

Examiners' Report Summer 2007

GCE

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

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Unit 6951 - The Information Age

General comments

Most of work seen was appropriate and gave the candidates good opportunities to meet the requirements of the specification

There were still several examples of work submitted in inappropriate file formats, such as PowerPoint presentations which had not been converted to html format, or long, document-style PDF files with few links for e-book presentations. In some case it was apparent that the candidates had produced a series of essays covering the topics required for strand a) b) c) and then simply linked them into an eportfolio. Work of this nature can gain marks in those strands, however in d) e) very few marks can be awarded, because no e-book is present.

Some assessors made appropriate comments, however in many cases, the comments on the e-record sheets were too brief often giving no indication of how the assessor had applied the assessment guidance. Comments are essential to help the moderator agree the marks given.

Stand (a) On-line services:

There was generally a broad coverage of online services by most candidates. Some are still including two types of the same online service which are presented as different services which limits the marks they could be awarded.

At the top of the mark range good candidates covered the required depth by describing and evaluating more than one aspect of each service.

In some cases the information presented was merely copied from sources, with no evidence that candidates understood what they were writing about.

Stand (b) Life in the information age:

It is essential that variety of sources of information is used to gain marks above MB1; sources of information other than the internet must be used and listed in the bibliography.

The overall impact was often not discussed by many candidates. Candidates could be encouraged to summarise and comment on the overall impact of ICT on life in the Information Age. This is essential to access the higher mark ranges.

Stand (c)

Digital Divide:

Better candidates appreciated the need to research the extent of the divide and the measures being taken to bridge the gap. Candidates often listed or gave a brief comment on factors such as wealth and environment but did not evaluate the impact or the extent. Better candidates included statistics in the form of graphs, better candidates referred to and explained the significance of these.

To gain marks in the higher ranges the candidates must cover the divide at all levels, Local, national and international.

Stand (d) The e-book:

Many candidates created professional looking e-books. Most candidates had used appropriate software and multimedia design although there were a lot of poorly chosen colour schemes and animations. Weaknesses included a lack of understanding of sequential and non sequential links.

Links and navigation were still an issue due to candidates using absolute link addressing which was subsequently broken when the CD was written.

Better candidates tried to address the audience in 100 years' time. However others still presenting the work as an assignment for the teacher and include inappropriate headings such as unit numbers.

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 e-book.

Stand (e) Components and structure:

To access the higher marks candidates need to include both ready made and original content. Better candidates included sound and video clips in there work, these were often in the form of a short interview or some background music to a page.

Links are still an issue, components were often missing due to the copying to CD. Centres must encourage candidates to copy the e-book to CD and test the links before it is sent for assessment.

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:

The standard of evaluation was better than in previous series, candidates are evaluating their own performance as well as that of the e-book. To gain full marks candidates must include feedback from others in the evaluation. There were several examples of candidates producing questionnaires and scanning in completed copies. This shows that they have sought the feedback, but must then refer to this feedback and use it in a meaningful way in the evaluation.

Many candidates still confused the eportfolio with the e-book at this stage. 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 be 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 e-record sheet naming convention is the same.

Unit 6952 - The Digital Economy

This is now the fourth moderation window for this unit and it will be noted that many of the comments made below are similar to those made at previous windows.

General Comments

There were a good number of entries for this unit for the January window and the full range of marks were seen from 1-60. There were some excellent eportfolios submitted with candidates clearly taking a real pride in the presentation of their evidence and demonstrating good understanding of the unit and accurate assessment to national standards. On the other hand, it was disappointing to see a number of submissions which did not demonstrate standards which reflected AS candidates.

Most of the eportfolios submitted were in the correct format and the evidence easy to find. However, there is still a significant percentage of centres submitting evidence in incorrect formats, ie Word files and also with many links not working. Eportfolios should be in a format that can be read in a browser and the files should link together. Centres should refer 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/>

Many centres are giving clear feedback on the candidate esheet which shows how the marks were awarded and helps the moderation process. However, some centres are not giving any feedback at all. There is evidence that the requirements of the higher mark bands were not fully appreciated and this is explained in more detail below. Assessors are advised to use the e-sheet to indicate whether deadlines are met and explain if the candidate worked independently.

