Examiners' Report Summer 2007

GCSE Applied ICT (2331)

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5331 ICT TOOLS AND APPLICATIONS

Just under 14,000 candidates were entered for the externally assessed examination which forms Unit 1 of this specification. Responses varied considerably and covered all grades.

Some centres seem to have experienced difficulty in preparing for the examination with more enquiries in the days running up to the examination window – and on days when candidates were due to sit the examination.

Specific enquiries centred on the data files and on instructions for labelling. Both of these issues are dealt with in more detail below.

There is still concern among examiners that the **applied** nature of the examination is not fully understood and many candidates continue to gain much more credit for the spreadsheet and database activities than for the other three activities. There is concern that where candidates appear to have been drilled in spreadsheet and database applications they have much less grasp of the importance of effective business communications. The mark scheme for each examination gives an example answer, and these can be used as examples of layout. The detail in the mark scheme indicates other possible layouts.

Smarts Leisure Park is the scenario for the paper. The weighting of the assessment objectives in the specification should encourage centres to expect candidates to be able to apply knowledge and understanding to business applications. In this paper many candidates failed to gain any marks for the memorandum, and the agenda was frequently not fit for such a purpose. The mailmerged letter also caused difficulties.

There has recently been an improvement in the use of graphics and in importing text from data files. The third activity, the inside pages of a leaflet, could have been a platform for candidates to continue this improvement. But, perhaps surprisingly, many candidates used inappropriate graphics and failed to maintain proportions. Generally, both lower and higher ability candidates are more successful if they copy and paste rather than attempting to key in text. However, in this paper, many candidates omitted some of the text and frequently missed a final full stop even when it appeared that text had been copied and pasted from the data file.

Examiners continue to report a lack of attention to detail and awareness of target audience and fitness for purpose. There has recently been a general improvement in capitalisation but candidates should read instructions carefully – and look to see if there is already text within a data file – and ensure consistency. Candidates frequently could not be awarded full credit in the spreadsheet activity because of inconsistencies.

Consistency within tasks generally was not of a high standard. This was apparent in the third activity – the leaflet – and the final mailmerge activity. In the former case, text was given to candidates in a variety of fonts and sizes and it was expected that they would choose one font and format the text consistently. For the mailmerge letter, candidates were expected to present the recipient's details in the same font and style as the letter.

There were fewer instances of candidates submitting an "answer" to a "question" they hoped would be asked, although more than one instance of a "two-page leaflet" using presentation software was seen.

Candidates once again appear to have been guided to go as far in each activity as possible before moving on.

Use of software tools

The use of software tools such as a wizard, template and/or a spellchecker is, of course, legitimate but candidates should be advised against an over-reliance on such tools. Candidates using a template to prepare the agenda for task WP2 nearly always lost the fitness for purpose mark. More than one examiner reported that, "… the template … added extra headings that the candidate felt duty-bound to fill … some had up to three titles …". Another examiner commented that the use of the template "made the agenda look more like a poster".

Where candidates use the wizard to produce a database report, such as task DB3, they must be encouraged to customise that report to gain full credit.

Candidates appeared to make limited use of the spellchecker in this examination. However, again, more than one examiner reported instances where a candidate had changed **Enc** at the bottom of the letter in task MG1 to "Eric" – possibly encouraged by the spellchecker. A high proportion of candidates also unnecessarily changed **sweetcorn** in task DP1 to sweet corn.

Support Materials

As reported for the January session, the Smarts website was updated in the autumn of 2006. There continues to be an impression that some candidates had not seen the site and had not seen samples of letters from the January 2007 data files which included updated logos and letterhead. A significant number of candidates were disadvantaged as they again incorrectly attempted to move the contact details from the footer to the header area. This was often a whole centre issue, indicating that perhaps they had been instructed to do so by the centre.

The Activity Booklet and Candidate Pack will not be updated but are still available and continue to provide sample activities and revision check-lists.

Secure Environment

Examiners continue to report fewer instances where there is a suspicion that candidates have not worked in a secure environment, although there were still instances where candidates included within their cover sheet a printout from a different candidate.

More worrying are reports from examiners where data files from previous examination sessions have been used. Candidates must **only** have access to files pertinent to the current examination.

The separate user area must be set up for each candidate sitting the examination. This user area must not be accessible to the candidate at any time other than during the examination and up to half an hour after the finish.

Labelling Tasks and Printing

The number of enquiries received just before the examination as to how candidates should be instructed to label documents was worrying. Experience shows that if candidates are encouraged to label **all** their documents before printing in the classroom environment this should not be an issue in the examination.

The document *Instructions for Labelling* is available on the Edexcel website and within the ICE document (Instructions for the Conduct of the Examination). This states that, where a table or result of a query/search is required by far the most successful method is to copy and paste the table into a word processing document and then add a header.

When candidates give a screen shot, rather than copy/paste, there is a tendency not to show all of the required data.

If candidates have been instructed to give a screen shot they should ensure that they show all evidence that is required. In this paper, some candidates did not show sufficient of their database tables or searches to gain full credit.

Examiners report again that there is a suspicion that some centres are providing candidates with paper that has been pre-printed with candidate details. This is not in the spirit of the examination, which aims to ensure that candidates can label printouts produced using a variety of software.

Practice for the Examination

At least one full timed practice is recommended to help candidates appreciate the pressure of a long computer-based examination such as this.

Submission of Work

After a recent general improvement in the ordering of printouts within the cover sheet examiners report that many more candidates submitted work that was not in order and with the tasks face down. Candidates must ensure that coversheets are submitted in the order requested.

