Contents pages

PRINCIPAL EXAMINER'S REPORT FOR UNIT 5331 – ICT TOOLS AND APLICATIONS

General

This was the third time that the externally-assessed unit of this modular qualification was examined, with numbers increasing to over 20,000.

Significant areas of general improvement include the ability to import from the data files, to label documents before printing and to collate printouts in the correct order.

There was little correlation between achievement in different activities for some candidates indicating variable degrees of preparation within the centre. It was felt that there were again some whose competence in some areas indicated potential that might be realised in a later examination.

Application of skills

Many candidates who can demonstrate competence in various skill areas continue to lose the marks that can be awarded for the application of those skills within given vocational contexts.

It is again worth repeating this paragraph from the report for Summer 2003:

The specification states *'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'.*

Marks were frequently lost because documents did not 'meet their intended purpose' and were not 'appropriate for their target audience'.

In this examination, the agenda, database report, presentation and word-processed report were frequently unsuitable for use within the given context. There was often little evidence of design considerations, or of checking/testing output. Many candidates were unable to include given graphics and/or to re-size them appropriately without distorting proportions.

In order to maximise achievement, candidates must have evaluated a range of business documents and be able to incorporate relevant features into documents of their own (see page 15 of the specification, particularly 'Developing business documents').

The Activity Booklet and associated website are integral parts of the unit, providing opportunities for candidates to familiarise themselves with the scenario, to explore all aspects of the specification and in particular to practise applying ICT skills to the context by producing documents that are fit for purpose.

For the next series, candidates will have the benefit of three past papers to provide further examples of the types of document required. In addition, a revised version of the Activity Booklet will be available in the Autumn and there is a Candidate Pack of revision materials available. Centres should also make candidates aware that the Smarts Leisure website is updated from time to time and that they should check it regularly for expansions to the scenario. As the range of skills covered varies from series to series, centres are advised to read the Chief Examiner's Report for preceding series in conjunction with the related papers in order to cover as many issues as possible.

Time Management

The examination is un-tiered and designed to test all abilities, with each activity being generally progressive. Although there were still some candidates for whom time

management was a problem, there was much evidence of improvement with most candidates moving on to the next activity, rather than struggling with later tasks in the previous one. However, candidates should be reminded to check later tasks for any possible marks before moving on to the next activity, as there will sometimes be some relatively easy marks available at the beginning of tasks. The specimen paper and past papers can, of course, be used to practise these techniques if sat under examination conditions.

Proofreading and fitness for purpose

There were many instances where candidates had clearly not checked the printouts for obvious errors - incorrectly copied data, truncated cells, inconsistent fonts, etc. Many could have gained more marks by carefully checking through each step of each task.

Students must use wizards with care. There was a tendency to use wizards to create reports and slides without customisation, resulting in inappropriate layout or content.

Fewer candidates are now attempting to improve documents by adding text of their own and are thereby reducing spelling and grammar errors. Some continue to use Word art inappropriately.

Many students would have improved their level of achievement had they re-read the task and checked that they had covered each point, using the check boxes provided for this purpose on the question paper.

Labelling printouts

In the light of experience and valuable feedback from centres, definitive instructions were issued for the labelling of printouts for this series - in particular that **every printout MUST have the candidate's name, number, centre number and task name entered before printing.** Instructions relating to the implementation of this requirement featured on the website, in the ICE document, in hard copy to centres and in the Candidate Pack. As a result, most candidates labelled all printouts before printing, ownership was clear and marks could be awarded. It was, however, evident that some centres had not prepared their candidates, particularly for the database tasks. **All centres must refer to the ICE document for the January 2005 series and to the document 'Instructions for labelling of printouts'** for further information. Any printout not clearly identified in this way will NOT be marked and it is vital that candidates practise the required skills for each software type.

While identification was improved, many more candidates than previously omitted the task name from their labelling. Correct labelling by candidates ensures that examiners can give credit wherever possible.

For reference, the Instructions for Labelling of Printouts in January 2005 are shown in **Appendix A**

Printing

Most candidates are now printing directly from the software in use for the activity unless otherwise instructed. Some produced inappropriate screen shots with illegible or truncated content. Candidates must be prepared to produce appropriate screen shots when requested but should otherwise print directly from the software.

Collation

Presentation of candidates work was generally of a much higher standard and this was appreciated by examiners. Most candidates collated their printouts in the correct order, (task order within activity order) and attached their work to the cover sheet with a treasury tag.

However, many did not attach the printouts as instructed on page 2 of the cover sheet. To assist the examiners, the printouts should be printed side up, in task order within activity order, starting with Activity 1, task 1. The printouts should be punched in the top left corner (face up) and attached to page 2 of the cover sheet through the pre-punched hole (it is NOT necessary to punch any additional holes in the cover sheet). This enables examiners to use the marking grid in the most efficient way and helps to ensure that printouts gain the credit they deserve even if they are not labelled with the correct task name. Many candidates placed the printouts face down and a significant number punched additional holes in the cover sheet and used two tags, often including the back cover so that the script could not be opened.

