

# Examiners' Report January 2008

GCE

## GCE Applied ICT (8751/8752/9751/9752)



Edexcel is one of the leading examining and awarding bodies in the UK and throughout the world. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers.

Through a network of UK and overseas offices, Edexcel's centres receive the support they need to help them deliver their education and training programmes to learners.

For further information, please call our GCE line on 0844 576 0025, our GCSE team on 0844 576 0027, or visit our website at www.edexcel.org.uk.

January 2008 Publications Code UA019750

All the material in this publication is copyright  $\ensuremath{\mathbb{C}}$  Edexcel Ltd 2008

## Contents

1.	6951 Report	4
2.	6952 Report	7
3.	6953 Report	9
4.	6954 Report	12
5.	6955 Report	14
6.	6956 Report	16
7.	6957 Report	18
8.	6958 Report	20
9.	6959 Report	22
10.	6960 Report	25
11.	6961 Report	27
12.	6962 Report	30
13.	6963 Report	31
14.	6964 Report	34
15.	Statistics	36

6951 - The Information Age

General comments

In this series some excellent work was seen with good content for strands a-c and good well set out and functioning ebooks. In some cases the work was clearly reworked from the summer and resubmitted. Most of work seen was appropriate and gave the candidates good opportunities to meet the requirements of the specification.

There is still some confusion between the ebook and eportfolio. There should be an index page for the eportfolio with a link to self-contained ebook. Many ebooks still contain the evaluation which shows a lack of understanding of the purpose and audience for the ebook .

The majority of the ebooks are now in the correct format.

Some candidates are downloading large passages of information and not selecting relevant extracts. In some cases it was evident from the content that candidate had not read the passage since it contained irrelevant material or phrases.

Some assessors made appropriate comments, however In many cases, the comments on the erecord sheets were too brief to be helpful, or gave no indication of how the assessor had applied the assessment guidance.

Stand (a) On-line services:

There was generally a broad coverage of online services by most candidates although some candidates demonstrated real lack of research. With no secondary research being undertaken given. Most students described 5 online services with good descriptions in most cases the most common examples being shopping and entertainment. This is often the best strand possibly because it is the first of their course and it is straightforward. Most candidates list advantages and disadvantages as discrete entities rather than considered evaluations to give a balance, the balance tending to be number of bullet points rather than force of argument.

Some candidates did not have clear evidence of 5 online services. At times they included two types of the same online service presented but presented these as different services which limited the marks they could be awarded.

Stand (b) Life in the information age:

Most students seemed able to identify 5 areas of impact. However, these tended to be descriptive rather than analytical and focused on what the technology would do rather than how it had an impact. Again evaluations tended to be bullet points rather than considered evaluations to give a balance.

Research for this strand is still limited with many candidates not using a wide range of sources. The candidate's bibliography is the main sources of evidence for this. Frequently this consisted of a list of URLs and nothing more. In some cases the information presented was merely copied from sources, with no evidence that candidates understood what they were writing about.

## Stand (c) Digital Divide:

This section is still the weakest section of most work. Research is often limited or not well used. The extent of the divide was often well covered however the measures being taken to bridge the gap are often brief. Good candidates provide a clear and balanced account of the divide at all levels and include statistics and examples to support their point of view. Weaker candidates seem to add a graph because it looks good rather than to provide relevant information.

Stand (d) The e-book:

Students are producing much better eBooks but this is sometimes at the expense of the content. More candidates had used appropriate software and multimedia design although there were still a lot of poorly chosen colour schemes and animations. Many still lacked awareness of audience and purpose with live links; and evaluations in the eBook Some wrote the e-book as if it was an ordinary assignment to be given in to the teacher.

Some centres submitted work consisting of a collection of linked files produced in word, or pdf format, with no attempt by the candidate to make these into an e-book. The main feature of an ebook is that the reader can navigate not just between sections but within each section as well.

Standard ways of working were not always observed in that filenames were not meaningful and external assessors had difficulty in finding the start of the ebook. There should be a clear start point for the work normally called index.

Stand (e) Components and structure:

Many good examples of well constructed e-books were seen. Better examples used frames for navigation and an index that was always in view. They had also considered the audience in that pages were broken down into manageable sections with thought given to the size of font used and the amount of information that was on the page. Less inappropriate use of scrolling was seen although some candidates are still presenting all the information on one very long page.

Evidence of testing was often demonstrated by the fact that a fully function e-book had been produced, some candidates included test plans and feedback from others as further evidence.

## Stand (f) EVALUATION:

Most candidates managed to make some evaluative comment about their e-book evaluated their own performance. More incorporated feedback from others than in the past but failed to make use of this feed back in an appropriate way.

The evaluation is not part of the e-book and should be a separate document within the eportfolio.

## Standard Ways of Working

In most cases the only evidence the external assessors had for this aspect was the bibliography and the file structures and names used by the candidates. In some cases it was difficult to locate the e-book or e-portfolios of candidates as these were often not well named.

Bibliographies are the main source of evidence to support the range of sources of information used by the candidate; too many candidates still give "Goole" "Yahoo" and other search engines as the source of the information when clearly the source was a website found using them. Many candidates only quoted web sites, the specification requires a wide range of different sources to used for strands (b) and (c).

## **General Administration**

Most samples were correctly submitted with folders clearly labelled with centre numbers, candidate number and first 2 letters of surname and first of Christian name. It would help if the erecord sheet naming convention is the same

The centre assessor should use the erecord as an opportunity to help the moderator find the evidence required to agree the marks given. The comments by centres often contained only 1 line comments, in other cases no comments at all were provided. Some centres placed all units on the same CD, this can cause problems for the moderation team as samples of units frequently need to sent to different people during the moderation process.

#### 6952 - The Digital Economy

This report should be read in conjunction with the Summer 2007 report, and also the previous reports for the unit, as many of the comments made, remain the same and are not repeated in this report. These reports can be found on the Applied GCE ICT section of the Edexcel website:

http://www.edexcel.org.uk/quals/gce/ict/as/8751/

Although, as would be expected, the number of entries were not as high as the Summer window, there was still a significant number and it was good to see eportfolios representing all the grades with marks of 1-56 seen. There was some excellent evidence submitted with candidates clearly taking a pride in the presentation of their work. Many centres are now assessing correctly to national standards and are giving clear feedback in the esheets supporting assessment decisions made.

The majority of eportfolios were in the correct format with links to the evidence clearly identified. However, some candidates are still producing evidence in incorrect file formats, in particular Word. Files should be converted to html or pdf format.

Some candidates are still producing ebooks rather than eportfolios with the result that they are spending a lot of time on creating multimedia which gains no marks.

There were again examples of plagiarism in some eportfolios in particular extracts, or indeed, whole sections included from the exemplar on the ICT microsite. There were also examples of content directly taken from several of the Applied GCE ICT AS textbooks which are on the market. In addition, there was evidence of material being downloaded from the Internet with no reference to the source. This is unacceptable practice. It was observed that a small number of candidates were being given "writing frames" to complete which, again, is not an acceptable approach for AS candidates.

Comments on strand a - Transactional Website (18 marks)

There are still a significant number of candidates selecting Ebay for their transactional site although this has been discouraged in previous Examiner's reports. Ebay is an auction site which makes it difficult for some aspects of this strand to be well addressed. Candidates should independently select a transactional site which allows goods to be bought from stock and despatched to a stated address.

Some candidates were awarded marks in the higher marks bands where little detail had been given to the descriptions of the various features and virtually no evaluative comments. The assessment guidance on page 42 of the unit specification gives further clarification of the requirements for the 3 marks bands for this strand.

#### Comments on strand b - Back Office Processes (10 marks)

More candidates are evidencing this strand well. There were some instances of poorly presented diagrams which had been hand drawn and scanned into the eportfolio evidence. Candidates are expected to use suitable software to produce diagrams, e.g. Draw, Visio.