Data Files and Software

There was a number of enquiries about data files just before the examination window and even while candidates were sitting the examination.

Some centres seemed not to be aware that the Instructions for Centres **must** be read when the files have been downloaded. These instructions state what files must be made available to candidates and how they should be formatted. It is not possible to provide data files that can be used directly on the systems of every centre and it is the centre's responsibility to ensure that the files are compatible with their system. A number of formats are provided, in two different folders and centres may need to use files from both folders. Not all are intended to be given to candidates. For example, it is not appropriate to give a .csv file containing data for the spreadsheet to the candidate. The data must be transferred into spreadsheet software and formatted according to the instructions.

Centres, therefore, must test the files to ensure file formats are readable using the software in the centre. This must be done **before** the examination window. Candidates may be unnecessarily disadvantaged if they find during the examination that they cannot adequately manipulate the files.

Centres should also ensure that only the **current** data files are available to candidates. Examiners have reported that some candidates have used the old Smarts Leisure Park logo in this session, which was not included in the data files. In other instances, candidates have used data files from the January 2007 series.

The data files should **not** be discussed with candidates prior to the examination. As stated above with reference to the letterhead, examiners have reported a concern that some centres have instructed candidates to make unnecessary changes to what has been supplied.

The ICE document states that centres should include with the scripts a note of the software used and printouts of centre-created files. Very few centres have complied with the first requirement.

Data files for the January 2008 examination will be published on 10 December 2007.

ACTIVITY 1 – USING WORD PROCESSING SOFTWARE

Candidates were required to compose a memorandum, using given information, and to construct an agenda, using information from the question paper and from a data file.

Task WP1

Very many candidates seemed to have no clear idea about the composition of a memo and the need to show who it is from and to, with a correct date and subject. Those who made some attempt at this often spelt names incorrectly (McCrea instead of McCrae; Johanansson or Johannson instead of Johansson). A majority did not correctly include labels for the heading information. A few candidates attempted to add the status of Joe or Anders – but made errors in the spelling of Smarts or Teenz, so lost the mark they would have been awarded if they had only used the names.

The date was generally in a correct format, within the exam window, but without a label although a number of candidates used lower case "m" for May or used an incorrect year. The format "22nd of May" is not acceptable.

The subject caused many candidates difficulty. This was often given simply as "Meeting", which was not sufficient, or a longer phrase with inconsistent capitalisation, such as "Meeting about study Days".

Some candidates composed an excellent message, often using wording given in the examination paper. Others wrote a complete paragraph, introducing ideas of their own. More than one meeting was expected to take place in "The General's Office".

Candidates were expected to have read the introduction to the activity and to use some information given. However, many candidates did not use what they read correctly. A frequent misconception was that the Study Days were part of the Teenz Club programme and not a Smarts Leisure Park activity.

Only a minority of candidates used a correct order for the heading information. Those who used a wizard/template were often more successful than in previous series (although see note above about the use of templates). Many, however, could not be award credit for fitness for purpose if they retained "cc", which was not required in this instance.

Task WP2

Attempts at the agenda were generally more successful than attempts at the memo. The majority of candidates used the Smarts Leisure Park logo, although some used the Teenz Club logo. If candidates retained the wording from the data file, "Purpose of meeting ...", they gained credit for a suitable title if this appeared above the agenda items.

The majority included the word "Agenda" in a suitable position, in a suitable font and size, although some added unnecessary wording or added a full stop. Few used WordArt.

A pleasing majority included the details of the time and place of the meeting which was found in the introduction to the activity. Some candidates, however, included these as numbered items in the agenda. Others placed them at the foot of the page.

Only a minority of candidates were able to put the agenda items into the correct order and examiners report a concern that this was a centre issue – candidates in some centres appeared not to have been introduced to an agenda previously.

The majority were able to produce a numbered list, although a few candidates attempted this without using software tools and introduced an inconsistent layout. Few obtained credit for fitness for purpose.

Centres are encouraged to use the example answers within the mark scheme as a guide to expected layout – although, as mentioned above, these are not entirely prescriptive.

Key Areas for Improvement

- be fully aware of all types of business documents, including the use of a memorandum and agenda
- use suitable headings in a memo
- use a correct order for headings in a memo
- correctly copy information, especially names, into a document
- compose a suitable message using given information
- apply correct layout for an agenda
- include an appropriate title for an agenda
- add details of a meeting time and place in an appropriate place in an agenda
- place agenda items in a correct order
- produce a consistent numbered list
- proofread and check for fitness for purpose

ACTIVITY 2 – USING SPREADSHEET SOFTWARE

The majority of candidates worked through this activity and stopped at a point where they felt they could complete no more tasks. Fewer submitted the same task with a different header. A disappointing number of candidates continue to appear not to be able to present a spreadsheet in formula view and fail to gain credit for parts of a task that might have been correctly completed. Consistency of capitals and following instructions from the question paper also caused candidates not to gain full credit. While there has been some improvement in the use of formulae and functions, the incorrect use of SUM is still a problem for some candidates.

Task SP1

The majority of candidates added a title in row one, but some failed to use all capitals. The correct title was **STUDY DAY BOOKING**, but this often appeared as STUDY DAYS BOOKING or STUDY DAY BOOKINGS. Most candidates correctly formatted the values in column F to 2 decimal places with the £ sign, but a significant number did not right align entries in column A.

