band 2.

For task b(i) some candidates produced plans for completely different products; the requirement is to produce different designs for the same product. Content must be considered as part of the plan to access higher marks; some plans seen in this session, as in previous sessions, contained very little indication of content. Some candidates that had been awarded mark band 3 had produced detailed designs, as required.

Task b(ii) 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. Again, an analysis that was not critical in nature restricted marks awarded to a maximum of mark band 2.

Task c(i) and task c(ii) require evidence of the use of a variety of ICT skills to produce a multimedia solution. The nature of these skills is identified on page 69 of the qualification specification. Many candidates failed to identify how they had used their initiative to develop and extend their ICT skills to create a variety of elements to be used in the product. Candidates could annotate their evidence to explain how the skills have been used and how the skills are aiding the development of the multimedia product. Task c(iii) 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. A small number of centres continue to allow candidates to create products that are mainly text and image based with little or no interaction.

The testing of the product for task d was carried out to a high standard by a minority of centres. 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; the quality of evidence varied from centre to centre. Candidates are encouraged to incorporate images within their user guide in order to clarify the steps within it. The user guide needs to include details of the system specification for the product and details of how to install the product. Some candidates omitted an explanation of what the purpose of the multimedia presentation was.

For task f some candidates critically analysed 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. Evidence for this task must also incorporate a critical analysis of the candidate's own performance to secure mark band 3.

G051 Publishing

It is important that candidates address all parts of the unit rather than concentrating on the production of the CRC document; some candidates did not sufficiently document the processes involved.

The evidence of the meeting(s) with clients varied greatly in evidence presented for task a. Some candidates could not access real clients so the teacher, or other suitable person, acted as the client; this is acceptable. It is important that interim and final deadline dates are considered to move beyond mark band 1. In some instances the record(s) of the meeting(s) provided little insight to what was discussed at the meetings.

It is a requirement of mark band 3 in task b(i) that candidates explore different means of presenting the same information and use a comprehensive range of editing and manipulation tools. Some candidates were awarded marks in mark band 3 when there was no evidence to support this. Some candidates explored a range of editing and manipulation tools but did not demonstrate these on the same piece(s) of material and therefore candidates found it difficult to draw any conclusions from the tools used.

Evidence for task b(ii) and b(iii) sometimes showed clear evidence of the design stage processes. To access marks in mark band 2 in task b(ii) there must be explicit evidence to include the following:

- sketching different initial document designs;
- following house style;
- creating master page layouts;
- presenting page proofs;
- producing artwork sketches;
- setting text orientation;
- creating style sheets.

For task b(iii) annotation of evidence generated enabled candidates to access mark band 2, whereas an accompanying explanation enabled candidates to access mark band 3. Many centres awarded marks based on the final product when the candidate had included little or no explanation of the design stages followed and how this enabled the production of the product. Production of the product does not imply any understanding of the process and overt evidence is required.

Higher marks in task c(i) were awarded where clear evidence of using styles and attributes to produce a publishable version of the agreed design were included. The work of some candidates did not match the agreed design. Candidates are required to evidence 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. Candidates accessing the higher mark points sometimes demonstrated a clear understanding of the design stage processes. A number of centres gave high marks in task ci when the candidate had made use of WordArt; at this level, candidates should be using style sheets to control the appearance of the publication and the presence of WordArt in a publication suggests that the candidate has limited understanding of the design stage processes. Many candidates had made simple errors in their publications and these had not been identified by the assessor; for example, a contents page with page numbers for the sections of the document, yet the pages of the publication did not include page numbers.

The letter produced for task c(ii) lacked detail in the work of some candidates. The unit specification identifies the required content of the letter.

Task d(i) and d(ii) require analysis of the CRC and how the solution was refined to meet the client's needs as well as an analysis of the candidate's performance. Candidates in mark band 3 sometimes produced a critical analysis, as required. There will be an evaluation, not a description, of the candidate's role in the development of the solution for higher marks.

G052 Artwork and Imaging

Some candidates produced a high quality portfolio of artwork as required for the higher marks in task a. In task a, some candidates failed to includes samples of artwork produced to cover the range listed on the assessment grid. A small number of candidates included material which they had not produced but taken from other sources. Mark band 3 was achieved in a number of portfolios where candidates explored the development of the materials using advanced editing and manipulation techniques. It should be noted that it is not necessary to provide step-by-step screenshots explaining how the original images were produced. The referencing for task a must relate solely to the portfolio of artwork and must not include reference to the product developed for the client.