There were instances of candidates producing diagrams which had been copied exactly from other sources. This has been commented on in previous reports and is not acceptable evidence.

#### Comments on strand c - Security (6 marks)

There is still evidence of candidates including content which is not their own and no sources referenced. Some candidates within a centre were submitting very similar evidence for this strand which did not demonstrate the independent approach required for the higher mark bands.

Candidates often neglected to clearly specify the threats although preventative measures were usually well addressed. Many candidates are reproducing the legislative "Acts" rather than explaining how these legislative measures could help prevent threats.

More evaluative comments would help raise achievement.

Comments on strand d - Database (20 marks)

The comments in the June 2007 report cover the major points relating to this strand.

Again, it was good to see more candidates accessing mark band 3 and clearly presenting their evidence.

However, there were still instances of structured work observed where all candidates were producing identical screen shots, queries etc. This has been commented on previously. Candidates wishing to access the higher mark bands should demonstrate independence in their approach to the structure of database created, e.g. explaining the tables, field types, field lengths and validation/input masks to be used. Independence should also be shown in the approach to the manipulation of the database created, in particular with the use of queries and the output from these queries.

Some candidates are still inputting their own records rather than using a large dataset provided. Being provided with a large dataset is an essential aspect of the unit.

Not all candidates explicitly evidenced they had produced a relational database with two tables with a one-to-many link. This can easily be shown through a screen shot and there needs to be referential integrity enforced in order to meet the requirements for mark band 1.

There were examples of charts and graphs indicating trends but sometimes no indication if these were from the candidate's own database as no implementation evidence was included in the eportfolio. The evidence presented needs to show the candidates' progression through the main steps, i.e.

- examine a large dataset and create a suitable structure for 2 tables
- test the database structure, e.g. with the inputting of test data
- import the dataset into the created structure
- test the import is successful
- manipulate the dataset to extract meaningful data and also to identify trends. Likely trends could be patterns of sales over a period of time and/or across different areas.
- make recommendations based on the trends identified.

The assessment guidance on pages 43-44 of the unit specification gives further clarification on the requirements for the 3 marks bands for this strand.

Comments on strand e - Evaluation (6 marks)

Many candidates are still explaining how they used Access rather than evaluating the performance of the database they have created.

Many are evaluating their "ebooks" when the unit requires an eportfolio and this aspect is not part of strand e for this unit. Candidates are required to evaluate their own performance for the whole unit as stated on page 38 of the unit specification which explains the evidence required for the Assessment Evidence.

Some candidates include feedback from others but neglect to refer to this feedback in their evaluations which is a requirement for mark band 2. It should be pointed out that feedback is required from more than one "other".

#### 6953 - The Knowledge Worker

#### General

Candidates approach to this examination continues to improve. Although there are exceptions, most candidates seemed well prepared and approached the examination well. There were fewer examples of candidates having serious timing problems.

It is still, however, worth repeating the advice to candidates from previous reports. There are timings on the exam paper which candidates are advised to stick to as this will enable them to attempt every question. Activities 1, 2 and 5 can be answered using bullet pointed lists. This will save the candidates considerable time. Question 4 should be a report and not a letter. Candidates should use sub headings, proof read their report and use the spell checker.

#### Activity 1

This activity was less well done than in the June series. A significant number of candidates gave the whole of "Brain's" background story, most of which was irrelevant to the model. A large number of candidates didn't manage to identify that they had to design a rollercoaster ride for a theme park an only a small number managed to gain full marks in this section.

Most candidates seemed to understand the decisions they had to make but a large number failed to state them, thereby losing some easy marks. The length of the features was mentioned frequently as a decision, often when the choice of features and their order was not.

Few candidates managed the full three marks available for assumptions. Where marks were gained here, the most popular thing mentioned was safety, though quite a few mentioned the flatness of the terrain and the area (or the length) available. Many were concerned that the ride should return to its starting place and height.

#### Activity 2

Many candidates misunderstood this activity and gave long descriptions of the data, especially of the survey data and which feature seemed to be the most thrilling.

Few candidates gave valid evaluations of the two sources, though a minority managed to suggest the manufacturers might be biased/want to increase sales, and that the inspectors would be independent/take real life readings - most of the reasons were clearly based on answers to previous papers.

Most candidates stated which source of information they were going to use, with (a small) majority of candidates choosing the safety data. Most, however, were unable to give a valid reason for their choice - where they managed to indicate that safety was an important issue they only just managed to say enough to get the mark.

Very few candidates achieved marks for commenting on the survey data: most said they knew nothing about its size or the people asked, indicating that they either did not realise what they were importing or had not read the scenario. Again, points made seemed to be taken from answers to previous papers practised by the candidates.

#### Activity 3

Again this activity was the saving grace for many candidates, typically a mark of 17 to 20 for the better candidates.

Only a small number of candidates used the sum function inappropriately this time. The vast majority of candidates successfully imported the survey data and transferred this data into the appropriate worksheet, though only about half used a formula to do this.

Candidate lost mark because they did not print out the correct rows and columns showing the row and column headers.

Only a very few candidates managed to follow the instructions in the exam paper in relation to the formula to be input to work out the Thrill Factor for the Results sheet. The majority of candidates managed the Max and the two basic Sums required, but got no further - where candidates attempted more, most did not complete the formula successfully. Having arrived at this point, many candidates forgot to format their printout, even when they attempt to print the correct cells of the worksheet, they forgot the gridlines and row and column headers and so lost marks. Most gained around half the marks available here, with a minority managing over 12 of the fifteen.

For the solution, most candidates managed to enter 10 features, though many repeated features. Most managed to keep within budget, but those whose grasp of formulae was poor did not manage to get a high Thrill factor (or any at all). A substantial minority of candidate's submitted work showing that their solutions contained red cells and so gained no 'E' marks.

#### Activity 4

The majority of candidates once again failed to structure this activity as a report: no suitable title, no mention of recipient, no introduction/conclusion etc. However, the majority did use a suitable font style and size. Spelling and grammar were not good, and much of the language was unsuitable for a business report. Most titles still say merely 'Report' or 'Recommendations', though more candidates than in the past include some headings and sections, and there were fewer letters.

Many candidates used screenshots to show their chosen features and lengths, though sometimes this was written within the text of a paragraph, or presented as a graph - this usually matched the choices seen in the previous activity. Some did not managed to state the amount they had spent.

Many candidates described (at length) how they tried different combinations of features for their ride to gain the maximum thrill factor, but few managed to suggest they were looking for variety and sustained excitement.

Many candidates simply wanted to spend more to increase the thrill factor.

It was clear that candidates had been advised to include a chart in their report as most had done this, and more gcharts were fit for purpose this time, with many showing the comparative thrill factor of the features, with accompanying descriptions.

Very few candidates included concluding statements that provided suitable summaries.

The font was generally suitable & where headings were used, they tended to be consistent, but very few used suitable language even where their grammar and spelling was satisfactory.

There was evidence that the overall standard of reports is improving, with most candidates attempting this activity and managing to include evidence of a solution and a graph to gain some marks.

#### Activity 5

This activity was poorly tackled by most candidates, with very little actual reference to the model.

Many candidates again evaluated their own ability to tackle spreadsheets, rather than the performance and effectiveness of the model. Few suggested clearly that they had actually provided a solution to the problem.

Most candidates attempted to make suggestions for improving the model, although some found it difficult to express their ideas in a way that was understandable. Many candidates went off on a tangent and suggested things that could be done to improve the business instead of sticking to ways in which the spreadsheet model could be improved; a popular suggestion was the distribution of another survey: many candidates suggested data they would like to be incorporated into the model but did not give improvements to the model.

A few managed to suggest that a drop-down list might have been useful when entering features into the results sheet, or that the model should include costs/pricing/profits or and indication of the limits of space/length.