The majority attempted to enter the label **Total activity cost** into G9 but a high proportion used incorrect caps (which were not consistent with other labels in the row) or did not wrap text onto 2 lines as instructed (again to be consistent with other labels).

Task SP2

There continues to be an improvement in the number of candidates who use a formula or a function as required. The majority of candidates correctly used E10*F10 in G10 (with = if necessary). Those who used SUM(E10*F10) did not gain full credit. Most candidates were able to replicate what they had in G10 for the other activities.

Candidates were asked to add up the total activity cost into G16. A correct response was SUM(G10:G14) or as appropriate for their software. Those who used the autosum key added in a blank row, producing SUM(G10:G15) which did not gain full credit. Some candidates did not put the function into the correct cell and, again, could not gain full credit.

The majority of candidates correctly used the label **Total** although some entered Total: or Total=. The label was generally in a correct cell.

Candidates who did not print in formula view were restricted to the 2 marks available for the label, out of the possible 8.

Task SP3

The majority of candidates correctly changed the title to **STUDY DAY INVOICE**, although some retained the original title and again a common error was to use DAYS. Other candidate changed the heading to STUDY DAY BOOKING INVOICE. The majority changed the page orientation to portrait but some candidates did not ensure that all columns were printed on one page.

Task SP4

Candidates were presented with a set of information that was to be entered into the appropriate cells in the spreadsheet. A small minority copied the entire set of information, including headings, into unused cells at the foot of the sheet and could not gain any credit.

Those who attempted to enter the information correctly generally correctly entered the first four items into column B. Some candidates added this information after the labels in column A. Others used column C.

A minority of candidates changed **Ms G Harris** to Mrs G Harris or Mr G Haris. A more significant number changed **Woolston Community College** to Woolston community collage.

The date of the visit was generally entered correctly, as was the current date. Date formats were frequently not consistent, but inconsistency was not penalised where correct information had been entered. Where candidates entered information into the correct cells, the numbers for each activity were generally correctly entered.

Task SP5

A significant majority of candidates used a correct criterion for the IF statement. The major error was to use G16>=300 rather than G16>300.

Candidates have been encouraged to look carefully at the question paper to gain as much information as possible from it. But this advice needs to be tempered by the need for correctness. A high proportion of candidates did not use a mathematical formula to find 10% of G16 for the first message, instead copying from the paper "10% of the total". There is also still a significant number of candidates who do not correctly include a blank cell in the statement when required. The most common method candidates attempted to avoid this was simply to omit a second message.

The majority of candidates produce a working IF statement – often surprising examiners with what does not produce an error message.

There was an improvement in the number of candidates who printed the required columns – although still some who select a print area and consequently print on 3 separate pages.

Task SP6

Responses for this task were generally disappointing. Candidates were given the first range of cells around which they were required to put an outline border (B9:G16). Some put a border only round B9 and G16. Others used interior lines as well as the outline border.

For the second border only 2 cells required the outline border – but again the internal border was often included.

Few candidates correctly put the third border round only the cells which contained the school and contact details (A3:B4 or B3:B4). Many also included the cells containing the dates.

The majority had correctly inserted **Deposit** £ into F18, with the omission of the £ the most common error.

Most removed the gridlines on the spreadsheet, but a minority did not remove the row and column headers.

Key areas for improvement

- correctly copy and enter headings and labels
- be aware of the need for consistency of capitalisation in labels and headings
- align data in given cells
- correctly enter functions and/or formula
- print in formula and data views
- change page orientation
- ensure all necessary columns are printed on one page
- enter given data into correct cells
- create an IF statement including correct criterion and messages
- include a blank cell in an IF statement
- print selected columns on one page
- correctly insert outline borders round selected cells
- remove gridlines and row and column headers

ACTIVITY 3 – USING DESKTOP PUBLISHING/WORD PROCESSING SOFTWARE

Although layout as a two-page leaflet was generally improved over previous examinations, some candidates did not produce a document as described and required. Some produced an A4 sheet in portrait layout, looking suspiciously like a report, others produced a slide show, yet others produced an A6 leaflet. Some candidates then folded their leaflets inside the outside cover provided, added extra perforated holes and then fastened this tightly into the cover sheets.

Task DP1

The majority of candidates selected a suitable graphic from the **GRAPHICS** file for the Activities section. Few of these graphics were too large (although some were formatted so they became a "washout" background to the text). Some were too small and consequently left too much white space in the leaflet. A failure to retain the proportions of the graphic generally occurred with the use of the Swimming Pool image, or that of the Education Centre. The majority of candidates only included one graphic in this section (and perhaps a correct logo, which was not required but not penalised). Few placed it above the heading.

Again, the majority of candidates correctly copied text into this section. Some omitted the final full stop, or the opening heading **Mathematics.** A significant number added their own version of Mathematics – often rendered as Mathmatics or similar. Only a minority of candidates fully justified all of the text here. Many candidates made no attempt at wrapping text round the graphic, with many images in line with the text. Candidates were expected to use their skills to consider an appropriate size of text and graphic to enable sensible wrapping.

When candidates moved on to work on the Facilities section, some of the accuracy of the first section seemed to disappear. Many candidates did not import all of the required text. Some made unnecessary changes (eg sweetcorn to sweet corn) and others omitted some of the text and final full stops.

The choice of appropriate graphic was often disappointing, with more than a handful incorrectly selecting the London branch of the Onion Café. Layout of this section often could not be credited. The graphic was often not in an appropriate place, with the relevant text. Often the graphic was placed in the middle of a paragraph, splitting a number of lines of text.

