

Examiners' Report Summer 2008

GCSE

GCSE Applied ICT (2331)

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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 2008 is the fifth moderation session for both portfolio units - 5332 (ICT in Organisations) and 5333 (ICT in Society). It is pleasing to see that the quality of response has stabilised. Whilst a few candidates did not apply the necessary skills in the vocational context despite research and investigation, the majority had produced good quality evidence of their ability to apply their knowledge of ICT across both portfolio units at all levels. There is sound evidence of a good 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 independently 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 often 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. Centres, in general, continue to make 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.

Areas for improvement:

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.

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. A few centres allowed candidates to use their work experience placements as a basis for this strand, but this resulted in very limited success, since most work experience placements are not a suitable basis for the level of investigation and study required by the qualification.

Centres continue to heed earlier advice that candidates should be guided to choose either a spreadsheet or database solution. This 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.

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.

Principal Examiners Report - Summer 2008

5331: ICT TOOLS AND APPLICATIONS

During this session approximately 10,000 candidates were entered for the examination which forms Unit 1 of this specification. Responses varied considerably and covered all grades. The examination is now in its 10th series. Many of the issues which were highlighted in previous series are still evident though there are some which are now less common.

The main issues to note are that candidates lose a large number of marks because of the failure to pay attention to detail.

For example

- 10 marks on this paper were available to candidates able to accurately copy text from the examination paper to the appropriate document. Many candidates lost marks because they failed to check the spelling, the use of capitals and/or the correct punctuation.
- 14 marks on the paper this series were for correct formulae in the spreadsheet tasks. Many candidates lost these marks because they failed to display the formulae in their printouts - though the evidence presented in the printouts suggested that they had obtained the correct values.
- Several candidates lost marks where screenshot evidence was produced. This in itself was generally not penalised but several of the screenshots were cropped so that vital information was not present or the image was too small to read clearly. In database tables and queries, copying and pasting the data into a word document is a more effective way of submitting the response.
- The loss of marks due to failure to type the candidate details on documents (particularly in the database tasks) before printing is less of an issue now than it has been in earlier series of this examination.

Candidates at many centres seem to be poorly instructed in the correct collation of the printouts. Sometimes all the candidates at a centre had pages upside down, back to front or effectively sealed into the folded cover sheet by knotted treasury tags through both the front and the back of the cover sheet.

There is continuing evidence that the applied nature of the qualification is not fully understood by the candidates and many fail to gain fitness for purpose marks. Generally database and spreadsheet tasks, which tend to be more mechanical, gain higher marks than the tasks which require effective business communication such as word processed documents and database reports. Examiners also report that candidates often do not seem able to reproduce standard layouts for business documents.

There were fewer difficulties reported to the Board of problems associated with the data files.

Software

The use of Microsoft products continues to dominate the work seen by examiners. Even so, centres rarely follow the instruction to include within the envelope of scripts details of the software used during the examination. The issues raised by centres in calls to the examination board were often due to a lack of understanding that the data files are produced in two versions - one in "Microsoft Office 97" and one in "non-Microsoft Office 97". Centres will often have to collate the set of data files from both versions. For example, conversion of the database files to the appropriate version of Access.

The use of software tools such as wizards, templates and the use of spelling and grammar checkers is, of course, legitimate but candidates often place too great a reliance on the output of such tools and do not always pay attention to proof reading. Examples in this series included the rebranding of the magazine from SmartIssues to Smarts Issues or SmartIssues. Candidates need to be aware that in a business environment, names do not always appear in the dictionary and that software guidance about misspellings may be inaccurate. Customisation of the output of templates and wizards is rarely done effectively by candidates. This leaves documents poorly presented in many cases.

Support Materials

The Smarts Leisure Park continues to be the basis of the work in this examination. The Smarts website (www.smartsleisure.co.uk) continues to be updated each year and often provides useful information about the background to the organisation.

In addition, the Activity Booklet and Candidate Kit are still available and provide useful guidance for candidates about the examination and include activities and revision check lists.