There are still many instances of evidence containing many uncorrected errors. Candidates are recommended to proof read their work thoroughly and should refer to the quality assurance section of 2.10 of the unit specification.

Again, there was evidence of candidates downloading content from websites or copying from textbooks for strand C without evidencing the source. There were also many instances of diagrams being directly lifted from textbooks and/or the exemplar on the ICT microsite to evidence strand b. This is unacceptable practice.

Comments on strand a - The Transactional Website

It was good to see that most candidates had chosen different transactional websites to evaluate. There are still a significant number of instances of candidates evaluating ebay which is fundamentally an auction site enabling third parties to buy and sell. It was good to see very few candidates now choosing ticketing sites which makes understanding of strand b difficult. Candidates are advised to choose sites where items are ordered from stock and delivered to a specified address. Candidates who chose smaller sites often addressed more aspects in their evaluations.

The majority of candidates evaluated one site only which is the requirement for this strand. Most included relevant screen shots and explained navigation and the shopping basket. Few candidates explicitly explained methods used to capture customer information. These should include covert and overt methods in order to address all aspects of mark band 1. Candidates wishing to raise achievement in this strand should look at 2.3 and 2.5 to find a wider range of features to evaluate to enable them to address the requirements of mark bands 2 and 3. Some candidates

describe the products at some length rather than evaluating the transactional website itself. Many candidates did not cover the design of the site. Few candidates explicitly commented on the “customer experience” which is required in order to access full marks.

Comments on strand b - Back-Office Processes

Overall, there was a continuing improvement in evidence produced for this strand by many centres. Candidates produced a range of different types of diagrams which is acceptable. Most candidates produced more than one diagram which is a requirement for mark band 1. It was good to see more candidates accessing marks in mark band 2 and 3. Unfortunately there was again many instances of diagrams copied from textbooks and also the exemplar on the ICT microsite. In addition, there were also a significant number of examples where diagrams from the same centre were virtually identical. Candidates working in the higher mark bands are required to demonstrate an independent approach to their learning. Candidates should be encouraged to annotate and explain their diagrams to demonstrate understanding. However, it should be pointed out, that explanations on their own without diagrams do not address this assessment strand and, therefore, cannot access the marks available.

Many candidates demonstrated a good understanding of the front office processes which can be ascertained from the transactional websites evaluated. Back office processes need to be taught and candidates should produce their own diagrams to explain these. Many candidates do not appear to have a comprehensive understanding of all back office processes, which would certainly include stock control, payment processing and despatch of goods. The back office involves many different areas within an organisation and may also involve third parties. It was good to see some candidates covering these areas and thereby demonstrating understanding of the complete picture required for mark band 3.

Some diagrams provided flows of information that were more appropriate to a manual system and did not demonstrate how systems are now adapted to suit transactional websites and the use of computer technology.

Comments on strand c - Threats to Data

Many candidates are still writing about security in general and, sometimes, relying too heavily on reproducing textbook content rather than relating their research to the requirements of the strand. The strand clearly states “potential threats to customer data COLLECTED BY ORGANISATIONS via their websites ...” Candidates should identify several threats if wishing to access the higher mark bands and clearly describe measures taken to protect this data which needs to include relevant legislation if wishing to access all the marks available for mark band 1. Many candidates are producing a lot of evidence but neglecting to include the evaluative comments required for the higher mark bands. However, it was good to see that a significant number of candidates related this strand to the transactional websites they had evaluated for strand a which is good practice.

Few candidates covered the requirements of mark band 3 for this strand.

Comments on strand d - Database

This is a high scoring strand with 20 marks available. For this window there were more candidates moving into mark band 3. However, there is still a significant number of centres who are assessing this strand leniently with candidates producing evidence that does not match the requirements. The assessment guidance on pages 43-44 give some further clarification.

There were many centres where it would appear that the candidates had followed very structured tasks with the result that the evidence was very similar in all eportfolios. Candidates wishing to access the higher mark bands should demonstrate a more independent approach to their work.

Candidates are not required to find their own data but should be given a dataset large enough for them to extract some trends. There are several datasets on the microsite for this unit which can be used or centres may have access to other suitable datasets.