Consistency throughout the activity was generally poor. Although the two main headings were often in a consistent font, the headings were often capitalised differently. There has been a pleasing reduction in the number of candidates using WordArt for these headings. Lack of consistency was also a problem with the sub-headings, where **PHYSICAL EDUCATION** was often left in upper case, with the rest of the sub-headings in sentence case (initial capitals). The body text was given to candidates in different fonts and sizes. A majority made no attempt to make this text consistent.

Some very good layouts were seen, however, and credited where possible even if text wrapping had not been attempted. But, as stated previously, a proportion of candidates did not correctly present their documents as two A5 portrait landscape pages on one A4 sheet. Very few candidates were awarded the final mark for fitness for purpose.

Key areas for improvement

- select a suitable relevant graphic
- use appropriate size and retain proportions for a graphic
- import text by copy and paste, especially retaining punctuation
- format text to a suitable size for its purpose
- wrap text round a graphic
- avoid over-reliance on a spellchecker
- consider consistency of font and style in headings, sub-headings and body text
- create a suitable layout for a specific document
- consider white space in a document
- present pages of a leaflet as two A5 portrait pages
- proof-read text
- consider fitness for purpose

ACTIVITY 4 – USING DATABASE SOFTWARE

Examiners report that there was some improvement in responses for the database activity, although the report still causes difficulty. Few candidates made any attempt at customisation. The final task, which required a primary and secondary sort, was a good discriminator for higher ability candidates. There are still a significant number of candidates who do not enter their details **before** printing and who, therefore, cannot be given credit for these printouts.

Task DB1

This was designed as a relatively straightforward first database activity and a good majority scored full marks. However, a proportion of candidates failed to enter the new record correctly with the most common error being Dignet or Dinget instead of **Digent**. The majority used a correct code for the Fitness activity.

A significant number of candidates produce a screen shot of their tables and results. This often means that they do not show all of the required records and some lost the mark in this task for showing all 31 records on one A4 sheet.

Candidates who did not gain marks for correctly sorting the data generally sorted on FirstName rather than LastName.

Task DB2

The majority of candidates gained both marks for this task, although some only showed five fields and a small percentage appeared not to have attempted a search/query.

Task DB3

Many candidates can produce a report, but few gain full marks.

Although the majority of candidates gave their report a title, these varied considerably in suitability. Some had difficulty in spelling **Biology**, with common errors being Boiolgy or Boilogy. Many still include the task name. Although this is not penalised for this mark point, candidates should be reminded that, as an applied qualification, documents should be made to look "professional".

Most candidates gave the correct records and fields but very few had made any attempt to customise the field names, even though these were quite straightforward in this examination.

Examiners felt that more candidates were able to correctly add their details in the footer area at the bottom of the page (not at the foot of the report).

Few gained the mark for fitness for purpose because of a poor title and/or lack of customisation of field names.

Task DB4

A significant number of candidates did not show the design view of the search/query and were thus restricted to the final mark for this task.

Many candidates gained full credit for the search criteria – but an equal number showed only one criterion. Very few used "OR" rather than "AND".

About equal numbers also showed the required fields only to be printed, but many put LastName and FirstName in an incorrect order.

Candidates using non-Microsoft software (usually Filemaker Pro) often failed to provide sufficient evidence that they had completed the task in accordance with the requirements of searching on two fields but displaying three others.

Task DB5

Higher ability candidates scored well in this task. Others did less well. While the majority found the correct 12 records, some produced two separate searches in order to achieve this and so did not gain any marks for the task.

Where the correct records were credited, candidates generally gained the mark for the primary sort. But only a minority were then able to correctly achieve a secondary sort on the correct field. A common error was to use FirstName for the secondary sort.

The majority of candidates achieving the initial marks were then credited for showing the correct fields.

Key areas for improvement

- correctly add a new record
- show and print all records as required
- sort on a correct field
- use a primary and a secondary sort
- search on one criterion
- search on more than one criterion
- produce a database report with a suitable heading
- customise field names in a database report
- enter details in the footer area of a report
- show and print only the required fields of a table/search

ACTIVITY 5 – USING WORD PROCESSING AND DATABASE SOFTWARE

Responses to this activity were often disappointing. As mentioned above, very many candidates did not use the letterhead as given and examiners are concerned that Centres should encourage the use of past papers, mark schemes, and the Smarts Leisure Park website in order that candidates may remain aware of the current "corporate image" of Smarts.

Candidates do not appear overly confident in the use of mailmerge, but there was an improvement in the number of candidates incorrectly submitting more than one letter for MG2.

Task MG1

The majority of candidates correctly used the letterhead as given but a significant minority made changes, including attempting to move the details from the footer to various places at the top of the page.

The majority attempted to enter a date but this often did not include a year or was the date of the meeting (6 June 2007) rather than the date the candidate sat the examination.

Most were able to add some recipient details, top or bottom left, but there is still a significant minority who copy and paste the database table at the top of the letter. Some candidates placed it top right of the page.

Very many candidates did not include a salutation. Of those who did, a minority incorrectly included the HeadInitial field or omitted the word "Dear".

A surprising number omitted the word **Enc** from the text of the letter. If candidates used the data file as given there should have been no reason to remove this. Some attempted to rearrange the columns with generally incorrect results.

Candidates still struggle with a complimentary close that matches a salutation. An upper case "s" for **sincerely** is frequently given; the "s" is often not given in **Yours**; and the complete spelling of the phrase **Yours sincerely** causes difficulty, eg "Yours sin sanely".