#### Administration

Considerable time is still being wasted by the examiners because the examination responses were not supplied in the way required. A large number of candidates failed to supply the activity number and the other required items in the header or footer of their printouts. There were also a large number of cases where the printouts were supplied in the wrong order. Centres should be aware that examination documents are considered to be the e-portfolio described in the Standard Ways of Working section of the specification (practical restrictions mean it is not possible at present to accept the examination work in an e-portfolio). Not having output correctly labelled or in the wrong order is considered to be not "creating an appropriate structure". Marks are awarded for Standard Ways of Working and students may lose these if their materials are not labelled or badly ordered.

All printouts should be attached to the cover sheet via a single treasury tag to the hole available in the top left corner of the inside of the cover sheet as shown in the instructions. There should be no need to punch extra holes in the cover sheet and the treasury tag should be passed through the cover sheet and the printouts only once. The instructions are clear and the examiners would be grateful if centres could remind candidates to do this.

#### 6954 - System Design and Installation

#### General comments

Assessors are advised to use the e-sheet to explain if the candidate worked independently, this is a requirement of the higher mark bands, and to indicate where evidence is located and how marks were awarded. It was disappointing to see that some centre assessors are still giving little feedback, comments such as 'well done' or 'nice screenshots' alone do not aid either the candidate or the moderator. There was continuing evidence that the requirements of the higher mark bands were being to be appreciated.

Whilst most of the eportfolios submitted were in a format, which allowed the moderator to easily find the evidence there are still centres submitting evidence in incorrect formats, i.e. Word files and portfolios with links not working which indicated a lack of summative testing. As stated in previous Principal Moderator's Reports eportfolios should be in a format that can be read in a browser and the files should link together. Centres are again referred to the following document "submitting eportfolio samples for moderation" which is on the Applied GCE ICT section of the Edexcel website.

http://www.edexcel.org.uk/quals/gce/ict/as/8751/

Lack of proof reading was still evident throughout a high number of submitted portfolios with alarmingly many examples of evidence containing uncorrected errors. Candidates are recommended to proof read their work thoroughly and should refer to the quality assurance section of 4.12 of the unit specification.

## Strand (a) - Needs Analysis

It was disappointing that a small number of candidates are still misinterpreting the need to evaluate two existing systems and looked at similar organisations rather than actual systems which have similar functionality. Almost all Candidates had little problem in finding two existing systems but again many could not describe how they matched their client's requirements. There was a distinct lack of evidence from the majority of candidates when it came to being able to evaluate fully the benefits and perceived drawbacks of the chosen systems in order to give their client an informed conclusion. The production of a proper needs analysis for a client with complex needs is central to this strand and centres are again reminded to refer their candidates to section 4.1 of the unit specification.

#### Strand (b) - System Specification

The main requirement of this strand is still being misinterpreted by a small minority of centres in that the chosen system needs to be recommended to the client through a detailed and informative systems specification (section 4.7 of the unit specification). As in previous reports centres should ensure that their candidates' are aware of the information in sections 4.2 to 4.6 of the unit specification as to the what areas should be considered when putting together their system specification.

Again as in previous moderation series candidates selected furniture, which they claimed to have ergonomic qualities but failed to explain why they would be suitable for their client.

#### Strand (c) - System Build

As mentioned in the three previous Chief Moderators reports the system build does not need to relate to the system recommended in strand (b) but there should be some indication as to the requirements of the system being built. It was again evident that a small minority of centres still created scenarios which asked candidates to dismantle then re-build the same system this is not the purpose of the unit. It is recommended that the starting point for the system build be where the candidate has all the components laid out and then commences with an explanation of how safe working is going to be evidenced, as many candidates' failed to evidence the basic aspects of working safely i.e. ensuring the system is disconnected from the power supply, wearing static bands, the proper handling of tools and components. The evidence for the configuration activities still did not reflect the candidates' level of work. Candidates should again be advised to address several of the activities listed in 4.9 of the unit specification.

#### Strand (d) - Testing

Candidates should produce annotated evidence of the variety of tests undertaken if they wish to achieve a mark in grade bands two or three, ensuring the evidence produced covers all aspects of the hardware and software. As stated previously it is not essential to produce evidence of every single test which results in many pages of similar tests being undertaken. The quality of the evidence showing real understanding of testing, covering all aspects of the unit, is more important.

Testing should show that the complete system meets the agreed specification standards. There was evidence of some good practice with candidates giving detailed accounts of how they tested the final system and also some end user testing. Photographs and screen dumps of error messages were included.

Strand (e)

A large majority of the candidates still seemed to find it difficult to accurately evaluate the work undertaken in this unit and comment reflectively on their own performance many evaluations did not address the requirements of the strand at all well. A minority of candidates are still concentrating on the performance and structure of their eportfolios rather than the performance of the built, tested and configured system. Many candidates struggled to evaluate their own performance throughout the project and often produced descriptive detail of what they had done. Assessing their skill level at the outset and reviewing the skills obtained through undertaking the unit can help candidates evaluate both their skill level and their performance. Feedback from others was often omitted and when present was found to be vague and lacking evidence of who provided the feedback and why.

The evaluation needs to relate to the all aspects of the unit and good evidence produced for the various strands enables a candidate to do this effectively.

#### 6955 - Web Development

#### **General Comments**

This report should be read in conjunction with the Summer 2007 report and also the previous reports for the unit, as comments made remain the same and are not repeated in this report. These reports can be found on the Applied GCE ICT section of the Edexcel website:

#### http://www.edexcel.org.uk/quals/gce/ict/as/8751/

Although there was a relatively small entry for this unit for this window, marks across all the grades were seen, i.e. marks of 6-51. It was pleasing to see a larger percentage of candidates achieving marks in the 30s and 40s which is an improvement on previous moderation windows. However, there was a significant number of eportfolios where centres had placed the evidence in too high a mark band.

Again a significant number of candidates did not appreciate that the major proportion of the marks are allocated to aspects other than the final website produced. Achievement could be raised if candidates actually liaised with a client or Assessor posing as a "client" in order to evidence the software development lifecycle as specified in 5.1 of the unit specification. This enables candidates to address all strands more effectively. Further clarification can be found in the previous report as already mentioned.

There was evidence that a number of candidates are producing evidence retrospectively for strands a and b which is not appropriate.

#### Comments on strand a - planning (8 marks)

Few candidates are addressing this strand well. It is good to see many centres are using Project Management software which is recommended for this unit but not a necessity. Candidates are expected to produce project plans in the form of gantt charts and spreadsheet software is accepted for this AS unit. It is disappointing to note that few candidates appear to have addressed 5.2 in their plans and very few have produced explicit evidence of plans being used to monitor the planning and implementation of the websites produced for a "client". Note: the plan is for the website and should not include the evaluation for strand d nor the Proposal for strand e. The first plan needs to be produced prior to the start of the design and implementation of the website to be created and show the activities to be undertaken until the handover to the client. Many candidates failed to indicate the handover date to the client in their plans. Updates of the plan, showing changes, would be expected if candidates are accessing all the marks in mark band 1. There should also be explanation of the changes that have occurred. Annotation on the updated plans or a diary of events could do this.

There were some examples of templates, complete with headings, being used by candidates which is not appropriate. Candidates are required to produce their own project plans.

#### Comments on strand b - Design (16 marks)

Many candidates were allocated marks in too high a mark band for the evidence produced. Most of the evidence seen was mainly brief notes under the headings stated in 5.3 of the unit specification. Few candidates produced explicit evidence of producing a Requirements Analysis involving a specified client as mentioned in the general notes above. 5.3 indicates a variety of techniques should be used and candidates progressing to the higher mark bands should demonstrate this aspect

Comments on strand c - Development (20 marks) See June 2007 report

#### Comments on strand d - Evaluation (6 marks)

There was a lack of understanding as to the performance of the website (does it work) and the functionality (does it meet the client needs?). The comments in the June 2007 report gives further clarification as these are relevant to this window.