There will be a similar cover sheet for the next examination and further instructions will be included in the *Instructions for the Conduct of the Examination (ICE)* for January 2005. Please ensure that candidates are equipped with a **short** treasury tag and that they are able to submit ordered printouts attached as specified.

An example of this is shown in **Appendix C**

The **Instructions for the Conduct of the Examination (ICE)** document is **MANDATORY reading** for all centres, as these instructions supplement the JCGQ Instructions for the Conduct of Examinations and **MUST** be adhered to. The document contains information concerning the preparation of data files as well as administration of the examination itself. This will be published on the Edexcel website in early September.

Data files

The vast majority of candidates were able to access the given data files. Data files must be downloaded or created prior to the examination and stored in appropriate formats in the candidates' user areas. In some instances, centres failed to check that the file formats were readable using the available software. Some centres re-created the files from scratch and in doing so introduced errors. File content must be exactly as given. Some centres did not attempt to set up the user areas until the week of the exam causing difficulty if they met a problem.

Centres were asked to submit copies of the datafiles as given to candidates if they did not use the given files without alteration but most did not comply with this requirement.

All centres were asked to state which software candidates were using, but few did so. These instructions were part of the ICE document and therefore mandatory. Centres are again reminded to ensure that they comply with all requirements.

Data files for January 2005 will be published on **13th December 2004.**

ACTIVITY 1 – USING WORD PROCESSING SOFTWARE

This activity, and activity 5, indicated that many candidates did not have a grasp of business documentation.

WP1 – Agenda

Few candidates scored full marks on this relatively straightforward task. Only a minority managed to score significantly on the Agenda order component with most clearly having very little idea as to what was required.

Some continued to use Word art to make either the company name or the title stand out (even though the instructions stated 'no Word art' for the title). Centres should continue to address the use of Word art and also the use of a "suitable" font for a business document.

Many lost marks by putting the title in the wrong place. Most moved the logo up the page but many distorted the image when resizing or chose an inappropriate size or position. Most students understood the term left-align, although some successfully aligned the information but not to the left.

Most students managed a consistent numbered list for at least 8 items but many left "Report by Joe McCrae" out of the numbered list, adding it elsewhere in the document. Few candidates were able to demonstrate knowledge of standard conventions for the order of an agenda.

Use of the spell checker occasionally resulted in the incorrect choice from available options e.g. "Minuets" and "Boredom". A few candidates attempted to type in their own corrections to the spelling, but overall very few candidates made inappropriate changes to the document. It was pleasing to note that the vast majority successfully added their candidate details in the footer (or header) area of the document.

Key areas for improvement

- Retain proportions of graphics when resizing

- Select appropriate sizes for graphics

- Understand and apply formatting terms such as alignment

- Import text from data files rather than key in to avoid data entry errors

- Incorporate knowledge of standard components and features of business documents

- Check the accuracy (spelling, grammar) of any text that is incorporated into documents

- Consider balance and/or use of white space

- Before and after printing, check that the 'product' is fit for purpose

ACTIVITY 2 – USING DATABASE SOFTWARE

The quality of the database work continues to improve compared to previous exam series. There was also a marked improvement in time management, with students moving on appropriately rather than wasting time on tasks beyond their skills. Very few attempted to reconstruct output by entering expected results into a word processed table.

A number of candidates lost marks because they failed to print their details on their work, suggesting that the labelling instructions had not been observed by some centres. Some candidates entered their details as an additional record in DB1 and went on to include this in all subsequent results. In view of the changes to labelling instructions, examiners were instructed to ignore this for the present series. However, candidates must be able to use a valid method for labelling in future.

There is an over-reliance upon the use of wizards to execute a task and marks were lost by the candidates' inability to customise and improve the design of an output, eg on the form in DB6. Lack of attention to detail (spelling errors), and the understanding of the function of a particular output, eg report, adversely affected the quality of output.

Where screen shots of designs are required, candidates who do not use Access should be prepared to produce more than one screen shot if the software they are using does not allow them to display all the required features in one view.

DB1 – This was well attempted by most candidates, although a surprising number were not able to put the table in alphabetical order of surname. Candidates should be encouraged to check that data entry is copied exactly as given – including case and spelling – and that all requested fields and records are included.

DB2 – Candidates are generally showing a greater understanding of performing searches/queries. The majority of candidates produced a query that contained the correct twelve records. Some did not show all the fields as required and a few repeated the whole table. A number of candidates added their own details into the database to achieve the requirement for labelling the work.

DB3 – This task shows the greatest improvement by candidates since the start of the qualification. Many candidates can now produce a database report using the correct query.

The use of a suitable title has improved, but still a significant number of candidates enter only task number or their name. Very few customised the field names and candidates should be aware that field names such as FirstName and DateOfBirth are not appropriate in a professional printed document.