A small number of centres did not ensure that an appropriate product was created for the client. Candidates are required to develop artwork, not publications, presentations, web pages or other such products; other units exist within the GCE Applied ICT specification addressing the development of such items and such evidence should be used for those units. The artwork must be sufficiently detailed to allow the candidate the opportunity to develop artwork and images using a variety of skills listed on page 77 of the qualification specification.

Task b(i) was well evidenced by a small number of candidates where the sketches, in response to the client brief, were detailed and considered the capabilities of the software. In some cases, it was not clear if the client existed; if there is no opportunity for a real client, then the teacher or other suitable person should act as the client. Task b(ii) was difficult to achieve if task b(i) was poorly evidenced, as it was not easy to comment on the strengths and weakness of the designs. Mark band 3 required critical analysis and not just descriptive comments. Task b(iii) requires candidates to show development of the product and the use of ICT tools, not just to present the final product. Task b(iv) requires explicit evidence that ICT skills have been developed; this was evidenced well by a small number of candidates. A diary can help to evidence this, or alternatively, annotated screenshots can provide evidence. Evidence for task b(v) varied greatly as some candidates had not considered client feedback in order to access higher mark bands.

Task c required a critical analysis of the final product identifying how well it met the brief; a small number of candidates achieved this. Some candidates made little reference to the brief and some omitted to mention the printer, media or resolution. Candidates that appeared to have limited experience of working with computer artwork found it difficult to critically reflect on the final product and identify how weaknesses could be tackled in future briefs.

G053 Developing and Creating Websites

This unit remains the most popular unit in the A2 specification.

For task a, candidates must explain the reasons for choosing, or not choosing, features in web pages examined to be awarded mark band 2, a few did not. In order to access mark band 3, there must be a critical analysis of the web pages examined; a number of candidates had achieved this. Frequently, the evidence provided was solely a description of the web pages visited, meeting mark band 1 requirements.

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. It was pleasing to see that a number of candidates had actually uploaded the site designed, although this is not necessary. 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. Only some candidates had sufficiently analysed the website to be produced. In some instances the index of pages was produced from the software after the website was created; this is not appropriate.

In task c, to secure mark band 3, a full explanation is required to explain the design techniques, hyperlinks, multimedia and interactive features used; a small number of candidates had evidenced this.

Evidence of understanding HTML script in task d was implicit in the work of some candidates rather than explicit. 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; this was provided by many candidates. 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 and adding HTML script. The use of JavaScript contributes to task c and not task d. This has been contained within reports for previous sessions, yet some centres have failed to address this issue.

In task e most candidates ensured that the website met the design specification; explicit evidence of this is required. It is useful if candidates include before and after screenshots if changes are required to the website as a result of testing.

Task f required candidates to produce a critical analysis of their website in order to gain higher marks. An analysis of the candidate's own performance was also required. In many cases the evidence was a description of what they had undertaken, rather than a critical analysis, meeting the requirements of mark band 2 rather than mark band 3.

Unit G056 Program Design, Production and Testing

No entries were received for this unit this series.

G057 Database Design
G058 Developing and Maintaining ICT Systems for Users
G059 ICT Solutions for People with Individual Needs

The number of entries received for this unit in this session was too small to produce any general feedback. Centres preparing candidates for moderation in Summer 2012 are advised to read the report to centres issued for Summer 2011.

G041 How Organisations Use ICT

General Comments

In general, candidates performed well in Task 2 and questions 1 to 3 of the question paper, demonstrating some understanding of the case study of Pounds Car Hire. However, candidates did not seem to have the knowledge and understanding of how organisations use ICT to provide suitable responses to Task 3, questions 5 and 6 in Section A and all of Section B. It was generally felt that candidates were less well-prepared than those in previous series.

Most candidates attempted all of the questions but some 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, as is using the number of marks available as a guide to the number of points they should make.

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 topics in the 'Unit Content' section of the specification 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.

Most pre-prepared work was word processed and most candidates had clearly labelled tasks 2 and 3. There was a great variety in the standard of Task 1 work attached. Many candidates included huge amounts of text for their Task 1 notes, which were not useful to them in the examination. Candidates should be encouraged to keep to the point in their notes so that they are able to refer to them for their answers in the examination.

All reports for task 3 were word-processed as required. Hand-drawn diagrams are acceptable for task 2 and candidates may benefit from at least hand-labelling the information flows, as marks were sometimes lost due to candidates' inability to manipulate text boxes. However, hand-drawn diagrams should be clearly laid out with candidates making use of a ruler to draw boxes and arrows. Where candidates use colour to link a label to the relevant arrow, they should ensure that the colours chosen are visible and distinguishable. It is not necessary to use a different shade for every arrow, as long as those labels that could be ambiguous are in different colours.