Although the candidates do not have to evidence every step of every process they undertake, they should include relevant screen prints to illustrate the various aspects of the mark band they are addressing. A structure should be produced for the dataset which needs to address field types/formats and incorporate validation. There should be some evidence of testing the structure created. Inputting test data to initiate error messages is one way of doing this. The structure should be tested prior to the importation of the data. It was good to see more candidates evidencing validation rules as well input masks and producing evidence of testing these.

The dataset needs to be divided into 2 tables with a one-to-many link and there needs to be evidence of this which can be provided by a screen shot of the tables with enforced relational integrity. There also needs to be some evidence that the data has been correctly imported. Candidates are not required to produce a database in third normal form.

Candidates need to manipulate the database and show evidence that the manipulation uses the relational aspects, ie both tables. More candidates explicitly evidenced some of the aspects required for mark band 2. Some candidates produced evidence which only used one table and this meant that mark band 3 was not addressed. The Assessment Guidance for this unit clearly states what evidence is required for the 3 marks bands.

Candidates should be encouraged to work out for themselves what queries they will use by examining the data used. Such queries should enable them to produce trends. It was good to see that most candidates had used graphical format to portray their trends clearly and most had made an attempt to analyse and explain the trends. To achieve full marks the candidates need to make sensible recommendations based on the trends identified. A major part of this strand is the ability to use a database as a tool to help in the decision making process.

There was a lack of understanding of what a trend is and it should be noted that candidates are required to identify some significant trends for mark band 2 and interpret these and make recommendations for mark band 3. This means it is important that the dataset is sufficiently large and complex enough to enable trends to be found. Candidates should examine how large amounts of data are used within organisations to help in the decision making process. Observing results over a period of time can identify a trend and then this can be used to help an organisation become more effective.

Comments on strand e - Evaluation

This strand is still not addressed effectively. Many candidates are addressing the requirements listed for 6951 rather than looking at what is needed for this unit. There is a tendency to list what had been done rather than evaluate the requirements of the strand. There are 6 marks available but most candidates are in mark band 1. There are two main areas to address and few candidates are evaluating the **performance of the database created**. The assessment guidance gives some further clarification on this.

Candidates are also required to evaluate their own performance whilst undertaking the unit.

To move into the higher marks bands, candidates need to have obtained some feedback from others and incorporate this into their evaluation. There were many instances of evidence of feedback but no reference to it in the evaluation. Candidates could obtain feedback from others by asking them to use the database they have created and ask them to comment on how easy or difficult this was and explain why.

Unit 6953 - The Knowledge Worker

General

As centres get more used to the format of the examination the standard of response is getting better. There are still weak areas, however, and although the spreadsheet activity is generally well answered some of the other activities are not so well attempted. Many candidates have a problem analysing data sources and there were few examples of really good reports. The time management problem was mostly a problem for the low to middle attaining candidates. I will repeat the advice I gave in the report in previous series.

- a) Only the report activity is marked for quality of written communication; all other activities can be answered in note form.
- b) The suggested timings are given to help the candidate and should be adhered to, especially the timing for the 'using the model' activity. If the candidate has time left at the end of the activity they may revisit the earlier questions but they should not return to the 'using the model' activities.

Overall marks varied between very low and very high indicating a well differentiated examination.

Activity 1

The majority of candidates scored reasonably well in this activity especially identifying the main points of the scenario and also identifying the decisions they had to make. Many candidates struggled identifying the information available. In general the higher scoring candidates took a bullet point approach to this question. Using bullet points seemed to lead to more concise answers. Many of the lower scoring candidates simply repeated parts of the scenario in their own words in the hope of picking up marks. Although it is possible to pick up marks in this way it is not only time consuming activity but some of the comments contradicted what had gone before thereby revealing a lack of understanding.

There were three areas for which marks were awarded. Firstly the candidates had to be able to pick out relevant background information, most were able to do this. Secondly they had to state the decisions they had to make, again most manage this. Lastly they were looking for other things which may effect the results of the model. Only the higher scoring candidates were able to do this.

Activity 2

A large number of candidates failed to refer correctly to the sources which lost them marks. The description of the sources was too often vague, referring only to the size of the numbers; "the company sales had too many big numbers" was often quoted missing the point that it was for 35 stores. Most candidates chose the Birmingham sales 2006 data although very few justified its use by indicating that the data reflected the local sales patterns.