Most candidates were unable to enter their details into the footer area at the bottom of the page and instead used the report footer in Access which printed the information after the last record. There was also some evidence that the identification of the report was achieved by candidates pasting the report into a WP document, using the headers and footers to add their details. Others produced an incomplete screen shot.

Candidates should be clear that a database report **must** be printed directly from database software.

A number of candidates had correctly answered **DB2** but did not use this information in the report, reverting to the original table.

Many candidates still need to check their final copy for spelling, layout and overall fitness for purpose.

Those who were unable to produce a report using database software copied the results of DB2 into a word-processed document which was not eligible for marks.

DB4 – A surprising number of candidates did not attempt this task, and of those who did, many only gained one of the two marks because they used < rather than <=, or used =.

DB5 – Most candidates made some attempt at this task and successfully produced a legible screen shot. Many were not able to copy the field names exactly, in particular adding spaces or changing the capitalisation. Surprisingly, there were fewer errors in the validation rule which was generally placed correctly, although a few entered it into the Validation Text or Description box instead.

Some candidates did not show the required design view for the Group field and were unable to gain the marks for the field length or the validation rule. A minority of candidates answered the question by copying the structure from the paper straight into a new table and some included an additional ID field – which often became an incorrect key field.

Whilst the majority of centres use MS Access, it is, of course, perfectly acceptable to use other relational database software. However, candidates should be well versed in the skills required to demonstrate use of techniques, producing more than one screen shot if necessary. For example, it is not always possible to show the field length, validation rule and primary key on the same screen.

DB6 – Most candidates were able to produce a form using a wizard with the required data entry fields but few went on to customise the form to make it fit for purpose or, as the instructions required, easy to use. Features such as customised field names, drop down menu on the Group field, help messages, suitable title would have attracted marks. Some screen shots did not include the whole form.

DB7 – Again, there were significant errors in data entry indicating that candidates did not check their work. A common error was to confuse the letter O with the value 0 and even have a mix of the two.

Key areas for improvement

- Check that output/results of sorts and searches are as expected

- Check that only/at least required fields are shown

- Use page headers and footers for database reports

- Use appropriate titles and column/data headings for reports

- Print database reports directly from the software

- Know a valid method to print tables and search/sort results with printed candidate details

- Produce a screen shot that is legible and complete

ACTIVITY 3 – USING SPREADSHEET SOFTWARE

Some candidates seemed to have no knowledge of printing in formula view and had attempted to compensate by a variety of means. These included typing the formulae into adjacent cells, handwriting them, inserting a cropped screen shot of the formula bar into one of the cells, or typing into a word processed table. Candidates should be aware that we cannot award marks for working spreadsheet formulae in these cases.

SP1 – This task was attempted well by the vast majority of candidates with many gaining full marks. There were occasional data entry issues, particularly the spelling of Escapade (Espade, Escaped, Escpade, etc), and misplacing of the new column. Left alignment was not attempted by some. A few students changed Softball to SB and Pony Trekking to PT but didn't delete Softball or Pony Trekking.

SP2 – This was attempted by most candidates, with more using the SUM function rather than =B4+C4 ….etc. Some candidates keyed in each formula rather than replicating, thereby introducing errors which they clearly did not pick up by checking the results. Sadly, there are still a significant number of candidates unable to print in formula view, thereby losing 3 of the 4 marks. Some spreadsheet printouts used a font size too small to read.

SP3 – Most candidates managed to achieve the first two marks on this task for moving the column, but many missed out on the third because they did not re-check the formula after moving the column, and hence the 'Needed' column held incorrect data. Others placed Escapade as the column heading for CA or truncated some of the data by not widening the columns. Some did not insert a full column, leaving **Escapade** in the wrong place.

SP4 – Absolute cell referencing continues to be a weaker area although there was some evidence of improvement in some centres. Many transposed the formula (H4-B10) and did not check that the output was as expected. The value 22 was often entered in the same cell as the label 'Available', or repeated for an entire new column. =B10-H4 was a popular alternative formula, demonstrating a lack of understanding of absolute cell referencing. 22-H4 was also common, but did not attract marks.

Many candidates are still unable to show row and column headings and so many mis-spelt 'Available' that examiners began to doubt themselves! Some candidates confused labelling the cell with naming it – those who used a named cell rather than B10 often did not enter the label 'Available' at all.

SP5 – Many candidates attempted this task with varying degrees of success. Many used a valid criterion, but did not always enter the message in the correct position. Errors in the given message were common and forcing a blank cell, rather than a second message, (or defaults such as 'false' or 0) caused problems for some.

It was evident that a significant number of candidates had prepared for this task by learning the IF statement by rote producing a working IF statement that worked but did not fulfil the requirements. Once again, many of the errors would have been spotted and corrected had the candidates checked the resulting output.

Although more candidates printed just the one column as requested, they were still in the minority.