Secure Environment

Examiners continue to report a few cases where there is a suspicion that candidates have not worked in a secure environment. A few cases have been reported where the cover sheet for one candidate included work from other candidates.

One or two examiners reported that some candidates appeared to have access to data files from previous examination series, for example logos which were changed up to two years ago. Centres are reminded that the candidates should only have access to the software and the current data files, that a separate user area must be set up for use solely during the examination and that candidates should not have access to this area except during when they are sitting the examination.

Labelling and Printing

There were fewer enquiries about this aspect of the examination during this series. However, it still remains the case that there are some centres where the majority of candidates at the centre had failed to gain marks because they had not included typed candidate details on tasks. Candidates perhaps need to be reminded that tasks which are not correctly labelled before printing will gain zero marks. Handwritten details are not accepted in this qualification. Experience has shown that if candidates are encouraged to label all their documents before printing in the normal classroom environment then this is rarely an issue in the examination.

The instructions are available on the Edexcel website and within the Instructions for Conduct of the Examination ((ICE) document. In addition, the paper includes the

instruction “**You MUST enter your name, candidate number and centre number BEFORE PRINTING**” within each task.

Occasionally examiners are raising concerns that some centres have provided candidates with paper that is 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 applications.

Practice for the Examination

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

Submission of Work

It is sometimes felt by examiners that the message about correct submission of work is not being passed on to the invigilators who are giving incorrect guidance to the candidates.

Some examiners also reported that some centres had not submitted the candidates’ work in the attendance register order and that occasionally a correctly completed attendance register itself was not included with the scripts. One examiner reported that it had taken him over 4 hours to sort the 160 scripts which had not been correctly packaged by the centre.

Data Files and Software

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 in the weeks **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. The data files should **not** be discussed with candidates prior to the examination. 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 comply with the first requirement.

Data files and Instructions for Centres for the January 2009 series will be available for registered centres to download from the Edexcel website in December 2008.

ACTIVITY 1 - USING DESKTOP PUBLISHING/WORD PROCESSING SOFTWARE

Candidates were required to produce a poster from a given text file and a file of graphics.

Many candidates had used the given text file and added appropriate graphics. However, examiners reported that many candidates had changed the name of the magazine from SmartIssues to Smarts Issues. Others had inappropriately changed the capitalisation of some of the text. Marks were occasionally lost because candidates had not highlighted the important information. Most gained the mark for highlighting the title "Writers Wanted!" but did not highlight the magazine title or the contact details. Most candidates were able to pick out graphics from the selected file which illustrated the topics of the questions presented in the poster. Some candidates lost marks due to inappropriate changes to the size or shape of the graphics.

Layout was often an issue for candidates with text and graphics not presented well. Often the effect was either cluttered or unclear. Occasionally the whole poster covered only the top half of the page.

Key areas for improvement

- combine text and graphics effectively with appropriate text wrapping.
- sensible use of spelling and grammar checkers
- choosing appropriate graphics for a task
- alignment of text
- appropriate use of white space
- appropriate highlighting of important information
- checking fitness for purpose

ACTIVITY 2 - USING DATABASE SOFTWARE

There continues to be an improvement in the candidates' responses to database tasks although customisation still causes difficulty and few candidates gain marks for this. There is a decreasing number of candidates who lose marks due to failure to include candidate details before printing. The number who add their details into a record or as separate fields also seems to be decreasing. The use of "copy and paste" into a

word processed document is an increasingly popular way of presenting tables and queries.

Task DB1

This was designed to be a relatively straightforward database task of entering a new record then sorting the table into ascending order. The candidates were then required to print out the table. Most candidates gained all the marks on this task. However there were a number of candidates who failed to copy the given data accurately into the new record. This was notably in the Title field where examples included "Night Nature Training", "Night Nature Trialling" and worryingly "Nightmare Nature Trailing". The other common error for those who failed to gain full marks was to use KC rather than TC in the SmartsDept field. Occasionally marks were lost where candidates had not used the correct capitalisation of the text.