A disappointing number of candidates did not correctly copy **Anders Johansson** as the sender of the letter. Given the length of time the qualification has been in existence, it is also worrying that so many candidates make errors with **Smarts** (often Smartz or Smart's) and **Teenz** (often given as Teens). A significant number also misspelt **Manager** as "Manger".

Examiners also report an increase in the number of candidates adding their own names as the sender of the letter, with a few then "promoting" themselves to a position within the Smarts organisation.

Many candidates were able to use at least two merge fields, although there is still a small number who try to persuade the examiner they are doing so by inserting their own chevrons with a field name. Only a small majority, however, correctly used all the appropriate merge fields with a common error being the omission of spaces between the fields.

The majority of candidates ensured consistent font, style and size but few proof-read and checked their letter to ensure that it was fit for purpose.

Task MG2

Where a candidate had produced an acceptable letter in task MG1 this was usually followed up with a correct printout for MG2. There were some candidates whose letter for this task did not "match" their original printout. This included those candidates who had realised that they had omitted spaces in the recipient's details in MG1 and had then obviously put in the spaces for MG2. Some candidates had keyed in the details, introducing entry errors.

Key areas for improvement

- use a letterhead as given
- produce a business letter with correct components and suitable layout
- enter a correct date in a correct format in a correct position
- correctly enter recipient's details in a suitable position in a business letter
- use merge fields from a given data file for recipient's details
- add a suitable salutation
- use merge fields appropriately for a salutation
- use text as given, retaining additional items such as "Enc"
- add a complimentary close that is consistent with a salutation
- copy details of a sender and his/her position within an organisation
- format a document to consistent font, style and size
- proof-read a document
- check a document for fitness for purpose **before** printing
- use a mailmerge document as a basis for a printed letter
- print one mailmerged letter from a mailmerge document
- Submit only printouts required

5332 – ICT in Organisations

For GCSE Double Awards the skills, knowledge and understanding must be applied in vocationally-related contexts and this will generally include a greater degree of involvement with ICT practice beyond the educational environment (extract from the specification).

June 2007 is the fourth moderation session for both portfolio units – 5332 (ICT in Organisations) and 5333 (ICT in Society). The quality of response has stabilised, although there were still some overall improvements in the quality of the work seen. This is due to a greater understanding of the qualification and increased familiarity with the specification itself. Throughout 2006/7 many centres have undertaken either standard INSET or customised training and this has had a positive impact. Whilst a few candidates did not apply the necessary skills in the vocational context despite research and investigation, the majority had made significant improvements in their ability to apply their knowledge of ICT across both portfolio units at all levels.   There is clear evidence of a greater understanding of the specification and its delivery, both on the part of the teachers and the candidates themselves.

Where Centres have done well:
Where centres have done well, candidates have covered and learnt much about the application of ICT in business and society (especially when combined with their performance in 5331).   These candidates are well deserving of their 2 GCSE equivalent award.   The most successful outcomes were in centres where the philosophy of both vocational and independent work has been applied.   Centres where candidates were encouraged to visit organisations produced more comprehensive portfolios. Candidates who had looked outside their school/college environment and had visited real organisations gained significantly higher marks as long as they concentrated on a single system rather than trying to investigate and document the whole organisation. These candidates accessed the higher mark bands because their work demonstrated a greater understanding of how ICT was used within the functions of the organisational system.   Where candidates chose very narrow or limited systems there was little scope for them to access higher mark bands. In the case of 5333, ICT in Society, it was clear when case studies had been used rather than inviting visiting speakers or allowing candidates to interview their own 'live' adult or special needs person which resulted in more stimulating work and allowed candidates to ask more questions. Most centres have made sound use of the Unit Marking Guides, which when coupled with detailed page number annotations and an indication of any professional judgment applied, have greatly aided the moderation process.   There has also been an increase within the portfolios of signposting of the evidence by the candidates themselves.

Where Centres have not done so well:

Some centres still seem to have little awareness of the grade descriptors found in the specification. These give a general indication of the required standard at grades A, C and F. The skills, knowledge and understanding for this award must be applied in a vocationally related context.   This calls for involvement with ICT beyond the educational environment.   Candidates are expected to show knowledge of ICT terms and definitions; explore, develop and interpret information; use ICT to share, exchange and present work; reflect on how they have used ICT and the impact of ICT in the wider world.   Where centres did not do so well, it is because they have underestimated the demands of the qualification and the 2 GCSE equivalence across grades A*-G. For the first time, there were instances of centres submitting work on

CD, which resulted in moderation problems, since there is no requirement for electronic portfolios.

In 2a, some candidates were limited in some of their responses by their choice of organisation and subsequent restrictions. This meant that opportunities to describe the technology could not be developed, restricting them to lower mark bands. There were fewer cases of candidates choosing an organisation where it was almost impossible to describe a virtually non-existent usage of ICT. There were fewer instances of students basing their investigation on two different organisations for stands 2a and 2b, which in previous series had led to two disparate reports or a comparison of the two; neither of which enabled the student to achieve higher mark bands.

Centres continue to take heed of earlier advice that candidates should be guided to choose either a spreadsheet or database solution and there was little evidence of designing a logo or a range of business documentation, and only one or two websites. This is a marked improvement and increased candidates' chances of securing higher marks.

The key to achieving higher band marks in Unit 3 lies in explanation and evaluation that is based on clear detailed descriptions which show a good understanding of the functions and capabilities of the particular ICT. Some centres gave marks for evaluative statements that did not exist or were too weak. Centres' appreciation of the quality of evaluative comments has continued to improve significantly.