SP6 – It appeared that few candidates had grasped the use of a spreadsheet as a "what if…" tool. Candidates should be able to interpret simple models and manipulate the data held in them. Some cancelled an activity for all four weeks and others cancelled an entire day. Some reduced numbers in various cells rather than reducing one to zero. Of those who did well, many made use of software features by typing 'cancelled' into cells, rather than changing the value to zero.

Few candidates attempted to make the printout suitable for display on a noticeboard.

Key areas for improvement

- Be able to switch to and from formula view

- Be careful not to truncate cell contents in formula view

- Know how to show row/column headers and gridlines

- Know how to format cells

- Check that a criterion is correct, particularly the operator

- Check that messages are spelt correctly

- Know how to force a blank cell in an IF statement

- Know how to select an area for printing

ACTIVITY 4 – USING PRESENTATION SOFTWARE

Overall this multimedia activity let candidates down. Very few showed understanding of the conventions of presentation and there was a lack of attention to detail. The formatting of the slides often differed within a candidate's presentation despite the provision of a storyboard, the first slide, and reminders to check for consistency.

MM1 – Most candidates missed at least a few marks in this task. Many candidates did not print 4 to a page, submitting 4 A4 sheets instead.   For slide 1, "Smarts Kidz Assistants" was not copied correctly and many did not add bullets. On slide 4, PONY TREKKING was often left in capitals and in some cases the slide was not altered at all.

Graphics caused problems for candidates who either did not resize graphics when required or distorted proportions even when the given graphics were already the correct size.   Most candidates were able to use the slide or page footer facilities to label their work before printing.

MM2 – Most candidates made some attempt at this task, managing to import the logo, the café graphic and the menu. Some candidates had changed menu items, especially "Paninis" which became Pennies, Puniness, Patinas or Panamas, to name a few!   Many did not manage to copy the title correctly, often using 'Woodland Café' instead, and often did not put the border around the menu. Many did not consider the layout of the menu and assumed that the given information was in an appropriate format. A few candidates replaced the given menu with one of their own, often with amusing results!

MM3 – Many candidates did not print 2 to a page, submitting another set of five slides. Since marks were allocated in the previous tasks for the creation of the slides and the instructions clearly asked candidates to check the whole presentation for consistency, it was disappointing to find so little evidence of candidates amending their work from tasks MM1 and MM2.

Some candidates had wasted time adding formatting and backgrounds to the slides, but had not checked for consistency of fonts, logos and text. Centres are advised to address issues related to the quality of presentation techniques to ensure that candidates gain marks for fitness for purpose.

Key areas for improvement

- Match slides to a storyboard

- Retain proportions of graphics when re-sizing

- Include only necessary information

- Import text from data files rather than key in to avoid data entry errors

- Check the accuracy (spelling, grammar) of any text in the slides

- Consider balance and/or use of white space

- Consistency of fonts and sizes between the slides

- Consistency of style between slides

- Consistency of repeated elements such as logos

- Before printing, check that their 'product' would be commercially acceptable

ACTIVITY 5 – USING WP/DTP SOFTWARE

DP1- More candidates attempted the final activity than in previous exam series showing a greater understanding of time management. It proved exceptionally good in differentiating between the weaker and stronger candidates.
.
The title was frequently not spelt as given particularly "Kids" not "Kidz" or "Smart" rather than "Smarts". Some candidates did not include all given text. There was lack of consistency in the style and size of body text and subheadings and very few justified the text.   Word art was used inappropriately by some.

The correct pony trekking graphic was generally inserted, however it was often an inappropriate size or the proportions had been altered.

Few successfully imported their slide, but most made some attempt - often by including a screen shot. Other candidates had obviously practised inserting a spreadsheet into a composition and were determined to do this, even without being instructed! Some included just the café graphic or Slide 1 instead.

There was evidence of weakness in presentation techniques. Many candidates did not seem to have a grasp of what a formal report should look like, with many printouts giving the impression of a poster or newsletter. Once again a lack of proof-reading and assessment of quality was evident. Good use of white space and consistency of spacing was rare and there was little evidence that candidates had checked their printed work for appearance and content. Few gained the mark for fitness for purpose.

Key areas for improvement

- Layout and content of business documents

- Choose (possibly sketch) a suitable layout bearing in mind the purpose

- Retain proportions of graphics when re-sizing

- Include only necessary information

- Check the accuracy (spelling, grammar) of any text

- Check positioning of graphics/objects in relation to text

- Consider balance and/or use of white space

- Check consistency of font, style and spacing

- Before printing, check that the product is fit for purpose

PRINCIPALMODERATOR'S REPORT FOR UNITS 5332 AND 5333

General

Summer 2004 was the first moderation session for both portfolio units – 5332 (ICT in Organisations) and 5333 (ICT in Society). The quality of response was generally lower than might be expected in future series, partly because it was a new qualification resulting in a lack of experience in centres and partly because of a lack of maturity in candidates. Whilst many candidates had researched and investigated the relevant aspects of the respective units at each level, many were unable to apply these skills in the vocational context.