Task DB2

Candidates were required to search the table for records where the NoWords value was 300 or greater. Many candidates lost marks because they failed to use both > and = and so ended up with either 2 or 3 records instead of the expected 5. Most candidates gained the mark for showing all 6 fields. Some screenshots produced, however, had been cropped so much that the final column was truncated - this meant that this mark was lost.

Task DB3

Candidates continue to score well on the mechanical parts of such tasks. They are able to create a report with the correct fields and records. However they often fail to produce a suitable title for the report. Those who were most successful used the question paper to guide them. Candidates also fail to customise the field names for the report and present it suitable for purpose. For example, field names such as SmartsDept and NoWords are not appropriate for a report. Few candidates gained the final mark for checking that the report was suitably presented. Even those candidates who had gained the other marks for this task often neglected to check that the layout was appropriate with columns not adequately separated.

Task DB4

In task DB4 candidates were asked to do a simple search on two related tables. Most candidates appeared able to use the linked tables but produced all the records rather than just the four required in the task. Several candidates lost the final marks because they used a screenshot which had been cropped and so did not demonstrate that only the four required fields had been selected for printing.

Task DB5

In this task candidates were required to create a new table following a specification given in the examination paper. Most candidates scored the majority of the marks for this task. Those that failed to gain full marks generally lost them for inaccuracies in copying the field names from the examination paper. Several candidates lost marks because their screenshot did not show the primary key because the candidate had cropped the image. It was pleasing to note the increasing number of candidates who produced a screen shot which had been arranged so that the text was easily readable. Most candidates were able to reproduce the input mask accurately though some failed to select the MobilePhone field and so did not show the input mask in the screenshot.

Task DB6

Candidates were required to create the relationship between the tables ADVERTISER and ADVERTBOOKING. Most candidates showed a relationship between the tables but failed to correctly link the correct fields (AdvertiserRef) in both tables. A minority of candidates actually showed the 1-to-many relationship between these fields.

Task DB7

In this task candidates were asked to enter data into the two tables ADVERTISER and ADVERTBOOKING, then produce a query which used both tables. Few candidates managed many marks on this task. Several included too many fields in the query - repeating the AdvertiserRef field from both tables. Many candidates managed to complete the query correctly but lost marks due to inaccuracies in copying the data.

This was usually the missing “s” on Jacobs and Williams or capitalising the “p” in page.

Key areas for improvement

- sorting tables of data to alphabetic and reverse alphabetic order.
- use of codes to replace longer text entries
- correctly add a new record using data as given
- show and print all records as required
- search on one criterion using the correct combination of comparison operators (>, = and <)
- search on related tables
- produce a database table design using input masks and primary keys
- customise field names in a database report
- create relationships between tables
- show and print only the required fields of a table/search

ACTIVITY 3 - USING WORD PROCESSING SOFTWARE

Candidates were provided with a list of items for an agenda and were asked to produce the agenda for a meeting in the future. Again, it seems that the majority of candidates failed to score full marks on this task because of a failure to pay attention to detail. The production of an agenda is a standard task in a business environment and is named in the specification. Even though similar tasks have appeared regularly in this examination, the layout and structure does not seem to be well completed by candidates. The main points for loss of marks were the inability to provide a suitable title for the document. Usually it is possible to get an idea of what is required from the introduction to the task. Here candidates were informed that the agenda was for a meeting to discuss the launch of SmartsIssues yet titles provided by candidates rarely mentioned either of the words “launch” or “SmartsIssues”. Many candidates did not include the meeting details (date, time and place) and failed to realise that the order of items given to them was not correct even though they were instructed to put the items into a sensible order. Some candidates failed to number the items consistently and so lost the mark for this task.

Key areas for improvement

- be fully aware of all types of business documents including the use of an agenda
- correctly copy information, especially names, into a document
- 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 4 - USING SPREADSHEET SOFTWARE

Those many candidates who completed this task generally gained high marks. The spreadsheet provided contained details of the payments for adverts to be included within the SmartIssues magazine. Candidates were asked to produce some IF function statements and do some adding up of the figures.

Task SP1

Candidates were asked to insert a heading into cell A1 and format it in a given way. Most candidates gained the marks for entering the title in the correct location and for the formatting of the label. However a large number of candidates failed to copy the title accurately.