While candidates may draft Tasks 2 and 3, only the final version should be submitted. Submitting multiple copies makes it difficult for the examiner to determine which version should be marked.

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. The requirements of task 1 change from year to year, so centres need to ensure that the task is read carefully and responded to appropriately. 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.

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. Candidates should be warned that it is very obvious when they share diagrams for Task 2, even if they make changes to the formatting, or share files for task 3, even if they change the order of the points/paragraphs. While most candidates included the required list of sources, some still failed to do so. Also, quoting the website used in their list of sources does not excuse copying and pasting significant sections into their report.

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. Also, only one Centre Authentication Form is required; it is not necessary to attach one to every script.

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.

If candidates use a supplementary sheet because they run out of space for their answers, they **must** indicate to the Examiner that they have done so. Such sheets easily get mixed in with the pre-release tasks and if it is not clear to which question they relate, candidates could lose a significant number of marks.

Comments on Individual Questions

Task 2

This task was well attempted, with many candidates gaining full marks. Five or six senders and receivers were correctly identified by most candidates, although a significant number omitted the Driver Co-ordinator and Drivers. Many of these were still able to gain full marks by correctly labelling the information flows. Where Driver Co-ordinator and Drivers had been included, there was often no link to the rest of the diagram. The list of methods used for communicating information listed the top of page 27 of the qualification specification includes ‘Centralised database system’. The information flow from the Contract Clerk to the Driver Co-ordinator used this method. The Contract Clerk entered the booking details into the database and the Driver Co-ordinator accessed the booking details from the database. The booking details information was, therefore flowing from the Contract Clerk to the Driver Co-ordinator, with the method being the database.

When candidates did not gain full marks it was because they had described processes or labelled arrows ambiguously.

Care is needed that the information and method for each information flow is identified, rather than described. Where candidates describe the information flow, they often include other processes and lose marks as a result. Some candidates wrote a whole sentence from the case study on each arrow, rather than picking out the information and method from it. Candidates should be advised against this. They need to be taught to use nouns, rather than verbs, when identify the information and method. Although on this occasion, both ‘appointment request’ and ‘requests appointment’, for example, were accepted, the former is preferable, as it clearly identifies the information being passed. Candidates should get into the habit of writing ‘booking confirmation – email’, ‘deposit – post’ and so on. They are then less likely to fall into the habit of describing processes.

Care is needed that information flows are labelled unambiguously. Marks can only be awarded if it is clear which flow a label refers to. Candidates may find it easier to label the flows by hand, rather than manipulating text boxes. Two or more information flows between the same two people must be represented by separate arrows, each unambiguously labelled. Candidates should only include what the task requires. The inclusion of additional senders/receivers and information flows makes the diagram more crowded and increases the possibility of ambiguity.

Many included Finance on this occasion. This was unnecessary as the task stated that the process ended 'when the car is provided'.

Task 3

Candidates who scored well in this task used a structure to include the facilities provided with the benefits and limitations of each facility in relation to the case study. In the main, however, candidates provided limited, or no, explanation of the facilities an online booking system would offer. Alternatively, their response failed to use examples from the case study to explain benefits and limitations. Such responses were limited to the lowest mark band. Candidates had clearly carried out research but this was not always focussed specifically on systems for booking car hire. This made the research less useful than it could have been.

To improve their performance in this task, candidates need to ensure that they consider all aspects identified within it. Where candidates are asked to evaluate impacts, their report should cover both positive and negative impacts on all parties identified in the task in a balanced way and they should explain these impacts by using specific examples from the case study. On this occasion, the report required candidates to evaluate the impacts on the company and its customers; impacts specifically on staff were, therefore, not required.

Candidates who provided an evaluation of their performance gained most, if not all, the marks available. Others failed to access these marks by not attempting an evaluation. The evaluation should be of the methods used to carry out the research to produce the report, rather than its structure.

1 Where candidates correctly identified two job roles they went on to gain most, if not all, of the marks. It is important that candidates recognise to which part of the organisation the question refers. In this case it was the car hire outlets, so job roles in the company's head office did not gain marks.

2 Candidates who had identified the various aspects of the Driver Co-ordinator's role from throughout the case study scored well in this question. Others only gave a response based on the initial description in the case study on page 5 of the instructions to candidates. This gained only 2 marks.