Good Practice

Where centres have done well, students had covered and learnt much about the application of ICT in business and society. Centre approaches varied, but the most successful outcomes were in centres where the philosophy of both vocational and independent work had been applied. Centres where students were taken out to, or encouraged to visit organisations, produced more comprehensive portfolios. These students 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 students to interview their own 'live' adult or special needs person, which resulted in more stimulating work and allowed students to ask more questions.

Candidates who had looked outside their school 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.

Improving performance

Centres did not always seem aware 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 generally calls for involvement with ICT beyond the educational environment. Students 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.

In 2a, organisations need to be chosen with care. Some candidates were limited in some of their responses by commercial confidentiality restrictions. This meant that opportunities to describe the technology could not be developed, restricting them to lower mark bands. In other cases, some candidates chose an organisation where it was almost impossible to describe a virtually non-existent usage of ICT. Significant difficulties also arose when the student based their investigation on two different organisations for strands 2a and 2b. This led to two disparate reports, or a comparison of the two, neither of which enabled the student to achieve higher mark bands.

Centres are advised that designing a logo and a range of business documentation will not meet the criteria for these components. In general, a spreadsheet or database solution is most likely to be appropriate.

The key to achieving higher band marks in Unit 3 lies in explanation and evaluation that is based on clear detailed descriptions showing a good understanding of the functions and capabilities of the particular ICT. Insufficient descriptions did not provide a firm basis on which to explain, assess or evaluate and prevented students from accessing higher mark

bands. Successful students are able to describe well and then analyse or evaluate in the context of the component.

Many centres gave marks for evaluative statements that were too weak.

Many centres had not interpreted the components of Unit 3 correctly and had not guided students to use real, specified individuals and groups. Some candidates submitted generic reports on 'IT and students' for 3a, 'IT in work' for 3b, 'IT for disabled people' for 3c and 'IT in the community' for 3d. In general, strand 3e was more successful when tackled as a discrete component rather than as an integral part of the other four components.

Unit 5332: ICT in Organisations

The key focus for this unit is **systems**. Students 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 students 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.

Strands 2c and 2d are about creating a system for a specific user and purpose.

For the higher mark bands, 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, include searches, sorts and queries. They may include a user interface such as a menu and a mail merge facility based on a query. Spreadsheet systems will include complex formulae and functions and 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, students 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 they were tested using the plan, the outcomes of the testing and they have used the results. The evaluation should consider weaknesses as well as strengths of the system and, to access higher mark bands, student should document how the system could be improved. The user guide should aim to 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.

Strand 2a

Most students were able to describe an organisation, identify its main purposes and describe how those purposes used ICT. Few students achieved 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 objectives. Very few students identified the organisation's objectives at the outset so that they could refer back to them when explaining the use of ICT.

Where centres chose their school as the basis for study their evidence lacked detail, as there was simply too little scope. In other cases, those studying other companies gathered the basic information, but lacked evidence when it came to the organisation and its objectives. Candidates who just achieved the highest mark band did so on the strength of one evaluative statement only. Students at centres that organised visits/guest speakers were usually able

to describe in greater depth the technologies used and the system as a whole. Students who worked from case studies found it much harder to identify an ICT system and just described a basic system that could have been anywhere.

Students 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, eg they explained the finance function but did not clearly describe how ICT was used. Candidates who structured their research into functions (purchasing, sales, finance, distribution, human resources, etc), tended to score well. This approach showed a greater understanding of how ICT was used and how the organisation functioned as a whole.

Strand 2b

This component was tackled less well 2a. In some cases, candidates had not identified a single system within the organisation and had either concentrated solely on the hardware and software of the organisation or had tried to discuss the organisation as a whole. Components were listed, but no detailed information given on the use of them. One of the main reasons why students failed to gain the higher marks was because they had not covered all of the five components (input, output, processor, ports/cables and storage) and software. Categorisation of the components almost always achieved higher marks. Ports and cables were most frequently omitted and, even where it was included, students showed little knowledge. Those missing out a component group could not move beyond the lowest mark band. Higher mark bands also required the student to evaluate the extent to which at least one component or some software meet its purpose. Many students found this difficult and relied on descriptions of the components used rather than exploring limitations or alternatives.

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. A small number of candidates chose the problem of organising an event and so were unable to successfully demonstrate much individuality, limiting themselves to the lowest mark band. Identification of the inputs, processes and outputs is essential if students are to be able to break the proposed solution down into logical steps. Whilst many said they had tested their solutions, evidence such as before and after screen shots were not included to substantiate the testing. User documentation was missing in a number of portfolios, some were just a restatement of some of the 'testing' that had gone on. Evaluations varied from peer questionnaires to single sentences.

Strand 2c

Students were required to provide some indication of the scope or purpose of the solution with objectives. Objectives were often poorly constructed which made it difficult to assess the extent to which their eventual solution met its original purpose. Very few students achieved the highest mark band in these components even though centres had marked them as such. The main reason was that centres had misinterpreted the meaning of an independent solution to the problem.