Task SP2

In this task candidates had to insert a label, produce two formulas and display the spreadsheet in formula view without truncating data or formulas. Many candidates would have gained the marks for the formulas but failed to receive them because they had not displayed the spreadsheet in formula view. That they were capable of displaying formulae was often demonstrated by their responses to later tasks. Several examiners reported that fewer candidates than usual had used less efficient formulas which did not use the SUM function. Many of these candidates had formulae of the form =D4+D5+D6+D7+D8+D9. Some candidates lost marks because in using the

autosum function they had not excluded the empty cells in D10 and E10. Examiners reported that some candidates lost marks due to inaccuracies in copying the label "Totals:". These candidates had either used lower case, missed off the "s" or missed off the colon.

Task SP3

An IF function was required in this task. The use of this function is increasingly well completed by candidates. Most candidates who showed formulae gained high marks in this task. However many were then let down by errors in copying the label "Paid in Full?" from the examination paper. Variations included "Pain in Full"

Task SP4

This task required another IF function which included the use of a blank cell as one of the responses. This has appeared several times in recent series, but still seems to cause many candidates a problem. Many left a gap indicated by two commas which would produce the response of either TRUE or FALSE rather than a blank cell. Again several candidates lost marks for not copying text accurately from the question paper.

Task SP5

For this task, candidates were required to delete a column, insert two new rows, enter a new label and print a section of the spreadsheet. Many candidates deleted the data in the column and not the whole column. Most were able to insert the new rows correctly. Examiners reported that many candidates failed to print just the required cells.

Task SP6

Candidates were required to copy the labels from the first few rows of the spreadsheet used previously in SP1 to SP5 to a new spreadsheet changing one of the labels. Most candidates managed to copy the first five rows but only copied the first five columns omitting the final column. Many candidates failed to format the width of the columns so that the labels were not unnecessarily split.

Key areas for improvement

- correctly copy and enter headings and labels
- format labels consistently using capitalisation, bold and font size appropriately
- be aware of the need for consistency of capitalisation in labels and headings
- correctly enter functions and formulae
- create efficient formulae
- print in formula view and data view
- change page orientation
- ensure all necessary columns are printed on one page
- enter given data into correct cells
- change row heights and column widths to display labels and data effectively
- create an IF function including correct criterion and messages
- print selected cell ranges on one page
- show and/or hide gridlines and row and column headers

ACTIVITY 5 - USING WORD PROCESSING/DATABASE SOFTWARE

The final activity for this paper was to use a prepared letter to create a mail merged document adding standard features of a business letter. The candidates were then required to print a copy of the document showing the fields and one copy of the merged document.

Task MG1

Most candidates gained credit for using the given template letter and inserting the correct date in a suitable location at the top of the page below the letterhead. Several candidates did lose the mark for using an incorrectly formatted date. A larger number of candidates failed to place the recipient's address in the appropriate place at the left of the page. A «greeting line» in the greeting was often misused and several examples of "Dear Dear Jake Bowman" were seen.

Many candidates seemed not to be aware of the correct convention for closing a formal business letter with "Yours sincerely" or "Yours faithfully" depending on the

greeting line. Many candidates did not include Jane's surname in their closure and there were several misspellings of "SmartsIssues". 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.

Merge field marks were often lost due to a failure to check for correct spacing and/or removal of too little or too much of the place holders in the original files. Examiners reported that many of the candidates did not check for consistency of the fonts used in the document and that very few candidates gained full marks due to a lack of proof reading of the document.

Task MG2

One copy of the merged document was required. Some examiners reported that those candidates who completed this task generally did provide only one copy of the letter. However several noted that candidates lost marks because they had made changes to the document from the previous task. This was penalised because the purpose of mail merging is to remove the need for changing of individual letters. Candidates would be advised to check carefully the master letter (including previewing the result of the merge) and make changes to the master document before they produce the final merged letter.