Many centres had not interpreted the components of Unit 3 correctly and had not guided candidates to use actual, specified individuals and groups. There are still some centres, where teaching staff seem to be unaware of the requirements of the syllabus and submitted generic answers on 'IT and candidates' for 3a, 'IT in work' for 3b, 'IT for disabled people' for 3c and 'IT in the community' for 3d. Centres are advised to review the document, which details categories of technology for this unit. In general, strand 3e was more successful when tackled as a discrete component rather than as an integral part of the other four components. It is important that those individuals and groups studied in 3a-3d are linked to the relevant legislation.

The difference between the GCSE in Applied ICT and the GNVQ ICT:
The GCSE in Applied ICT requires candidates to be able to describe the technology, purpose, needs or the function well. Where descriptions were insufficient, there was no firm basis on which to explain, assess or evaluate thus preventing candidates from accessing higher mark bands. Successful candidates will be able to describe the technology clearly, explain how it is used and then analyse or evaluate in the context of the criterion for that component.

The key focus for this unit is **systems**. Candidates are expected to describe clearly the work of the identified organisation in terms of three or four of its main functions or systems, preferably in terms of input, processing and output. They should describe fully how ICT is used in Information, Communication and Functional purposes. The ICT system described in 2b should relate to one of the systems identified in 2a and candidates should consider the five main component groups of hardware (input devices, output devices, processors, ports and cables and storage devices) and software and what they do within the chosen system - descriptions should include technical details of components and explain the purpose of the application software. In some centres, candidates are still evidencing strands 2a and 2b together; unless the particular elements are well signposted, this often causes problems with identifying where the criteria have been met.

Strands 2c and 2d are about creating a complex system for a specific user and purpose. Complex problems will involve the use of more complex processes associated with the chosen software. This may include importing data from another package or customising the software for easy use. Databases should be relational, and include searches, sorts and queries. Further, candidates may include a user interface such as a menu or switchboard and a mail merge facility based on a query. Spreadsheet systems will include complex formulae and functions, absolute cell referencing, look up tables and macros. Throughout the emphasis should be on **'fitness for purpose'**. Strand 2c focuses on the **design** of the system - the scope of the project, the objectives of the proposed system and draft/final sketches of inputs and outputs that are fit for purpose. In addition, as part of the design process, candidates should consider which parts of the system will be tested and how. The focus for 2d is **implementation**. Here candidates should provide full details of how they implemented their designs, how these designs were tested using the plan from 2c, the outcomes of the testing and how they have used the results to modify or improve the initial designs. The evaluation should consider weaknesses as well as strengths of the system and, to access higher mark bands, candidates should document how the system could be improved. The user guide should be detailed enough for an inexperienced user – with instructions how to load the system, add, enter and manipulate data and how to troubleshoot basic problems. The user guide should be about using the system and not the application!

Strand 2a:
Most candidates were able to describe an organisation, identify its main purposes and describe how those purposes used ICT. Some candidates did not achieve the higher mark bands because they were not able to directly link and explain how the use of ICT helped the organisation to achieve its purposes, aims or objectives. Many candidates were able to identify the organisation's purposes, aims or objectives in their introductions, which made it easier for them to evaluate since they could refer back to them when explaining the organisation's use of ICT.

Where candidates investigate an organisation, either as part of a formal group or independently, they should be thoroughly prepared for the visit. This can be done through web based research, letters to the company and brainstorming in the classroom. It was pleasing to see some centres use a range of organisations, expanding the candidates' experiences and allowing the student to focus on one for the purpose of this strand and 2b.

Where centres persisted in choosing their school as the basis for study the evidence lacked detail, as there was simply too little scope in terms of a range of functions. In other cases, those studying other companies gathered the basic information but lacked evidence when it came to the organisation and its purposes, aims or objectives. It is not sufficient to state these alone, they must be linked to the ICT used to perform or support the related functions.

Candidates who just achieved the highest mark band did so on the strength of one evaluative statement only as long as they had given sufficient detail on which to base it. Generally, candidates at centres, which organized visits/guest speakers, were able to describe in greater depth and with insight the technologies used, achieving the higher mark bands because they were able to describe an ICT system fully. Candidates who worked from case studies found it much harder to identify an ICT system and often described a basic system that could have existed anywhere. Fewer candidates used their work experience placement as a basis for this component. Centres are to be complimented for taking this advice on board since the local organisation in which they are placed is not often sufficiently complex to enable them to describe, explain and evaluate a range of functions and technologies.

Candidates who failed to reach the middle mark range usually failed to identify a wide enough range of purpose or did not explain how ICT was used, e.g. they explained the finance function but did not clearly describe how the ICT was used within that function. Candidates who structured their research into Functions (purchasing, sales, finance, distribution, human resources, etc), Information and Communication tended to score well. This approach showed a greater understanding of how ICT was used and how the organisation functioned as a whole.

Where candidates had used the Internet for research into their chosen organisation (whether an actual visit had taken place or case study had been used) there was clear evidence of copying and pasting from the website, but this had not been credited in a reference or bibliography. Evidence from candidates who had not had an opportunity to visit a 'live' organisation showed a lack of understanding.