Many centres relied 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 had still given students 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 themselves to the middle mark band.

Most students, who qualified for higher mark bands on independence and complexity, did not achieve all the marks because elements of the design were missing. Credit was often applied retrospectively from 2d. Students submitted copies of tables already created in databases to show design rather than annotated design. This indicated that students had implemented first then reverted to the design stage. Those gaining the highest marks in 2c included annotated drafts of input screens and output screens. They indicated processes with relationship diagrams or examples of formulae to be used. For the most part, design steps were not detailed enough for third party implementation.

Many students provided test plans which ranged from a simple statement of intention to a detailed grid. Test plans were also often included only in the implementation section of the project, and not as a separate plan. Students failed to identify abnormal or extreme data as part of the testing procedure. Most students also provided lists of hardware and software, but referred to packages such as Excel or Access, rather than a generic type of software application.

Most candidates managed to use complex processing but did not necessarily produce a complex solution. It appeared as though candidates were able to produce a basic spreadsheet or database, with some advanced features incorporated into them, but not many had any idea as to what they were actually doing or why. There was a general lack of evidence that the work had been carried out independently.

Strand 2d

Most students 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, students lost marks. The better solutions had clear objectives, which were then reflected in the implementation. Frequently students' solutions did not include complex processing. User documentation in a number of cases consisted of a guide on how to implement the system, rather than a guide on how to use the system. Test plans were not always accompanied by suitable evidence as to whether the test was or was not successful. Many students attempted a complex solution that they were unable to achieve successfully.

Most students undertook some form of testing. Higher marks were reserved for students who had made some constructive use of the results. Many students achieved the lower marks as they used their test plan as a checklist and did not describe or use the results in any way.

Most students 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 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 affected. Lack of detailed evaluation was evident throughout – very few candidates discussed the strengths and weaknesses and areas for improvement

User guides were of varying quality. The best guides were clear and well laid out. Some guides did not show how to use the candidate's finished system but showed the user how to create the system for themselves and were thus complicated and not meaningful. Many guides were focused on users of ICT, rather than the novice.

Where candidates failed to achieve, 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.

Unit 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 it protects 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, eg Internet, communication, entertainment, mobile ICT (laptop), 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 – ie, 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

More students achieved the highest mark band in 3a than in other components in either Unit 2 or Unit 3. Most centres were on track with the range of technologies, but descriptions lacked detail when it came to the evaluative comments. Some just listed the technologies and what they used them for, eg '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 did not reach the higher mark bands, either as a result of weak descriptions, or because they did not cover personal, social and work-related uses of ICT. Some centres had misinterpreted 3a to mean individual use of ICT rather than the ICT that the student used. This resulted in reports about the use of ICT in general (including surveys of peers). These students could only achieve the lowest mark band even if good descriptions and evaluations were provided, because the technology was not linked to the way they used the technologies or how it met their own needs. Many students did not achieve high marks either due to evaluative statements that did not develop explanations or to 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 briefly 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.

Some candidates wrote about adults in general, or one particular profession (usually teachers) in general. 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 adults with technology used by them could not move out of the lowest mark band. Also, ignoring the effect on working style caused many candidates to lose marks.

Strand 3c:
This was the weakest component for which several students achieved no marks because they generalised 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 (Stephen Hawkins was most commonly used), students fared better. Students from centres that had organised visits to centres for the disabled had obviously gained a good understanding of the different technologies used and produced some good work. 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 therefore obtain "real" information of what the technology could achieve, and how it could benefit the user.

Strand 3d:
Most students were able to identify a community but few were able to describe technologies used by the community and how they met community needs. Few evaluated the extent to which the technologies met the community's needs. 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 limited 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. 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, however 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 component. 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.

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 are asked to ensure that marks annotated on the OPTEMS match the totals on the moderation grids.

A number of 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 lowest and highest marks were not part of the sample requested, these were often not sent to the moderator.

Many centres used 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 and work for the units should be separated into two distinct portfolios. All pages should be identified with a header or footer, reflecting the candidate name and pages must be clearly numbered. Work should be proof read to eliminate obvious mistakes, early drafts should be removed, unless part of the evidence in the case of strands 2c and 2d, and all work should be submitted in component order.