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
- 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 mail merge document as a basis for a printed letter
- print one mail merged letter from a mail merge document
- submit only printouts required

Principal Moderator Report - Summer 2008

5332 - ICT in Organisations

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 their function 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 ease of use. Databases should be relational, and include searches, sorts and queries (on multiple fields with multiple criteria for the higher mark bands). 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, documenting this in a test plan. 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 stated 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** of them for the purpose of this strand and strand 2b. Some organisations chosen did not include a suitable range of functions and ICT, e.g. a nightclub.

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 it could be based. 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. It was pleasing to note that 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:

In this component, candidates addressed most key component groups and actually linked them to the purposes within the chosen system. However, this was not always the case. 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, e.g. where, when and by whom and how this linked to the objectives. 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. 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. This is not a pick and mix option!

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 and aided the candidate in identifying associated performance indicators.

As a result of their focus on the design elements and the greater choice of solutions based on spreadsheets and databases, some candidates were able to achieve the highest mark band in these components. 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. Fewer centres relied on the video database example from the teacher guide. 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. Candidates had put more effort into the design steps, in that these were 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. Candidates still need to develop their ability 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 enabled the candidates to 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 evaluating 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 achieved. Evaluation was sometimes robust - with candidates discussing 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.

Some user guides 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, 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.

Principal Moderator Report - Summer 2008

5333 - ICT in Society

This unit is about ICT in Society and requires students to look at how ICT is used in the wider world by adults, those with special or particular needs and communities as well as themselves. The unit requires an understanding of the legislation surrounding the use of ICT, how does it protect people and what must they do to comply with the law. Substantial descriptions of the ICT used are essential if students are to progress beyond explanatory to evaluative statements.

For strand 3a, students should explain 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, iPod), etc.) with explanatory statements based on a clear description of the technology for personal, social, work related and effects on working style. 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. In the fourth strand, the local community must be clearly identified with some background given to clarify the context and at least two categories of technology explained in detail and in terms of how they meet the needs of the community. The fifth strand concerns legislation. This does not need to be submitted as a separate strand, so students 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.

Strand 3a:

Many students gained their highest marks on this component. Most centres were on track with the range of technologies but descriptions lacked detail when it came to

the evaluative comments. Some centres were clear with the explanatory statements but some just listed the technologies and what they used them for, e.g. 'mobile phone to text my friends'. However, many were able to identify the technologies they used and describe how they used them and how they met their needs. Some students extended this by evaluating at least one technology to reach the higher mark band. Some centres included tasks set for students to explain technologies they were unlikely to have experienced which led to the students simply describing the technologies. Where students wrote in the third person, it was sometimes difficult to determine if they had actually used the technology.

Students who did not reach the higher mark bands usually did so either as a result of weak descriptions or because they did not cover personal, social and work-related uses of ICT. Further, these students could only achieve the lowest mark band because the technology was not linked to the way they used the technologies or how it met their own needs. Where students did not achieve high marks this was either due to evaluative statements that did not develop explanations or candidates choosing inappropriate technologies such as toasters or alarm clocks!

Strand 3b:

Many candidates lost marks because they failed to identify an individual and as such were placed in the lowest mark band. The same problems of inappropriate technologies from 3a occurred in this component also. A significant number of candidates failed to identify the effect on working style with regard to the adult. Although most students were able to identify and explain the technologies of their adult in employment, they had not been able to gain sufficient information (or use that information) to evaluate how well the technology met the adult's needs in a personal, social and work context. Several students gave advice on how other technologies would improve working conditions/performance for the adult for which they could not be awarded any marks. Often students identified working style but briefly and with little evaluation. Evidence included cursory comments about e-mail being faster than post, etc. Some centres used the same adult - the teacher - whereas others used a case study rather than a 'real' person. There was little opportunity to evaluate where the technologies had not been fully described first. Some candidates did not refer to home use investigating only the work environment, which meant they could not achieve marks in the higher bands. In centres where

candidates interviewed an adult of their own choice they gained far more of an insight into the adult's perception of ICT and its effect on their working style, and were able to write a much fuller and a more reasoned report

There are fewer cases where candidates did not specify an actual adult, writing about adults in general or one particular profession (usually teachers) in general. Although, some candidates started off with a specified adult but then described technologies used by the adult's organisation with no indication as to whether their adult used that particular technology. Candidates who did not link specified adult with technology used by them did not move out of the lowest mark band. Ignoring the effect on working style caused many candidates to lose marks, because they had ignored it or their adults had been badly chosen - especially when the candidate chose a younger person to study.