3 Candidates who recognised the difference between supplying goods and supplying services scored well on this question. However, some care is needed in identifying the supplier accurately, for example, 'car manufacturer' rather than 'sales representative'. Once the supplier was identified, candidates went on to gain most, if not all, of the marks for that part of the question. However, care is needed that the information exchanged, as well as the communication that takes place, is described to gain full marks in (iii). Candidates will not gain marks if they repeat the example given in the question or identify individuals/departments within the organisation.

4 (a) Candidates need to be clear what is meant by a type of software. Whilst a macro is a form of program, it would not normally be considered a type of software.

(b) For this question candidates needed to be able to distinguish between what is input and what is calculated or the criteria for selection. The required responses were mileage and date of last service/delivery, rather than 'mileage greater than 10000' or 'time since last service'.

(c) Candidates need to be more selective in their response to this type of question. The question asked for an identification and description of the output produced. There is, therefore, no requirement to describe the processing that takes place – this forms the answer to part d. In many cases, candidates gained the marks in the final sentence of a lengthy answer.

(d) Where candidates had described the process in part c, they did not often repeat it in this part of the question, restricting the marks that could be awarded. As with part c, candidates need to be more selective in their response and only include a description of the actual processing. Candidates also need to consider what the system would actually do, rather than simply giving a general description. For example, the case study states ‘the macro allocates dates for servicing so that no more than six cars are due to be serviced on each day’. There would be several steps in this process, ie, ‘allocate first six cars to first available service date, allocate next six cars to next available service date, repeat until all cars have been allocated a service date’.

5 Candidates need to ensure that they understand what is meant by the terms hardware, software, input data, process and outputs. They also need to read the stem of the question carefully to identify precisely which system the question parts relate to and ensure that all the answers relate to this system. The question requires **one** example for each part, so ‘correct’ answers will not be picked out of explanations that cover the whole system in an outlet, for example.

(i) Hardware: Candidates need to ensure they give specific details of the hardware, as described in the case study, to gain marks for this question. Candidates’ answers needed to be more precise. For example, they should identify that there are **two** workstations used by the receptionists.

(ii) Software: As in question 4a, candidates need to learn what is meant by software. A data input form is a user interface to the booking system software, rather than a piece of software itself. As candidates are asked to explain one piece of software, they need to include additional detail about the software they have identified, such as who uses it or how it is used, rather than identifying another type of software.

(iii) Input data: Where they had confined their answer to the system used by the receptionists when a customer picks up a car, candidates were able to gain both marks for this part. There was, however, confusion with the system used for making bookings.

(iv) Process: Answers tended to relate to input or processing done by people, such as checking the hirer’s driving licence and credit card. Candidates need to recognise terms related to processing, such as look up, select, sort or calculate.

(v) Output: Many candidates were able to gain at least one mark by mentioning ‘hire agreement’, with most going on to gain the second mark for stating that this is ‘printed on 3-part stationery’.

6 Candidates found this question difficult. Where candidates had made notes that met the requirements of the final bullet in Task 1, they were able to gain many of the marks. Most simply stated the principles of the Data Protection Act (1998), rather than describing actions to comply with it and explaining the impacts it has, as required by the question. Candidates also need to be clear of the distinction between an action and an impact. Answers were often given in part c that would have gained marks in part a.

(a) Candidates need to understand that an action is something the company actually does, such as ‘put security measures in place’, rather than ‘ensure data is kept securely’ or ‘check accuracy of data’ rather than just ‘ensure data is accurate’.

(b) Many candidates stated the rights customers and staff have as data subjects, rather than the impact that having these rights has on them. Where marks were awarded it was usually because candidates recognised that customers/staff would feel safer/more confident about providing personal data.

(c) As indicated above, many candidates gave actions as answers, rather than impacts. Those who gained marks recognised that these actions would impact on the company in term of money needing to be spent or the additional time required. Some were also aware of the legal aspects, although these answers could have been better expressed.

7 (a) Most candidates understood the difference between wholesalers and retailers, although there was some confusion that wholesalers also manufacture the goods. Answers were often given in terms of the quantity of goods, rather than who they are sold to. Candidates need to understand that, where the question asks for the difference between two items, they will not gain both marks for an answer such as 'retailers sell goods to the public, wholesalers do not sell direct to the public'.

(b) Where candidates identified a correct document, they went on to gain at least one of the marks for describing the content. Candidates should be taught the correct terminology in a business context. The correct term for the document used by a business to place an order is a purchase order.

8 Candidates needed to recognise the difference between training records and training plans to answer this question successfully.