GRADE BOUNDARIES
(2331)

VGCSE

	A*	A	B	C	D	E	F	G
Unit 5331								
Upper Limit	100	93	80	67	55	47	39	32
Lower Limit	94	81	68	56	48	40	33	26
Cum% of Cands	0.0	4.6	20.5	40.4	54.5	68.8	80.0	89.0

% = Cum % of candidates

	A*	A	B	C	D	E	F	G
Unit 5332								
Upper Limit	58	53	44	35	27	21	15	10
Lower Limit	54	45	36	28	22	16	11	6
Cum% of Cands	0.7	4.9	16.0	32.8	48.7	64.7	77.3	89.4

% = Cum % of candidates

	A*	A	B	C	D	E	F	G
Unit 5333								
Upper Limit	58	54	46	38	30	24	18	12
Lower Limit	55	47	39	31	25	19	13	7
Cum% of Cands	1.2	8.8	24.7	44.9	59.6	73.0	84.5	93.0

% = Cum % of candidates

Number Sat	19542
Number of Passes and Pass %	90.7

Unit 2331	A*	A	B	C	D	E	F	G
	0.2	3.4	15.6	36.1	53.7	68.2	80.6	90.7

APPENDIX A

Instructions for Labelling

5331 – JANUARY 2005

INSTRUCTIONS FOR LABELLING OF PRINTOUTS

Candidate identification is required to be entered before printing in order to authenticate ownership.

In most cases the solution is to instruct candidates to enter headers/footers within the software being used – ie in all word processing documents, all spreadsheets, all presentation software printouts, all desktop publishing printouts and in database reports. Candidates are also asked to print directly from the software used for these tasks.

The only exceptions to this labelling method are tasks that require database sort/search results - headers/footers are not generally possible in datasheet view. For these tasks ONLY, there are a number of methods that allow headers/footers to be entered, depending on the database software in use.

However, each of these methods is either software-specific or requires higher level skills and candidates may use any of these.

INSTRUCTIONS FOR LABELLING OF PRINTOUTS

These instructions form part of the Instructions for the Conduct of the Examination (ICE). The ICE document for January 2005 supercedes all previous editions. The ICE document will be available on the website and in hard copy and should be read well in advance of the examination.

General
Candidates MUST enter their details ON ALL TASKS BEFORE PRINTING - candidates must understand that they are required to enter their details prior to printing and that tasks not labelled in this way will not be marked.

Please note: It is not acceptable to pre-print each page with the candidate details and then overprint the appropriate task.

Headers/footers MUST be created in the header/footer area of the document. (Please note that MS Access report footers print after the last record, NOT in the footer area - page footers print at the bottom of (each) page).

A Database tables and search/sort results

For database tables/searches/sorts ONLY, candidates may use any valid method to produce pre-labelled printouts such as

> ➢ Paste into a word processing document and enter header/footer details in the header/footer area of the page
> ➢ Publish into a word processing document and enter header/footer details in the header/footer area of the page
> ➢ Use report format and enter header/footer details <u>in the header/footer area</u> of the page
> ➢ Enter candidate details as part of table name if this will come up as a table header

Centres are advised that candidates must have the necessary skills to use a valid method such as one of those above. **They are advised against using screen shots or entering their details as an additional record.**

The examiner will check for the presence of the candidate's details before marking but will ignore their position.

Please note that these methods should NOT be used for database reports. For database reports please see note B below.

B For all other tasks, including database reports

This applies to all word processing, desktop publishing, spreadsheet and presentation tasks, as well as database reports.

With the exception of database tables and search/sort results, labelling must be done using the header/footer feature in the software being used for the tasks.

Printing should be directly from this software unless otherwise instructed as experience has shown that candidates who produce screen shots tend to lose marks for fitness for purpose as well as for incomplete views of the documents concerned.

Please note that this includes database tasks where a database report is specifically requested.

For multimedia/presentation software, the candidate must be able to enter a header and footer on each printout. Where more than one slide is required on the page, it is advisable to use the page header/footer rather than the slide header/footer to ensure that the details appear only once on the page and are legible.

C Preparation for the exam

It is suggested that centres carry out a trial run of procedures using previous exam papers to ensure that: -

- students know how to open the supplied data files
- they know the methods applicable in their centre for entering the candidate details
- they understand the procedure applicable in your centre for ensuring they collect / receive the correct printout from the printer
- they know how to check, collate and present only the final printout for each task
- they understand that unidentified or wrongly identified work will not be marked

APPENDIX B

An example of wording of database tasks requiring table or search/sort results:

Note: the method is not given, simply a reminder to enter the details

Task DB2

You MUST enter your name, candidate number, centre number and task name BEFORE PRINTING.

Anil wants a list of all events on the ski slope.

- ❑ Use database software to run a search/query on the EVENTS Table to find these events.
- ❑ Save the results of the search/query as **DB2**.
- ❑ Make sure that your name, candidate number, centre number and task name are entered BEFORE PRINTING.
- ❑ Print the results of your search on **one A4 sheet**.

An example of wording for a database report:

Note: instructions are given here to enter details in the header and footer areas of the page using database software and to print directly from this software. This is the same procedure as that used for all other software types.

Task DB3

You MUST print directly from the database software.

Anil wants a database report for Mike Redhead showing the results of the search from Task DB2.

- ❑ Create the report using database software.
    - ➢ Show only StartTime, EventName, EventType and StaffID
    - ➢ Enter the title '**Open Day Ski Slope Events'**
    - ➢ Enter **DB3** in the header of the document
    - ➢ Enter your name, candidate number and centre number in the footer at the bottom of the page **BEFORE PRINTING**.
    - ➢ Make sure the report fits on **one A4 sheet.**
- ❑ Save your report.
- ❑ Print a copy of your report, using the database software, on **one A4 sheet**.