Strand 2b:
Evidence in this section was again much improved over last year with candidates addressing most key component groups and actually linking them to the purposes within the chosen system. Some candidates had managed to include images of the actual hardware within the organisation and this formed a useful adjunct to their written descriptions. However, in some cases candidates had not identified a single system within the organisation and concentrated solely on the hardware and software of the organisation or discussed the organisation as a whole. There was often a generic list of components, but no detailed information given on their use in the chosen organisation. One of the main reasons why candidates failed to gain high marks was because they had not covered all of the five component groups (input, output, processor, ports/cables and storage) and software. Categorisation of the components almost always achieved higher marks. Ports and cables was the most frequently omitted component; where it was included, candidates showed little knowledge. Still some candidates remain confused about the difference between processors and processing – explaining how the data was processed rather than giving technical details of the actual processor used (its speed, type and so on)! Those missing out a component group did not move beyond the lowest mark band. Higher mark bands required the student to evaluate the extent to which at least one component or some software meet the organisation's purpose. Many candidates found this difficult and relied on descriptions of the component's use rather than exploring its limitations or alternatives. In a few cases, candidates made recommendations about what an organisation could use which is not part of the specification.

Overall Comments for Strands 2c and 2d:
Many candidates produced a wide range of interesting and innovative applications for 2c and 2d. Candidates who used real problems had the edge over many of those using case studies because of the opportunity to clarify the problem. Identification of the inputs, processes and outputs is essential if candidates are to be able to break the proposed solution down into logical steps. There were many more instances of before and after screen shots to substantiate the testing. User Documentation was much improved, although some was simply a restatement of some of the "testing" that had gone on. Evaluations, whilst much improved over last year, varied from peer questionnaires to single sentences. This series, there was an increased range of ideas from centres accompanied by some robust design sketches of both inputs and outputs. However, centres are reminded that they must choose a single mark band within the Unit Marking Guide, which should reflect the independence of the work and the complexity of the solution.

Strand 2c:
Candidates were required to provide some indication of the scope or purpose of the solution with objectives. In order to gain two marks here, the description should be detailed enough for a third party to understand. Objectives were better constructed which made it easier to assess the extent to which their eventual solution met its original purpose

More candidates were able to achieve the highest mark band in these components as a result of their focus on the design elements and the greater choice of solutions based on spreadsheets and databases. Some centres had not fully understood the meaning of independent solution to the problem and there were cases of differentiation occurring only as a result of using a different name for the organisation, business or company for which the system was being created. A few centres continued to rely on the video database example from the teacher guide. Some variations were seen such as DVD database or book database but these were essentially the same design with different content. Centres that had designed their own assignments still gave candidates too much structure by indicating that a database was required or giving too much information about the problem. As a result, candidates were not able to define the scope of the problem themselves and were not able to choose the appropriate software for themselves, thus limiting the candidates to the middle mark band. In some portfolios, there was clear evidence of the use of scaffolding and structured templates to document the proposed solution, especially where candidates had omitted to delete 'instructions'.

Most candidates, who qualified for higher mark bands on independence and complexity, did not achieve all the marks because elements of the design were missing. Some credit was often applied retrospectively from 2d. Candidates submitted copies of tables from databases already created to show table design rather than annotated sketches. This indicated that candidates had implemented first, and then reverted to the design stage! In this section some candidates had included screen shots of the final implemented solution as design evidence, and as such could not be awarded marks for these. Those gaining the highest marks in 2c produced handwritten drafts of input screens and output screens. Some innovative candidates had also used a bitmap application to draw and design their planned screens and indicated processes with handwritten relationship diagrams or examples of formulae to be used. There was a definite improvement in that the design steps were much more detailed and could in many more instances support third party implementation.

Many candidates provided test plans, which ranged from a simple statement of intention to a detailed grid. Often test plans were included only in the implementation section of the project, and not as a separate plan. More candidates appear more able to identify abnormal or extreme data as part of the testing procedure, which is expected at the higher mark band. Most candidates also provided lists of hardware and software, but referred to packages such as Excel or Access rather than a generic type of software application. A few had actually discussed the pros and cons of each software type in terms of their propose solution.

The majority of centres managed to use complex processing and more produced a complex solution. However, some candidates were able to produce a basic spreadsheet or database (with some advanced features incorporated into them) but few of these had any idea as to what they were actually doing or why, which is linked to the lack of detail when describing the scope of the project. There was a lack of evidence (e.g. witness statements within the Unit Marking Guide) that the work had been carried out independently.

Strand 2d:
Most candidates provided evidence of implementation, testing, evaluation and some user information. Marks for implementation related to the objectives outlined in 2c. Where objectives were difficult to identify, candidates lost marks. The better solutions had clear objectives, which were then reflected in the implementation and evaluation. Most candidates' solutions included complex processing. Test plans were not always accompanied by suitable evidence as to whether the test was or was not successful. Fewer candidates attempted a complex solution that they were unable to achieve successfully.

Most candidates undertook some form of testing. Higher marks were reserved for candidates who had made some constructive use of the results. Many candidates achieved the lower marks as they used their test plan as a checklist and did not describe or use the results in any way. Evidence in the form of before and after screen shots has continue to increase and this enabled the candidates to more easily make constructive use of the testing process.

Most candidates evaluated their solutions to some extent. A significant number lost out on higher marks because they evaluated how well they had approached and completed the task rather than evaluated the usability of their system. The better evaluations listed strengths and weaknesses of the system and then indicated areas for improvements with some indication of how these could be effected. Evaluation was more robust – more candidates discussed the strengths and weaknesses but areas for improvement were not valid or fully considered. It was pleasing to see some had evidence from an end-user as to how they regarded the final solution.