Strand 3c:

This was the weakest component for which several students achieved no marks because they generalized about people with learning difficulties. It was obvious that they had not actually studied an individual or talked to them. Where centres had used case studies (although there were fewer instances, Stephen Hawkins was still used), students fared better. However, students from centres that had organized visits to centres for the disabled or who had invited a speaker into their centre, had obviously gained a good understanding of the different technologies used and produced some good work. In general, the use of case studies did not allow the candidates enough scope to evaluate the extent to which technologies met the special needs of the identified individual since they did not have the benefit of asking questions of the person and so get "real" information of what the technology could achieve and benefit the user.

Centres must ensure that the technology studied is assistive technology and not simply the standard technology used by anyone. The focus must be on technology designed specifically to help someone with special or particular needs - visual impairment, limited mobility, hearing impairment and so on.

Strand 3d:

Most students were able to identify a community, with most identifying the community's technological needs. Overall, candidates did much better at describing technologies used by the community and measuring how far they met community needs. Candidates still need to develop their evaluative skills! Most marks were gained where the community needs were identified and the student then went on to describe and evaluate the way technologies meet those needs. These were usually Internet access at libraries/cyber cafes, CCTV or other controls, community websites and transport. Where candidates were briefed on the definition of a community and were encouraged to go out and look around them, the evidence was well presented and meaningful.

Some students described technologies that were not available to the whole community such as Internet at home or described technologies that met the needs of the organisation in the community, such as bar code readers in shops, but not the needs of the community in general.

Some students had chosen a community organisation such as football team or a club. Although this is acceptable, students found it more difficult to describe and evaluate how the technologies met the needs of the community organisation. Often the range of technologies was not sufficient. In some cases the community was too loosely defined where, for example, tourist centres in three towns were compared. Many students did not link their explanatory statements to the needs of the community and limiting themselves to the lowest mark band. Unfortunately, many candidates chose a library as their community and so limited their choice of available technologies. Where candidates tended to concentrate purely on one establishment within the community such as an Internet Cafe, there was a tendency to evaluate how well that establishment catered for its customers rather than evaluating the technology used within the community at large. This is also true of the few portfolios which included a supermarket checkout system as part of the community technology. Candidates who focused solely on a community website limited themselves to one category of technology.

Strand 3e:

Where candidates did not achieve high marks in this component this was due to not relating the legislation identified to the people in the previous components. Most students gained at least the top of the lowest mark band in this component but middle and top band work was very rare. Most students could describe four acts but this alone only achieved the lowest mark band regardless of how good the description was or how well they evaluated the success of the acts in general.

Some students did relate the legislation to at least one individual (usually themselves) but did not cover it specifically for each individual and group, community and special needs were often omitted. To achieve the middle mark band, students had to directly relate at least one piece of legislation to each of their named individuals and their group. Sometimes this relationship was too general and students talked about adults in employment in general rather than their specific adult.

There was an increase this series in the number of students who described legislation that was not connected with the misuse of ICT and so were not able to gain marks for those components of their report. For example, the disability Discrimination Act is not appropriate within the specification.

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 one or two 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 proformae 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.

Grade Boundaries

5331	Total	A*	A	B	C	D	E	F	G
Raw Mark	100	97	85	73	61	52	44	36	28
UMS	100	90	80	70	60	50	40	30	20

5332	Total	A*	A	B	C	D	E	F	G
Raw Mark	58	57	50	41	33	27	21	16	11
UMS	100	90	80	70	60	50	40	30	20

5333	Total	A*	A	B	C	D	E	F	G
Raw Mark	58	57	52	44	37	30	23	17	11
UMS	100	90	80	70	60	50	40	30	20

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