(a) The question asked for types of information that would **only** be held in training records. The distinction between training records and personnel records was not always clear in the answers given.

(b) In this part of the question there was a tendency to confuse training plans with training. Answers needed to relate more to targeting training to the needs of the organisation, ensuring staff get their fair share of training and ensuring employees' professional development.

9 (a) Most candidates were able to provide a suitable answer, although this was often an example, such as car manufacturing. Candidates should know the difference between the type of organisation (manufacturing) and the building that houses it (factory).

(b) Again, most candidates made a good attempt, although some could have provided a little more detail than just 'make products'.

(c) This question asked how the role of personnel had changed. This required candidates to state what they did before the introduction of automated systems and what they now do. Many gave answers relating to unemployment that were more appropriate in part d. Few gained both marks as they only described what the personnel do now, not what they used to do.

(d) This is the first time that this type of question has been asked on this paper and it was pleasing to see that many candidates were able to provide some valid points in their answer to gain marks in the L(0–2) or M(3–4) band. To improve their marks in this type of question, candidates need provide a balanced discussion. They also need to ensure that specific points are made, rather than generic statements and that these are relevant to the discussion topic. In this case, the topic was employment patterns, so aspects such as the ability to work from home were not relevant to the discussion.

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 The Corner Shop, and are not theoretical. However, Section B is theoretical and centres should ensure that candidates have a thorough understanding of the Unit Content to enable them to improve their performance in this section.

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 isolated instances where the pre-release tasks for the June 2012 session had also been completed. 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 causes difficulty for the examiner. 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, ie, 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 L0 data flow diagram (context diagram) with the start point being given as when the shops fax the daily orders and ends when the stock delivery note is given to the shop manager. Most candidates managed to start and end the L0 DFD at the appropriate points.

The standard of the L0 DFD's submitted in response to this task was, generally, pleasing. The main issue were the incomplete external entities being correctly defined with some candidates failed to clearly identify the shop, suppliers and warehouse.

Most of the DFD's produced used consistent notation. For example, the same symbol being used to represent the entities.

Some of the DFD's produced by candidates were simply a set of isolated symbols and flows with no representation as to how the complete system being represented 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 DFD.

Task 3

This task required candidates to produce a flowchart showing how the business order for a given stock item was calculated. It was regrettable that some candidates produced a systems flowchart in response to this task.

Candidates were able to access marks for denoting the start and end of the flowchart and the use of consistent notation. Many candidates, however, failed to access the marks allocated for the use of correct mathematical notation and the decisions. A decision box, in a flowchart must have two outcomes; yes/no.

Task 4

Candidates were required to design a printed report layout showing the stock details for The Corner Shop. It had been requested that the report show the supplier, current stock levels and the re-order levels. Many candidates were able to access all marks allocated for this task.

The emphasis of this task was on the design of the form and not the implementation of the design.

Some candidates 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 still appear to be confused about the difference between the purpose and the functions of the new system.

2 The focus of this question was on the user requirements that have been defined by the accounts staff of The Corner Shop.

Many candidates were able to provide responses relating to the supplier details being accessible through a unique supplier number.

Candidates failed to access marks by providing incomplete responses which did not provide all required details.

3 The focus of the question was functional requirements. Candidates had to describe two functional requirements relating to each of the warehouse manage and the administration staff.

Most candidates were able to clearly describe the functional requirements and so accessed all allocated marks.

4 The focus of part (a) of this question was on the defined hardware constraint relating to the owner of The Corner Shop. Most candidates were able to provide answers relating to the provision of an iPad.

Part (b) of this question then required candidates to identify and describe a further constraint that had been defined by The Corner Shop. Despite the question stating that software and hardware should be excluded in the answer, some candidates provided answers relating to these categories of process constraint. Those candidates who did define time as the process constraint generally accessed all marks available.

5 Many candidates were able to describe the problems caused by the current system at The Corner Shop which relates to the shop manager.

However, some of the answers given by the candidates were not linked to the shop managers of The Corner Shop. Candidates who failed to link their answers to the shop managers failed to score marks.

6 This question assessed the candidates' quality of written communication.

Candidates were required to explain the advantages and disadvantages of using the phased implementation method. The question asked candidates to relate their answers to The Corner Shop. Candidates who did this gave some excellent and insightful answers.

There seemed to be a general understanding about the phased implementation method. There was some attempt to link answers to the case study. Few however provided responses clearly linked to The Corner Shop, in enough depth to score the highest mark band. The most common problem appeared, by some candidates, to confuse the phased and pilot implementation methods.