Comments on strand e - Proposal (10 marks)

This strand was often assessed very leniently. Most candidates produced general notes under headings listed in 5.7 of the unit specification. A Proposal, in a proper format addressed to the client, is required. The Proposal needs to recommend at least one suitable method to enhance the functionality of the website created, to enable it to support e-commerce.

Suitable formats could include a:

Professionally presented report addressed to the client

Professionally presented letter addressed to the client

Presentation (note that a supporting handout to the client would probably be needed to ensure sufficient detail was included to access all the marks)

#### 6956 - Technical Support

#### General comments

Assessors are advised to use the e-sheet to explain if the candidate worked independently, this is a requirement of the higher mark bands, and to indicate where evidence is located and how marks were awarded. It was disappointing to see that some centre assessors are still giving limited feedback, comments like 'well done' or 'nice screenshots' alone do not aid either the candidate or the moderator. There was continuing evidence that the requirements of the higher mark bands were being to be appreciated.

Lack of proof reading was still evident throughout a number of submitted portfolios with alarmingly many examples of evidence containing uncorrected errors. Candidates are recommended to proof read their work thoroughly and should refer to the quality assurance section of 6.9 of the unit specification.

#### Strand (a) - Upgrade

Even after comments in previous reports it was evident that a number of candidates were not explaining what was being upgraded and the rationales behind them. The most common upgrades were the installation of more RAM or a larger Hard Disk or DVD|CD-ROM Drive.

It was again disappointing that only a small number of candidates provided sufficient evidence of the practical work being undertaken to gain marks in grade bands 2 or 3. Those who obtained the higher grade bands provided clear screen shots and photographs' explaining through detailed commentaries what was happening. Many candidates still did not include any evidence of relevant testing the upgrade or ensuring that the hardware components were compatible with the original system. Candidates' did not always demonstrate standard ways of working notably safety precautions undertaken prior to and whilst performing the upgrade.

Candidates wishing to gain marks in the higher grade bands should complete a test plan and then produce annotated evidence of the variety of tests undertaken, covering all aspects to cover the hardware and software upgrades. It is not essential to produce evidence of every single test which results in many pages of similar tests being undertaken. The quality of the evidence showing real understanding of testing, covering all aspects of the strand, is more important.

#### Strand (b) - On-screen Support Manual

Unfortunately, even after comments in previous reports, it was still evident that a minority of candidates failed to recognise the fact that the manual was to be viewed on screen which resulted in the reader having to continually scroll up and down and in some instances from side to side. It also essential that both candidates and assessors are aware of the correct file format to be employed page 107 of the unit specification clearly states that html should be used for on-screen publications, it was disappointing that in a small number of instances candidates were marked down by their assessor for using html format and the assessor insisted on them using pdf formats. Candidates still need to be made aware of the different user categories the manual is aimed at, in mark band 2 the level of user is an ICT Technician and in mark band 3 the audience for the manual is someone who should be able to use the information provided without having to refer to others for assistance.

#### Strand (c) - Collaborative Working Tools

As in previous series a large majority of candidates were able to identify and describe the collaborative working tools listed in the specification (section 6.6). There was however major omissions from the evidence produced in that many candidates' failed to indicate significant points relating to the capabilities and limitations of the tools chosen. These omissions were not always reflected in the grading of this strand by centre assessors.

As stated in previous Principal Moderators Reports and the unit specification it is essential that candidates' who wish to gain marks in mark band 3 must have used a range (at least 3) well chosen examples which fully evaluate the key features of each of the four chosen tools. At this level they must be able to show that the chosen tools are totally suitable for particular tasks and fully describe the processes involved in setting up and using a particular tool.

#### Strand (d) - Communication needs of a small business

It is felt that the message from previous Principal Moderators Reports for this strand be repeated as a number of centres are still allowing candidates to produce a generic report rather than undertake some investigation into communication needs of a specified small business and then produce a report, in relatively simple and non-technical language, which describes the communication needs of the specified small business with justified recommendations for internet connectivity, security processes, security procedures, an internet policy and the use of email. The points are comprehensively listed within the unit specification (see sections 6.4, 6.5 and 6.7).

Again reiterating points made in previous Principal Moderators Reports at mark band one candidates are expected to produce as evidence at least one sensible recommendation about one of the areas being evidenced and for full marks made at least one sensible recommendation for each of the topics. A large majority of candidates failed to produce recommendations for each topic but this was not always recognised during the assessment process.

Those candidates' who were eligible to gain marks in mark band two again rarely produced sufficient detailed evidence of an SME's communication needs and did not make detailed recommendations for all five topics. At mark band three it is essential that the report includes some future-proofing elements with a full and detailed justification of the SME's communications needs.

#### 6957 - Using Database Software

#### General

The evidence from this series seems to show that candidates are much better prepared for this examination and are better aware of what to expect. Candidates do, however, lose a large number of marks by not providing the correct evidence. There were a number of effective and innovative solutions attempted but many of these failed to get the marks they deserved because there was no indication of how they worked.

#### Activity 1

Activity 1 was to test the functional specification area of the specification. Few scripts failed to pick up some marks on this activity. The work on the whole was well presented with bullet points quite common and most scripts completing the activity on a single sheet of A4.

There was still little indication that the candidates were aware of what a functional specification should be. Few candidates managed to state that the database should store data on customers, rides and reservations. Many described how a customer number/card number should be generated, and many mentioned adjusting points, but only a small minority did both. Few managed to describe the information the database should supply and to whom, often ignoring the 'to whom' part of this section.

#### Activity 2

A high number of candidates had many pages showing very similar input masks for validation. Many included a range check for the places available/number of points but there was little evidence of list and presence checks. Very few candidates managed to choose appropriate data types for the given fields, with 'Points' left as text, 'Student' / and 'Print Card' as numbers, as well as inappropriate types for Card Number.

Only a minority of candidates had analysed the data correctly so that they ended up with 4 tables linked correctly. Where the tables were correct, the relationships were rarely identified correctly, the most common mistake being to link the ride directly to the reservation table rather than this to session and session to reservation.

A minority of candidates included many screen shots of importing data, though not as many as in previous series. Fewer candidates failed to include the number of records for each table, and so did not gain the marks available here. Again this was slightly better than in the summer.

#### Activity 3

Many students either created lots of submenus before getting to the registration or reservation screens or they bypassed the menus completely and went for a one screen fits all approach. Titles were lacking in many scripts.

For this activity, there were again a large number of pages with little organisation, and often very little that gained marks. Only a minority of candidates realised that they needed to provide clear evidence that the data provided in for Activity 3 has been successfully processed by their systems. Very few provided screenshots showing the changes to their tables convincingly. Some candidates relied on unconvincing descriptions of what had occurred which did not match what should have occurred. Many did not seem to realise that the data provided screenshots databases in sequence. Some candidates provided evidence of queries and macros that gained marks. Many did not appear to have read the scenario/examination instructions as to the operations of their databases, in spite of descriptions in Activity 1. Often there was no opening screen/method of logging in , confirmation, evidence that only the new customer/logged in customer had access to their own details, as required.

Even candidates who clearly had a good grasp of the problem and had obviously spent a lot of time and effort on their systems failed to provide evidence which gained them more than about half of the marks available for this activity, even when they otherwise appeared to be working at an A grade standard.

#### Activity 4

In this activity it was evidence that the majority of candidates had trouble understanding what a tick in the 'Print' field meant, as most of them seemed to consider that this meant the card had been printed out and that all the others hadn't, and so produced several pages with 40+ cards ...... and sometimes proceeded to include an update query that would automatically update this field - to the wrong value.