An example of wording for a word processing task:

Task WP1
Your task is to make the changes to the draft agenda so that it is fit for purpose.

- ❑ Use word processing software to open the file **ALEX**.
- ❑ Make the changes as shown.
- ❑ Make sure the content, layout and style are fit for purpose. Remember that the document is an agenda for a business meeting.
- ❑ Enter **WP1** and your initials in the header, eg **WP1FGB**.
- ❑ Enter your name, candidate number and centre number in the footer of the document **BEFORE PRINTING**.
- ❑ Save the document with the filename **WP1** followed by your initials, eg **WP1FGB.**
- ❑ Print a copy of the document on **one A4 sheet**.

Please refer to the ICE document for the May 2005 examination for definitive instructions

APPENDIX C

Put 'treasury tag' through this hole

STEP 1

Punch hole here on each page

DP1

WP1
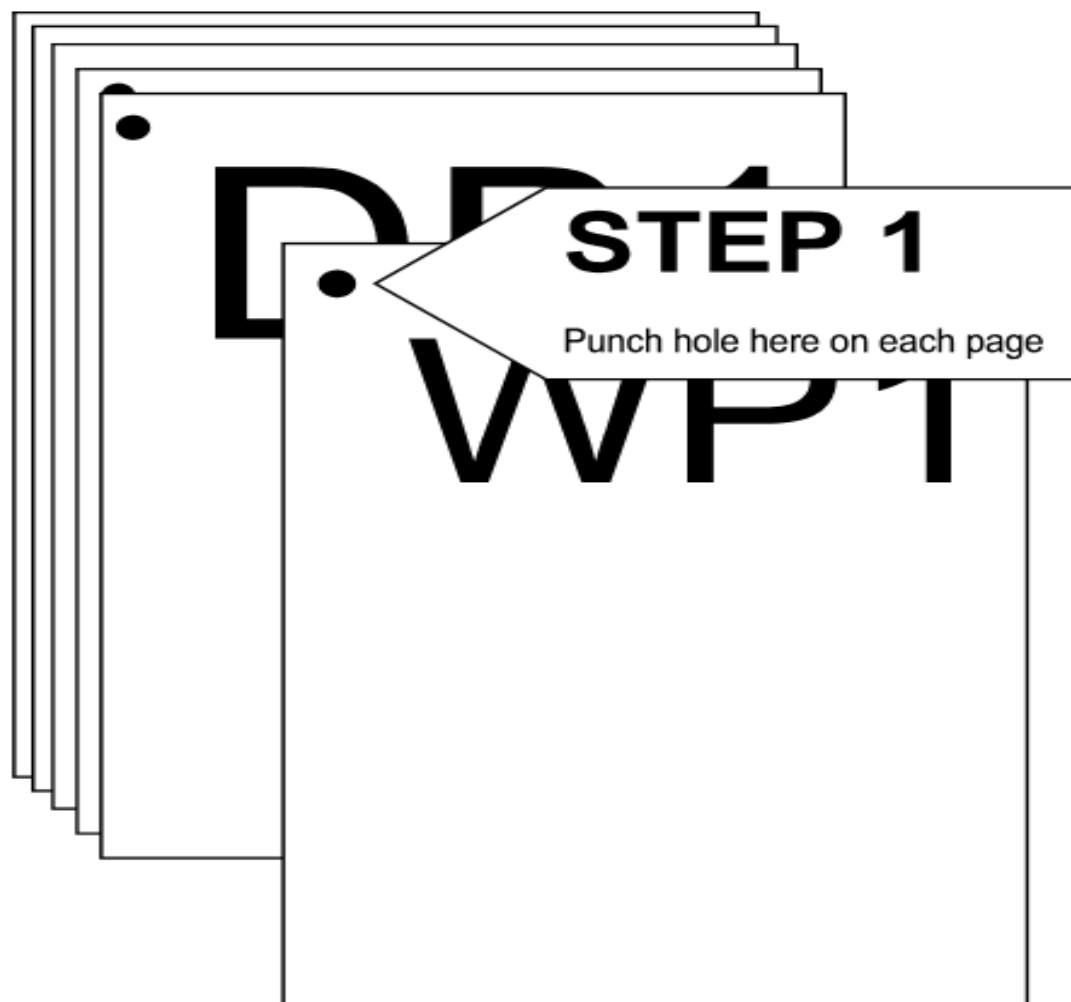
STEP 2 Arrange your pages in this order

WP1 (as the top page)
DB1, DB2, DB3, DB4, DB5, DB6, DB7
SP1, SP2, SP3, SP4, SP5, SP6
MM1, MM2, MM3
DP1 (as the last page)

STEP 3 Put a 'treasury tag' through all your pages

STEP 4 (last)