Good responses often talked about, for example, limiting of the detrimental effect on The Corner Shop. The better answers would then go on to give examples of how this is achieved by using the phased implementation method, for example, if problems are found during implementation the old system can still be used.

A minority of candidates failed to use examples relating to The Corner Shop This strategy limited candidates to the lowest mark band.

7 The focus of this question was on the advantage(s) and disadvantage(s) of the observation investigation method.

Most candidates were able to clearly describe one advantage and one disadvantage so accessing all marks allocated to this question.

8 The focus of this question was on the physical security methods which could be used by The Corner Shop.

To achieve the marks allocated to this question candidates had to identify the physical security method(s) they could use before they gained any marks for their description.

It was worrying to note that a large number of candidates provided responses relating to logical security methods such as passwords and user names.

9 To achieve the marks allocated to this question candidates had to identify the relevant Act (Health and Safety at Work Act) before they gained any marks for their description.

Those candidates who did identify the correct Act then went onto simply described the contents of the Act and failed to explain the actions which The Corner Shop must take to comply with the Act.

Appropriate responses could have included providing equipment such as wrist/foot rests.

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 This question focussed on the components of the software specification that comprise a physical design specification.

Very few candidates scored marks on this question. A list of the component parts of the different types of specifications is given in the unit specification.

11 Part (i) of this question required candidates to describe how test plans, data and logs could be used. Many candidates focussed on describing this documentation rather than describing how this documentation could be used.

Part (ii) of the question focussed on why this documentation should be passed to the end-user. The responses provided by the majority of candidates failed to access the allocated marks. The documentation should be passed to the end-user so that if anything goes wrong with the system after implementation the documentation can be referred. If the same fault occurred during testing then it can be seen how the fault was rectified.

12 This question required candidates to draw and label two components of an entity relationship diagram (ERD). Many candidates failed to access marks on this part of the question by providing symbols which were used in System Flowcharts or DFD's rather than those used in an ERD.

13 This question assessed the candidates' quality of written communication.

This question focussed on the use of data flow diagrams as a method of modelling flows within a system.

Those candidates who did provide responses relating to the use of data flow diagrams (DFD's) were unable to provide an evaluation (advantages and disadvantages) of the use of this method of modelling data flows and so limited the accessibility of marks to the low mark band.

To reach the higher mark bands candidates should consider the advantages and disadvantages and provide a conclusion.

G055 Networking solutions

General Comments

Tasks were generally separated and clearly labelled. Task 1 notes were completed but were often not related to the case study. Candidates will raise their performance in the examination if they have solid knowledge of the case study scenario to which they are able to refer. Questions relating to general knowledge of IT such as security, internet services, the financial costs associated with networks were generally well answered whereas questions requiring technical knowledge and the use of technical language tended to be poorly answered.

Candidates scored, on average, a higher percentage of the marks for the tasks than on the paper. Many marks on the paper are inaccessible to candidates who are unable to relate their knowledge to the case study.

Task 2

Most candidates had produced a correct logical star topology diagram with an accurate number of devices attached and gained full marks. Candidates often gained full marks for the physical topology diagram. Where marks were lost this was mostly due to the cabling not being accurate for a star topology (matching the logical topology) or because one or more devices were not shown as being connected to the network. An erratum notice was issued which related to this task, and candidates were awarded marks for a correct interpretation of the previous version of the diagram, although nearly all candidates used the updated version which was made available.

For the third part of this task, most candidates were able to identify the connecting device they had shown in their diagrams and appropriate network cabling. However, some answers focused on explaining why a connection device or media is needed rather than why this particular type of device or media has been chosen. Explanations were often textbook descriptions, which didn't identify the reasons for inclusion in this particular network. Candidates must refer to the given case study in all answers relating to Tasks 2 and 3.

Candidates generally evaluated methods used to carry out Task 2 well. A very small minority of candidates evaluated their solution or their own performance rather than the methods used.

Task 3

All candidates made a reasonable attempt at this task but few related the choice of broadband method to the Green Toes company in the case study. Accordingly, few were awarded marks in the top mark band, which required candidates to give a reasoned evaluation for a choice of method for **this** company.

SECTION A

Question 1

Candidates were able to identify and describe costs associated with the introduction of the network. The cost of purchasing equipment was the most popular answer. In some cases, candidates missed marks because they identified three separate equipment costs and so missed the opportunity to include other types of cost. This question was answered quite well with candidates using some general IT knowledge in the domain of most units.