User guides continued to improve over last year and some were of very good quality. The best guides were clear and well laid out with a contents page, screen shots of the actual screens and troubleshooting. Fewer user guides focused on how to implement the system, rather than acting as a guide on how to **use** the system. There were still examples of guides, which showed the user how to create the system for themselves and were complicated and not meaningful. Many guides were focused on users of ICT rather than the novice, making them less helpful and instructive.

Where candidates failed to achieve higher marks, it was because not all elements – construction, testing, user guide and evaluation – were completed. Many assumed implementation stages with finished forms and reports but provided no evidence of actual construction to show skills and understanding of the software capability. There was some evidence of good solutions, but the lack of annotation and inadequate testing lost these candidates valuable marks.

General Administration

In most cases, the OPTEMs forms were correctly completed and submitted with the portfolios for moderation. However, where this was not the case, the process became more complicated and lack of clarity significantly impeded the moderation procedure. Centres are reminded that accuracy is essential and that marks annotated on the OPTEMS must match the totals on the moderation grids. There were still some cases this year where candidates had been awarded total marks greater than the maximum available! It was pleasing to see more evidence of internal standardisation within a number of centres; and centres are reminded that this is a requirement!

Only a few centres used neither mark record sheets nor mark profile sheets which meant the moderator had only the overall mark with no indication of breakdown. Where the asterisked sample requested did not include highest and lowest marks, some centres did not send the lowest and highest marks in addition to the ten requested and had to be reminded. There were also instances of asterisked candidate being absent, but a failure on the centre's part to substitute this with another 'similar' portfolio.

Many centres continued to use file folders and plastic wallets despite clear guidance in the portfolio guidance booklet. Centres must read the instructions for submission of portfolios – work must be hole punched and treasury tagged on the left hand side. Centres must not use plastic or card wallets/folders; neither should the work be sent as a collection of separate sheets, since this increases the risk of problems in the moderation process. Coursework for units 2 and 3 should be separated since it is likely that this will be sent to different moderators. Work should be proof read to eliminate obvious mistakes; early drafts and centre writing frames or proforma should be removed (unless part of the evidence in the case of strands 2c and 2d) and submitted in component order. All pages should be identified with a header or footer reflecting the candidate name and pages clearly numbered. Page numbers should be annotated on the Unit Marking Guides to assist the moderator in finding evidence rewarded by the centre. Clear evidencing on the portfolio will enable the moderator to agree the centre's decision. Centres are advised that any use of professional judgement should be documented in the space provided on the Unit Marking Guides which may be found on the website. These guides enable an holistic view of the evidence and assist both centre and moderator in agreeing marks.

5333 – ICT And Society

Evidence from most strands of Unit 3 has improved over the past year but there are still concerns over 3c – The impact of ICT on a person with special/particular needs and 3d – The impact of ICT on your local community. For 3c a few centres are still using case studies, Stephen Hawking again being the favourite and these centres are scoring lower than those who brought in a speaker or who encouraged students to investigate their own choice of person. A few centres are using case studies of people who have passed away, Christopher Reeve and even Walt Disney are two of these. A few centres are still providing reports on a range of special/particular needs instead of telling the students to concentrate on one although the number of centres doing this are far less than before.

For strand 3d although many centres encouraged their students to research their local community the reports did not state the needs of the community and so were restricted to MB1 or 2. Several centres directed their candidates towards a single section of the community thus limiting the potential for a wide use of ICT. One or two centres just wrote about 'a community' and did not identify their own community. This limited them to marks from mark band 1

For strand 3a, Students should have explained, based on a substantial description, how they use ICT for personal, social and work-related purposes both at home and at school. The explanatory statement must be based on a description that is detailed enough for the reader to have a clear idea of how the ICT might be used, its capabilities and be linked to the student's own needs.

Strand 3b requires the adult and effects on their working style to be clearly identified. Two or more categories of technology should be identified (e.g. Internet, communication, entertainment, mobile ICT (laptop), etc.). Again, explanatory statements based on a clear description of the technology for personal, social, work related and effects on working style should be included.

Strand 3c relies on the identification of the special needs person, for the ICT to be related to their needs – i.e. what they actually use – and explanatory statements linked to those needs.

For Strand 3d the local community must be clearly identified and at least two categories of technology explained in detail and in terms of how they meet the needs of the community.

Strand 3e concerns legislation. The student was not required to submit this as a separate strand, but could include reference to relevant legislation within each of the preceding four strands. However, the most successful portfolios separated the legislation from the remainder of the evidence. In order to access the top of mark band 2, students must link at least one item of legislation to each of the individuals and groups within strands a through d. The explanatory statement accompanying the detail of the legislation should describe not only the legislation, but its impact on the people studied.

A high level candidates portfolio requires good evaluative statements that assess the impact of the ICT or legislation, how far it meets those identified needs and discusses possible problems or solutions according to the evaluation.

Less able candidates are unlikely to include all the strands in detail – in fact some strands may be missing altogether. The portfolio may show evidence of writing frames and other guidance and also lack description of the technology used . Lists of the technology/legislation used may be provided rather than descriptions.

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Statistics

5331	Max	*	A	B	C	D	E	F	G	U
Raw Mark	100	95	83	71	59	51	43	36	29	
UMS	100	90	80	70	60	50	40	30	20	

5332	Max	*	A	B	C	D	E	F	G	U
Raw Mark	58	57	49	40	32	26	20	15	10	
UMS	100	90	80	70	60	50	40	30	20	

5333	Max	*	A	B	C	D	E	F	G	U
Raw Mark	58	57	51	43	36	29	22	16	10	
UMS	100	90	80	70	60	50	40	30	20	