Few candidates managed to produce cards that satisfied all of Brian's requirements, though there were many examples which gained at least 10 marks here. A substantial minority produced cards with Yes/No fields showing for Student with a tick or 0/-1 printed in them.

Many candidates showed queries and report designs to indicate how to printout what was required without taking the next step of updating the print field afterwards.

#### Administration

A large number of candidates failed to supply the activity number and the other required items in the header or footer of their printouts. There were also a large number of cases where the printouts were supplied in the wrong order. Centres should be aware that examination documents are considered to be the e-portfolio described in the Standard Ways of Working section of the specification (practical restrictions mean it is not possible at present to accept the examination work in an e-portfolio). Not having output correctly labelled or in the wrong order is considered to be not "creating an appropriate structure". Marks are awarded for Standard Ways of Working and students may lose these if their materials are not labelled or badly ordered.

All printouts should be attached to the cover sheet via a single treasury tag to the hole available in the top left corner of the inside of the cover sheet as shown in the instructions. There should be no need to punch extra holes in the cover sheet and the treasury tag should be passed through the cover sheet and the printouts only once. The instructions are clear and the examiners would be grateful if centres could remind candidates to do this. Candidates should not include rejected work.

6958 - Managing ICT Projects

There was a relatively small entry for this unit for this window but marks across all the grades were seen, i.e. marks of 6-51.

It was good to see that many centres are now interpreting this unit correctly and assessing to national standards. However, weaknesses were still identified and some of the major issues are detailed below. This report should be read in conjunction with the Summer 2007 report as many of the comments made remain the same and are not repeated in this report. The Summer 2007 report was very thorough and only key areas which need further emphasising are discussed here. This report and that for January 2007 can be found on the Applied GCE ICT section of the Edexcel website:

http://www.edexcel.org.uk/quals/gce/ict/as/8751/

It is important that candidates apply project management techniques to the production of a small scale software project at the beginning and throughout the implementation of the product. There was evidence of eportfolio evidence being produced retrospectively. There was also evidence in a significant number of eportfolios of fabrication. This was particularly the case with evidence produced for strand c. Some candidates did not use a range of stakeholders which also made it difficult to evidence strand c.

Many candidates failed to indicate the date of the handover of the completed product to their client in the plan nor did they refer to their plans in the evidence for other strands, particularly stands c and d.

Many candidates produced eportfolios containing the evidence for this unit and also either 6960/6061. This is acceptable but candidates need to ensure the evidence is clearly linked to each unit and also that it fits the strand for the right unit. Separate evidence for strands a and e should be produced as there are very different requirements for these units.

Comments on Strand a - Proposal and Definition of Scope (6 marks) See the comments in Summer 2007 report

#### Comments on Strand b - Project Plan (12 marks)

Overall more candidates used project management software which is a requirement of this unit. Note: 8.7 of the unit specification states "You will use project management software ..." There are several suitable programs which are available as free downloads from the Internet and it is good to see many centres taking advantage of this. Candidates need to be able to use the Gantt chart feature in these packages which enable them to evidence this aspect of the unit specification.

More candidates were producing updates of the plans but did not always explain the changes that had occurred. There was little reference to the plans in the evidence for strand c.

Some candidates had produced only one plan and retrospectively which meant that this strand was not addressed at all. The whole object of the unit is to use project planning to produce the product.

There was some evidence that some candidates had used templates provided to them which included all the headings. This is not appropriate for this A2 unit. Candidates are required to create their own project plans using project management software.

Comments on Strand c - Communication with Stakeholders (20 marks)

There should be strong correlation between the evidence for strands b and c. Many candidates produced evidence explaining changes to the product but failed to state where the implementation of the product was in relation to the plan.

It is important that communication with ALL stakeholders used is clearly evidenced. There were instances where the only stakeholder was the "client" who was the Assessor and the evidence was just guidance between a student and teacher in carrying out an assignment.

Some candidates fabricated the evidence for this strand which is not acceptable.

The June 2007 report gives further guidance to help raise achievement for this strand.

#### Comments on Strand d - Delivery of Product (10 marks)

The evidence for this strand relies very much on strands a to c. The product needs to meet the objectives of strand a and this can be evidenced in the End of Project Review Meeting and the evaluation produced for strand e. The evidence produced for strands b and c should clearly demonstrate that the product was produced according to the plan. Many candidates were awarded full marks in this strand but there was no supporting evidence to justify the assessment decisions made.

#### Comments on Strand e - Evaluation (12 marks)

Many candidates evidenced the production of a product for units 10 or 11 for this unit which is a good approach. Candidates who produced separate evaluations for each unit addressed the unit requirements more closely. It should be noted that the requirements for strand e for 6958 are very different to the requirements for strand e for 6960 and 6961.

Candidates need to ensure that an End of Project Review meeting is held with the stakeholders used for the project and that full feedback is obtained from them on the 3 topics stated in the assessment criteria, i.e.

- the success of the project
- effectiveness of project management methods used
- their own performance as a project manager.

The feedback from the stakeholders is essential to enable the evaluation to be produced by the candidate. Many End of Project Review Meetings that were held did not contain much content which, again, hindered the evidencing of this strand.

Many candidates were awarded marks for evaluations that did not match the requirements for this strand.

#### 6959 - Communications and Networks

#### General Comments

There is no need for centres to send their research folders to the examiner, however they must be kept securely until after the results have been published.

Most centres adhered to the ICE document guidelines which prevents access to the Internet and any electronic storage during the question response session, this succeeded in reducing cut and paste answers however many candidates simply retyped their research material verbatim making no attempt to relate the answer to the scenario. Use of network manager job descriptions which retained references to a school or college were particularly obvious examples.

Comments on individual questions

Activity 1 - Benefits of networks

Document to Bronco Brian discussing benefits of networks.

Most candidates managed to answer this activity to some extent although explanations rarely showed an attempt to relate the benefits to the Bronco Brian scenario.

Notes describing characteristics, properties and uses of different types of networks.

Most candidates had a fair understanding of LANs, MANs, and WANs. But only a few were able to move beyond the basic description of geographical area, method of connection, and an example of use. The best answers included comparisons of such things as connection speed, security, and bandwidth.

Too many candidates wrote brief accounts of LANs, MANs, and WANs, and then went on to display a page of book work on network topography.

Recommendations on which type of network to install.

A lot of candidates repeated what they had written as a description of the above network types. Such descriptions are not worthy of marks for this section of the activity. where network types were recommended, many candidates seemed unaware that different types such as a WAN and a LAN can be combined.

Where justifications were attempted, they lacked detail and did not often relate to the Bronco Brian scenario. Very few candidates achieved full marks in this section.

Activity 2 - Components of a network

A list of all the components, transmission media, connections and software to be used.

The best answers tended to be those laid out in a systematic way, often in the form of a table. The less good answers included rambling accounts, and over detailed PC, laptop, and printer specifications from a sales catalogue.

Weaker candidates often missed out or badly miscalculated the number of devices required. They also tended to include application software such as MS Office as being a network requirement.

Notes explaining the purpose of each item and justifying your choices.

The best answers tended to combine this section with the previous one. Weakness here were in the choice and justification of software. Few candidates identified a network operating system, fewer were able to explain why it was needed.

A list of possible alternatives that may be used if reducing the expenditure is necessary.

This was not well answered. Most candidates who did include something restricted themselves to giving a cheaper version of everything. Few were able to give alternative items or to identify areas where a reduced level of equipment might have served.

Notes describing the different methods of connecting The Chuck Time House to the network of The Ranch House.

A number of marks were thrown away here by candidates who did not describe fibre optic cable, despite it being specified in the question.

Where microwave connections were discussed, there was some confusion between satellite and microwave dishes.

Where leased lines were discussed, too many candidates seemed to think that this had to be specially laid like a fibre optic cable.

Your recommendation as to which method of connection is most suitable.