Question 2

Candidates were able to gain both marks for question 2 part (a) by giving a textbook answer, which is relevant to all companies, including Green Toes. Many candidates gained one mark for identifying minimal cabling as a benefit but didn't always gain the second mark by expanding on this. For part (b), candidates rarely gained all three marks because their answers were text-book answers and weren't related to why Mr Greensdale might have rejected this topology for Green Toes.

Question 3

Marks were often lost because candidates were unable to name the types of software generally used for maintaining a website. The most popular answers were FTP software, web browser software and web page editing software. Candidates often gained one mark for the explanation of the software because they could describe what the software does. The final two marks for each were often not accessed as candidates were unable to explain why the software would be used in general and at Green Toes in particular.

Question 4

This question was about how to share a printer on a network and not about the media that might be used to connect it to the network. Candidates who described the difference between wired and wireless connections gained few marks. Many candidates reached only the lower band because they only discussed one method or because they didn't address the suitability. Few candidates related their answer to the case study.

Question 5

A significant number of candidates still confuse intranet with extranet and, for this question gave inappropriate answers. Where candidates were aware that an intranet was an internal service a further number were unable to identify advantages and disadvantages despite being asked to research the suitability of intranets in Task 1. Very few candidates were able to identify that a web server was needed to host intranet pages and this part of the question was poorly answered.

Question 6

This question was answered well in comparison to other questions. Candidates were often able to identify internet services and the most popular services were email and commercial transactions. Candidates were often able to gain one or two of the marks allocated for the description but very few gained the final mark for each service, which would have required that the description was related to the case study. Answers relating to commercial transactions generally gained more marks than those relating to email. Candidates often showed an understanding of the ways in which email might be used for communication and the transmission of documents but answers often related to the use of email on the internal network. Candidates need to be careful to relate back to the question, which in this case was about use of the internet and so required descriptions to relate to use over the internet rather than within the LAN. This question was answered quite well with candidates using some general IT knowledge in the domain of most units.

Question 7

Candidates were able to list a range of actions to be taken to maintain network security. Popular inclusions were anti-virus software and the use of passwords with a good number of candidates also including backing up. Some good answers scored marks in the lower mark band because the candidate discussed logical but not physical security measures and the question asked for both. Very few candidates gained marks in the higher band because answers were not related to the Green Toes network. This question was answered quite well with candidates using some general ICT knowledge in the domain of most units.

SECTION B

Question 8

This question was about network interface cards and what they do. Some candidates identified purposes despite the question asking for a description of 'tasks carried out'. Candidates should possess a sound knowledge of what the various components within a network do.

Question 9

Most candidates were unable to define VLAN and were therefore unable to answer part (b). Candidates must understand network terms such as VLAN, VPN, WLAN, etc and the equipment required to install, configure and run each type of network. This question required technical knowledge that was not displayed by the vast majority of candidates; practical experience of setting up networks or using network simulations may help candidates to consolidate this knowledge.

Question 10

This question was answered well in comparison with other section B questions. Candidates were able to identify that fibre optic cable used light signals and that this made it more reliable through being less prone to electrical interference. The second most popular feature was the distance covered, although the second mark for this feature was often not gained as the candidate was not able to link the feature to its usefulness for the large site.

Question 11

This question was poorly answered. Candidates were unable to identify that Ethernet is a standard used by all devices in the same network. A few candidates were able to describe that 100BaseT uses twisted pair cable and RJ45 connectors and a further few described the speed of transfer for all devices as 100Mbps. This question required technical knowledge that was not displayed by the vast majority of candidates; practical experience of setting up networks or using network simulations may help candidates to consolidate this knowledge.

Question 12

Question 12 asked for a description of FTP and TCP protocols. Very few candidates were able to describe the FTP protocol with many not even been able to identify its function in describing the way a file is transferred from one host to another on the internet. A number were aware that it was used for uploading band some were able to describe some features of FTP software rather than the FTP protocol. Candidates must be able to understand that a protocol is a set of rules or guidelines to be followed by all participating hardware or software. A few candidates were able to identify that TCP defines packets, which are reassembled after transmission. Very few candidates linked TCP with IP. This question required technical knowledge that was not in evidence for the vast majority of candidates; practical experience of setting up networks or using network simulations may help candidates to consolidate this knowledge.

G048 Working to a brief

General Comments

Overall, work was of a similar quality to that seen in recent sessions. However, the changes to the marking of task c(iii) now seem to have been taken on board by centres and this was reflected in the accuracy of the marking by centres.

Across all candidates, a variety of diary styles and structures have been used, and, in the best cases, these structures really do aid candidates when it comes to completing this task.