Most candidates gave a method, but justification tended to be weak. Typically, cost would be compared between method and method two, while performance would be compared between method and method three.

Activity 3 - Network design

A one page design for The Chuck Time House network. A one page design for The Ranch House network

This was a question where many candidates achieved a high mark. A lot of candidates showed a good understanding of network design and were able to construct an appropriate diagram showing a layout for Bronco Brian's network. It was apparent that centres had spent a lot of time on this section of the specification. There was a degree of creativity over symbols, with hub/switch/router symbols being used interchangeably, fortunately most candidates labelled them.

Candidates lost marks for not identifying cable types, not showing wireless access points, and failing to show how the buildings were connected. Some candidates did not always show a good understanding of printer connections as they were sometimes shown connected to multiple individual PC's.

There were also too many candidates who were effectively showing their server being used as a hub. They had anything up to half a dozen cables going to the server, with presumably a network card for each cable.

One page of notes justifying each major decision made about the network design.

All too often this turned out to be a long description of the network diagrams with no mention of decisions and no justifications. A significant number candidates did not submit anything for this activity.

#### Activity 4 - IP addressing

A scheme for IP addressing with an indication of the actual IP addresses to be used. Notes justifying each major decision made with regard to the IP addressing scheme.

These two sub-sections were usually combined.

This question was often poorly answered with candidates failing to understand the requirements of IP addressing.

DHCP was mentioned fairly often but rarely explained. Some candidates even rejected using DHCP on the grounds that it would cause extra work. The use of static and dynamic components was rarely justified, scopes and reservations were hardly ever mentioned.

A lot of answers included detailed descriptions of network classes probably copied verbatim from research that had been carried out. Despite this, it was obvious that many of the candidates who did this did not really understand network addressing.

A small minority of candidates were able to show the use of subnets and subnet masks.

In many cases candidates simply listed the devices and gave them all fixed IP addresses. In others they gave each floor of each building a different class C address.

#### Activity 5 - Network performance

Notes discussing possible causes of performance degradation. Notes recommending possible remedial action.

These two sub-sections were usually combined.

Most candidates could identify some causes of network degradation but very few related the causes to the Bronco Brian scenario where the two buildings had just been joined. There was clearly too much book work in many answers, with generic causes of degradation being discussed, irrespective of how likely they would be in the given scenario. Generally only the stronger candidates achieved good marks in this section.

#### Activity 6 - Network management

Detailed job description listing the duties that would need to be performed to keep the network running efficiently.

Students who achieved highly on this question were able to state a duty and then gain expansion marks when they gave a description. This meant they had to identify fewer duties but were able to achieve high marks due to the explanations they gave.

Weaker candidates often gave answers listing of numerous duties, but there was little attempt to put anything into context.

It was clear that in many cases candidates had simply lifted material during their research and had not bothered to put it into context. References to educational establishments and companies should have at least been removed, if not replaced with appropriate text for the scenario. Long passages about company cars, training opportunities, pension schemes and so on were not asked for.

There were plenty of good answers listing of duties, but again there was little attempt to put anything into context.

Standard Ways of Working

Most candidates gained both marks however careless marks were lost by putting work in the wrong order.

Before every examination series an 'Instruction for the conduct of examination' document is published on the Edexcel website. This document gives guidance to centres about the location of datafiles and the conduct of exams. Centres must read this document before the examination window.

#### 6960 - Using Multimedia Software

## General comments

The standard of the entry was encouraging although some of the work seen was reworked and improved from the summer series. Candidates often linked this unit to Unit 8 - Managing ICT Projects. This is good practice in most cases the work was well separated from unit 8.

Some candidates produced a web site is not what the specification requires, although the product may be accessed via a browser it must contain some elements of a multimedia product. The essential requirement is that candidates produce a product that has a timeline. Video, image and sound editing are all parts of this unit and some work of this kind is required to gain higher marks. Good work showed an understanding of the design, development, testing process and benefited from liaison with a client or assessor posing as "client".

## Stand (a)

It is essential that the functional specification describes the purpose of the product, the context and intended audience. This section lays down the foundation for the rest of the project and time spent producing a good specification is rewarded in later sections. Better candidates had explained what the finished product must do and how they would measure the success. They also had a "real" end user for the product and could therefore produce a detailed functional specification for the client.

Many candidates showed a lack of understanding of what was measurable success, often being very vague in their descriptions.

## Stand (b)

There was a wide variety of evidence, with most candidates having some kind of storyboarding describing layout designs, though often this was not very detailed, Candidates did not always state clearly what multimedia elements would be included in their products. It was also not clear which items were ready made or original.

Prototyping was not well done in the majority of cases; examples should be included to show how the product has been developed and the changes as a result of feed back. There was a lack of evaluation by the candidates as to how the work had been developed and refined at each stage. Overall, there was a reasonable awareness of audience and purpose with varying qualities of different types of ready-made and original multimedia components used in the finished product.

Designs should be matched to the agreed functional specification.

## Stand (c)

Candidates are required to produce a working multimedia product that will function fully away from the development environment. Most met this aim within the context of the eportfolio, from where the product should be launched for the purpose of assessment. It is essential that a fully working version of the product is included with the sample. The candidates produced 'getting started with...'instructions, of varying quality and detail Many gave instructions on putting the CD in the computer but failed to provide further information covering system requirements and installation procedures enabling a novice user to install and use the product. The instructions should assume that the product is to run standalone and outside of the candidates eportfolio.

## Stand (d)

Testing tables were often present but there no was evidence in the form of screen shots that indicated the results of the tests. It is not necessary to provide evidence of every single button being pressed, however a few samples are needed.

Involvement from others was often in the form of questionnaires with the focus mainly being the interface, user requirement and the original success criteria should be referred to and tested.

## Stand (e)

It is essential to comment on whether the final produced met the specified requirements. Evidence of feedback on their work was often in the form of questionnaires. The results of these were often mentioned but not used to critically review the final product.

The evidence in this e-portfolio was often mixed with that for unit 8, it is important that the candidates are aware of the different requirements of the evaluation for this unit. This unit requires the product to be evaluated; unit 8 requires that the project management be evaluated.

## Standard Ways of Working

In most cases the only evidence the external assessors had for this aspect was the file structures and names used by the candidates.

## General Administration

Most samples were correctly submitted with folders clearly labelled with centre numbers, candidate number and first 2 letters of surname and first of Christian name. It would help if the erecord sheet naming convention is the same.

The centre assessor should use the erecord as an opportunity to help the moderator find the evidence required to agree the marks given. The comments by centres often contained only 1 line comments, in other cases no comments at all were provided.

#### 6961: Using Spreadsheet Software

#### **General Comments**

Comprehensive Examiner's reports on this unit were published in January and June 2007. It was disappointing to find that some centres do not appear to have, as yet, considered and implemented the main points therein in relation to the requirements for 6961.

Only a small number of centres submitted eportfolios for moderation this window across which a range of performance was seen. Although there were a few examples of very good work, it would appear that many centres fail to appreciate the main requirements of this unit. 11.1 of the course specification states "spreadsheets are used in all sorts of contexts for tasks involving the analysis and interpretation of complex numerical data, such as: modelling; statistical analysis; cost-benefit analysis; simulation; forecasting; budgeting and planning". Assessment evidence (b) states "appropriate use of functions and formulae to analyse complex data"; both (b) and (c) use the phrase "technically complex spreadsheet". The design, prototyping, development and testing of such a spreadsheet is required to address all strands of this unit. It was disappointing to see that some candidates had not addressed the issue of complexity and had produced solutions that did not reflect A2 standards. These candidates were not able to access many marks in any of the strands.

Some centres had adopted a very structured approach with all candidates producing similar evidence. Whilst it is acceptable for the Assessor to act as "client" and give the same brief to all candidates, the brief should be sufficiently open ended to enable candidates to adopt an independent approach to a solution - as is required for the higher mark bands.