Comments on Individual Questions

Task a

The vast majority of candidates create a report that focuses on the structure and content of resources that are similar to their intended solution. For example, where candidates need to create a website, they will look at currently existing websites that carry out similar tasks. Where this practice is followed, this report will result in a mark from mark band 2 being awarded, as this only concentrates on one aspect of the required report. In the best cases, candidates then go on to look at more theoretical aspects – such as how persuasive writing may be used to help a website sell. In doing so, candidates are therefore looking at real world examples and discussing whether or not these examples are carrying out their function effectively. Clearly, from such a discussion, candidates are able to then identify a full range of issues of which account need be taken.

In a few cases, candidates have written a report in to the current structure and management of the organisation on which the task has been set. This focus does not allow candidates to draw conclusions about the structure and content of their intended solution and should be avoided, as such work is unlikley to achieve beyond mark band 1 for this task.

Task b(i)

Many candidates now include one formal planning technique (usually a Gantt) and do not provide a second. As a result, marks are restricted to mark band 2 for this task.

Task b(ii)

The quality of planning across all centres has improved over the lifetime of this qualification. However, there remains a surprisingly large number of candidates who plan Unit G048 rather than the task. Therefore, their plan will include time to complete the Current Working Practice report, as well as creating the Gantt itself. This is the wrong focus of this task and should be avoided. The planning should concentrate on the creation of the solution to the brief and should cover the period from the completion of the current working practice research (by which stage candidates should have a clear idea of their overall task) through to the completion of the Support Materials.

In order to move up through the mark bands, candidates need to include some clear information on what they intend to do. For example, when creating a document for publication, candidates wishing to achieve a mark from MB3 should plan to create both the individual pages, as well as the elements on those pages. In order to achieve this degree of detail, many centres are now asking candidates to create one over-arching plan, that covers all tasks in little detail, but then create sub-plans that cover distinct periods during the creation.

Task c(i)

Many candidates now include good evidence of the use of initiative to gather relevant ICT skills and fully justify a mark from mark band 3.

Task c(ii)

The majority of candidates now achieve a mark from mark band 2 by including evidence of both the use of formal techniques – usually a meeting (evidenced by a description in the diary and/or minutes) – as well as evidence that they are aware of the need for high quality work. Such evidence can include simple statements about the need for work to be completed on time and to a fair standard. However, marks from mark band 3 are not as frequent. In order to access this mark band, candidates must give clear evidence that they are fully aware of the need to complete high quality work. Evidence for this would be repeated comments about a wide range of issues.

Task c(iii)

This task represents the greatest improvement in performance over the last few series. Candidates are now more aware of the very different needs of mark bands 1, 2 and 3. However, there is still room for some improvement here. In order to justify marks from mark band 2, candidates must justify the actions they have taken in response to more complex issues. In some cases, this is implied in the issue itself, but, in order to make this point clearly, candidates are advised to include a clear statement about why they took the action they did. In most cases, this will be a simple comment, but the inclusion of this does make the point very clearly. In order to achieve mark band 3, candidates must also include clear evidence that they are aware of the cause of the problem and have taken action to avoid its repetition.

Task d

Many candidates are now producing really good support materials that show good application of skills from across this and other units in the qualification.

Tasks e and f

There has been some real improvement in this task of late, but, in many cases, candidates are not including sufficient range in either report to justify a mark from mark band 3. For the planning report, the report should not solely focus on the efficacy of using Gantt or CPA charts, but should consider the whole range of tasks that have contributed to the planning process. This can include aspects of how the focus of the Current Working Practice report was decided upon, as well as how this then led to the identification of tasks and the order in which they should be completed. Coupled with this, candidates could then include a discussion of how they identified how long each individual task should take to be completed. This in itself could be a large section, and may include some discussion of guess work, as well as the use of advice from third parties. Clearly, such a report would allow candidates to include a great deal of analysis and evaluation, thereby fully justifying a mark from mark band 3 for this task.

Similarly, for task f, there is a wide range of areas that could be considered. Typically, candidates concentrate on the creation of the actual product, and comment on how well they used the software. However, in terms of the application of the plan, candidates are working to create a product that fits the brief set and further extended by the client. As a result, the interaction between the candidate and the client is of great importance when creating the product. This area of consideration is often ignored.

Task g

This has been another area of development over the past three sessions. Candidates are now routinely including feedback from others – both client and user – in order to come to conclusions about their product. However, in a few cases, candidates are merely presenting this information, without any commentary or interpretation. As a result, this aspect has had to be ignored.

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