Some centres had used the created spreadsheet solution as the project for Unit 6958. This is good practice but centres should ensure that candidates clearly differentiate between the two sets of evidence.

Many candidates had not adhered to the correct file formats as specified in published Edexcel documentation and innumerable Word files were included in the portfolios. This aspect is incorporated within standard ways of working, a component of strand (c). The final spreadsheet, together with prototype versions, should be included in the eportfolio, as detailed on page 180 of the unit specification.

## Comments on strand (a) - Functional Specification

The nature and content of the requisite functional specification are well explained in section 11.2 of the unit. Many candidates failed to include details of how they would "judge the effectiveness of the solution". Good evidence in this strand facilitates effectively addressing the requirements of all the other strands. Those candidates who had responded to a "client" brief and presented a clearly outlined proposal to that "client" were able to produce the most effective evidence for this strand. It is perfectly acceptable for the Assessor to adopt the role of "client" to ensure candidates have opportunity to address all aspects of the Assessment Criteria.

## Comments on strand (b) - Design

It is important that candidates give consideration to 11.3 - 11.9 of the unit specification when designing their spreadsheet. The candidates who address this strand well have detail and clarity in their objectives - strand (a) -generate prototypes, produce evidence of liaison with the client, develop the product following feedback etc, all of which is well documented. It is very difficult to evidence such prototyping without the use of a 'client'. Prototyping is not the step-by-step process of implementing the spreadsheet solution as appears to be believed by some candidates.

To address mark band 1, candidates must consider "appropriate use of functions and formulae to analyse complex data". Many candidates referred to functions and formulae in their design work but did not show these in use. These should be clearly evident in the prototyping and testing of the spreadsheet as well as within the product itself. It was disappointing to see, as in previous windows, a significant number of candidates evidencing little beyond level 2 skills in relation to formulae. 2 cell formulae, sum, min, max, average, If statement etc are insufficient on their own in this context.

Validation does not seem well understood and was poorly evidenced by many candidates. To address mark band 3 the use of at least 4 different measures to validate data and trap errors is required.

When understood, future proofing was documented and incorporated well into the spreadsheets but not always included in the "Technical Guide".

Very few candidates this window demonstrated good use of charts and graphs in the presentation of the output/results from the spreadsheet - 11.8.

Comments on strand c - Fully Working Spreadsheet Solution

To be able to access any marks in this strand, candidates must include evidence to show they have produced a "technically complex working spreadsheet" with an explanation of how the spreadsheet relates to their Functional Specification produced for strand (a).

Spreadsheets are still being submitted which merely comprise the 'shell' of the system eg offering choices to a user but without any stored data or facility to store choices made. This is not appropriate, as it cannot reflect a fully working spreadsheet and precludes the opportunity to demonstrate analysis of complex data.

The eportfolio should include both a User Guide and a Technical Guide produced as stand-alone documents and accessible via discrete links.

Many of the User Guides did not fully demonstrate the facilities within the spreadsheet nor show that the spreadsheet had been produced to meet the requirements of the Functional Specification.

Similarly, many of the Technical Guides did not evidence all the "behind the scenes" aspects of the spreadsheet produced. Some candidates even failed to include screen prints of the worksheets in formulae view. Very few formulae were evident in much of the work and many of these formulae, as mentioned, did not reflect A2 standards/candidates. Few candidates had addressed analysis and interpretation of complex data appropriately.

Comments on strand d - Testing

It was apparent that many candidates did not understand the difference between prototyping the design of the spreadsheet, prototyping the product throughout the implementation process and final/summative testing. The testing should evidence the spreadsheet meets the requirements of the Functional Specification. The design of the spreadsheet and features and facilities may change during these processes but the candidate should explain the changes always referring the process back to the "client" requirements and the evidence produced for strands (a) and (b). Summative testing can include "end users" working through the User Guide to see if they can make effective use of the spreadsheet produced, a peer reviewer working through the Technical Guide. The specification (11.9) also states: "candidates should also make

use of any auditing tools available in the software being used. Typically, such tools can identify errors in formulae and suggest corrections".

Candidates should be discouraged from just submitting test plans and/or long Word tables merely describing tests on their own. These should be supported by screen prints showing evidence of tests having been undertaken, eg testing of validation using test data.

## Comments on strand e - Evaluation

Many evaluations did not address the requirements of the strand at all well. The evaluation needs to relate to the initial requirements and good evidence produced for strand (a) enables a candidate to do this effectively. Many candidates were not able to identify or explain shortcomings of the final spreadsheet. Some of the suggestions for improvements were very general and not specifically relation to the solution produced. Some of the 'improvements' were issues that should clearly have been resolved during testing.

Many candidates struggled to evaluate their own performance throughout the project and often produced descriptive detail of what they had done. Assessing their skill level at the outset and reviewing the skills obtained through undertaking the unit can help candidates evaluate both their skill level and their performance.

#### 6962 - Customising Applications

There was a small entry for the January series with only two centres submitting marks. The choice of projects were much more in line with A2 standard for this series although candidates failed to reach the top marks. Significant coding was produced by all candidates although there seems to be a general lack of desire to use loops in their coding. This is of course necessary to gain the highest marks. The general quality of the work seen for this unit was of average standard with a slight tendency for the assessors to be generous.

#### Strand a

There is still a tendency not to make the success criteria measurable - most statements were too vague, but on the whole this was recognised in the marks awarded. Again I will repeat that ease of use type criteria should state whose opinion is to be sought and this should be the client.

#### Strand b

Most candidates made some attempt at design but largely only the forms. Again there was very little in the way of anything resembling program design such flowcharts or Structured English and this led to this strand being generously assessed. It would be difficult to see how a candidate could be put into MB3 or even towards the top of MB2 with only form and structure designs.

#### Strand c

In this series both centres managed to set A2 standard projects and this produced a pleasing amount of coding that the candidates produced themselves. Many candidates go out of their way not to program loops or iterations and consequently fall short of the higher mark bands. Coding is still rarely commented or explained.

#### Strand d

Once again testing evidence was rarely sufficient for the higher mark bands - not sufficient to show testing of a range of data, or a thorough and systematic approach. Tests must be supported by evidence, a tick against a test is not enough.

#### Strand e

Evaluations are still weak. At A2 there are a significant number of marks for evaluation and many candidates are missing these.

## 6963 - Web Management

## **General Comments**

A small amount of centres submitted entries for this unit in the January window. Generally, the candidates had supplied front sheets that were easy to navigate and the centre had produced eRecord sheets indicating why the assessor had awarded the marks. Most of the eportfolios submitted were in the correct file format with all the evidence easily identified.

This unit is an extension of Unit 5 Web Development. The unit specification requires the candidate to continue developing the site produced in Unit 5 to provide an eMarketing solution. When creating scenarios or choosing clients for Unit 5, the centre should ensure that the resulting website has the ability to be developed to produce all the evidence required for this unit. Several of the topics chosen were not aimed at a client and could not be successfully promoted or gather suitable feedback.

Some candidates are still producing eCommerce sites, selling fictitious products or services. Unless using a real client, the production of eCommerce features, such as Shopping Baskets and item sales, should be avoided. Competitions and special offers should also be avoided as the candidate could become legally bound to supply the goods. Links to real sales sites could be included to allow a product to be purchased. The resulting web site for this unit should be filled with features that promote a product or service.

The main aim of the website should be to gather customer information and feedback that will later be used to market the product or service.

## Comments on strand a - Web Hosting and upload of files

This strand was generally well assessed with several almost professional web sites produced. However, it was disappointing to see many low scoring portfolios and portfolios where the scenarios limited the marks available to the students.

The client needs are still not being supplied or used when justifying the choice of provider. Some of the clients needs were too prescriptive. For instance, "My client needs 8 E-mail accounts and PHP". The client should have several general needs that can be used to determine the correct choice of provider. They could require the users to log on and register with the site, resulting in the need for data connectivity. The actual requirements should be teased out of the client and not just given to the candidate.

Testing was very weak across the work seen, with several candidates only testing the links. This limits the marks available to those available in mark band 1.

One or two centres asked the candidates to select an ISP for one client and build a site for another. If possible, the client should remain the same across the whole of the unit portfolio work.

## Comments on strand b - Promoting the website

This strand asks the candidate to choose and effectively use visit strategies. Several of the strategies used were too similar i.e. Adsense and Adwords, Web Rings and shared links, and some were not valid methods. The candidates should be encouraged to choose from the list given in section 13.2 of the specification, describing five and implementing two.

The assessment of their effectiveness can only be carried out if the candidates measure the visits in some way over a long period in time. This could involve a hit counter or an increase in feedback traffic. This was rarely done, but it was nice to see one candidate deciding that the visit strategies used were not effective and fully justifying this comment with hit reports and a full explanation that reached mark band 3. This further demonstrates that success is not required to provide a critical assessment of the visit strategies effectiveness.

## Comments on strand c - Capturing visitor information

There was a positive improvement in the quality of feedback and enquiry forms produced with the inclusion of a privacy policy or some notification that the data would be used appropriately. This ensured that the method of capturing information complied with legal requirements and opened up marks in mark band 3. Some of the forms were very professional with at least two centres attempting to link them in with a database solution. While this is not a requirement of the strand it has to be applauded.

Testing was generally much improved with evidence of emails being received and validation being applied and tested using dummy data.

#### Comments on strand d - Site Management

Assessment of legal aspects and accessibility was much improved but there are still centres where the general topic of accessibility has been misunderstood. Accessibility deals with the ability of a web site to allow all types of users to access the site information. The candidates should assess the ability of visually impaired users to access the site. In addition to the W3C testing available, there are sites like WAVE and Cynthia Says that provide in-depth information and on-line testing facilities that should be used to gain the higher mark band scores.

Several centres asked their candidates to produce a general report on legal and accessibility aspects instead of asking them to assess the content and layout of the site produced. This limits candidates to mark band 1.

Technical information varied widely across the centres, with some producing detailed maintenance manuals while others barely provided a site map. Site Maps, a history of development and details of each update should be provided as a minimum. For the higher mark bands, the candidate should provide important code with an explanation of the more advanced features included and a detailed record of the changes made during the eight week period. The technical documentation should allow future maintenance to be carried out by a third party.

There was still an amount of centres who allowed the candidates to add the eMarketing update features after they had published to the Internet. The site should be complete before publishing in order to give the visit strategies a chance to be effective and to allow a reasonable amount of feedback to be gathered.

## Comments on strand e - Evaluation

The quality of the written evaluations was much improved, with several effective accounts fully using the statistics available. Centres generally understood the need to evaluate the performance of the site including a measure of download speeds on occasions.

#### 6964 - Programming

#### General comments

Few centres were entered in this series. A full listing of the program must be included in the eportfolio. Preferably as a text document. The programs need to be both challenging and sophisticated.

In some cases all the candidates within a centre were working on the same product specification. It would be better to give candidates a choice at this stage so that each candidate can choose a task suited to their own abilities and so access the full range of marks.

The product specification is not marked but must be included so that the examiner can judge if the solution meets the requirements of the specification.

#### Stand (a)

Examples of good designs were seen which included the interface, validation of data and the structure of any files or data used

Some candidates were limited by the simplicity of the task undertaken. Such tasks limit the scope for navigation diagrams, validation procedures and data structures.

Stand (b)

The program must be fully working to gain marks above MB1. Evidence for this is mainly provided in the test results. Screen dumps are essential to provided evidence of successful testing and a fully working product.

A full listing of the source code must be provided, and a working version of the finished program.

The task undertaken must be of a level expected for and A2 candidate, it is not sufficient to use the program features in a contrived way so that loops, nested loops and if..then statements appear in the program. They must be used in way that is appropriate and effect for the solution to the problem.

Stand (c)

Candidates must be able demonstrate the program has been tested. Test plans should be included along with evidence that the tests have been carried out. It is not sufficient to simply add the phrase "test passed" to a column in the test plan. A screen dump showing the success of a test is required.

It is not necessary to provide evidence of a repetitive nature.

#### Stand (d)

The user guide and the technical guides must be separate documents accessible within the eportfolio.

The technical guide should contain details of the program, the variables used and structure of any files. To move out of MB1 the technical guide should give enough information for another programmer to get either and overview of the program MB2 or to fully understand the program and be able to make amendments (MB3).

The user guide should be fit for audience and use non technical language, the use of screen shots combined with instructions was effectively used by most candidates.

#### Stand (e)

Good candidates related the evaluation to the program specification, very few candidates made use of feedback from others effectively, often relying on the results of a survey from users.

#### Standard Ways of Working

In most cases the only evidence the external assessors had for this aspect was the file structures and the use of meaning full names used by the candidates.

#### General Administration

Most samples were correctly submitted with folders clearly labelled with centre numbers, candidate number and first 2 letters of surname and first of Christian name. It would help if the erecord sheet naming convention is the same

The centre assessor should use the erecord as an opportunity to help the moderator find the evidence required to agree the marks given. The comments by centres often contained only 1 line comments, in other cases no comments at all were provided.

## Grade Boundaries - Applied GCE ICT

6951	Max Mark	Α	В	С	D	E
Raw	60	45	39	33	28	23
UMS	100	80	70	60	50	40
6952	Max Mark	Α	В	С	D	E
Raw	60	44	38	33	28	23
UMS	100	80	70	60	50	40
6953	Max Mark	Α	В	С	D	E
Raw	90	57	49	41	34	27
UMS	100	80	70	60	50	40
6954	Max Mark	Α	В	С	D	E
Raw	60	44	38	33	28	23
UMS	100	80	70	60	50	40
6955	Max Mark	Α	В	С	D	E
Raw	60	44	38	32	27	22
UMS	100	80	70	60	50	40
6956	Max Mark	Α	В	С	D	E
Raw	60	45	39	33	28	23
UMS	100	80	70	60	50	40
6957	Max Mark	Α	В	С	D	E
Raw	90	56	48	40	32	25
UMS	100	80	70	60	50	40
6958	Max Mark	Α	В	С	D	E
Raw	60	44	38	32	26	21
UMS	100	80	70	60	50	40
6959	Max Mark	Α	В	С	D	E
Raw	90	75	65	55	45	35
UMS	100	80	70	60	50	40
6960	Max Mark	Α	В	С	D	E
Raw	60	45	39	33	<mark>28</mark>	23
UMS	100	80	70	60	50	40
6961	Max Mark	Α	В	С	D	E
Raw	60	45	39	33	27	21
UMS	100	80	70	60	50	40
6962	Max Mark	Α	В	С	D	E
Raw	60	44	38	32	26	21
UMS	100	80	70	60	50	40
6963	Max Mark	Α	В	С	D	E
Raw	60	44	38	32	26	20
UMS	100	80	70	60	50	40
6964	Max Mark	Α	В	С	D	Е
Raw	60	45	39	33	27	21
UMS	100	80	70	60	50	40

Further copies of this publication are available from Edexcel Publications, Adamsway, Mansfield, Notts, NG18 4FN

Telephone 01623 467467 Fax 01623 450481

Email <a href="mailto:publications@linneydirect.com">publications@linneydirect.com</a>

Order Code UA 019750January 2008

For more information on Edexcel qualifications, please visit <u>www.edexcel.org.uk/qualifications</u> Alternatively, you can contact Customer Services at <u>www.edexcel.org.uk/ask</u> or on 0870 240 9800

Edexcel Limited. Registered in England and Wales no.4496750 Registered Office: One90 High Holborn, London, WC1V 7BH