Candidates were normally able to indicate that the data would form the basis of their calculations without developing their description to include how they accounted for the 2% sales growth.

Activity 3

This activity was generally well addressed and in many cases better accessed than in previous years. Student's seemed more comfortable with a familiar system such as stock control. Very few, however, added the 2% onto the sales figures to produce their predicted values. Most candidates managed to change the settings and raise the profit, some significantly. A few managed to reduce the profit. It was disappointing to note the number of students who gave away marks by ignoring the rubrics on row & column headings.

Activity 4

The standard of report again varied with a few of the higher attaining students producing coherent reports and fit for purpose charts. In contrast the lower attaining students managed to get only the content marks and sometimes not even those. Many candidates produced much work without scoring any marks by failing to address the requirements of the report. Some failed to state their solution consequently lost marks. A few candidates managed to score odd marks for 'other factor' although generally these were poorly addressed. This was particularly disappointing as there were a few anomalies within the model and these should have been mentioned here but surprisingly few candidates mentioned these. Most candidates included a graph although these were often not relevant to the report or fully labelled. Spelling and grammar were generally quite poor, with few candidates adhering to a report format. Centres should prepare candidates by teaching them a report format. Edexcel has no preference for format but marks are available for headings, sub-headings and titles.

Activity 5

There was a great deal of opportunity to suggest improvements to the model in this examination and it was disappointing how few candidates recognised the obvious flaws. Once again this activity suffered from being the last activity and the one that was missed out if the candidate ran out of time.

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. 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.

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.

Unit 6954 - System Design and Installation

General comments

There were a high number of entries for this unit for the June window and again a wide range of marks were seen from single figures to a relatively small number in the mid 50s. There was however, still a highly noticeable difference in the presentation styles of the eportfolios submitted across the candidate cohort. It was disappointing that a significant number of portfolios were seen which did not demonstrate standards which reflected AS candidates.

Whilst most of the eportfolios submitted were in a format, which allowed the moderator to easily find the evidence there are still a small but significant percentage of centres submitting evidence in incorrect formats, i.e. Word files and an increasing number of 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/>

It was disappointing to see that, some centre assessors are still giving almost limited feedback, comments like 'well done' or 'nice screenshots' which, do not aid either the candidate or the moderator. In a relatively small number of examples no feedback was given at all. There was some evidence that the requirements of the higher mark bands were beginning to be appreciated but this was only in a minority of the centres. Assessors are advised to use the e-sheet to explain if the candidate worked independently, this is a requirement of the higher mark bands.

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

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. 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 many could not describe how they matched their client's requirements. Few candidates' were able to evaluate fully the pros and cons of the chosen system in order to give their client an informed conclusion, lack of alternatives and drawbacks were ignored.

Strand (b) - System Specification

The main requirement of this strand is that the system needs to be recommended to the client through a detailed and informative systems specification (section 4.7 of the unit specification). It is also advised that centres point out, to their candidates', 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.

The hardware and software specification should be presented to the client in non-technical language which would enable the client to have a full understanding what or why they were purchasing the stated items. Ergonomic considerations needed to

be given and related to the recommended system. 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 June 2006 and January 2007 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. 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.

There were, however a whole range of different methods employed to demonstrate examples of practical work being undertaken including short video clips or photos' clearly showing the candidate at work, which had been annotated by them and authenticated by the assessor. However, whilst showing an improvement on the previous moderation period much of the practical work undertaken was still poorly evidenced. In a number of cases it was again not clear that the candidates had actually undertaken the practical work for which they were claiming as their own, setting date and time on digital photographs is one simple way to prove authenticity of evidence.

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.

All candidates evidenced the installing of software of some kind but why they had installed it was better explained. 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 complete a test plan and then produce annotated evidence of the **variety** of tests undertaken, covering all aspects to cover the hardware and software. 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.

Clear records of thorough testing together with how identified problems were resolved should be produced. Often detailed test plans were included but with no evidence to show that the testing had actually taken place or any amendments that had to be made.

Testing should show that the complete system meets the agreed specification standards. It is recommended that candidates should show evidence of testing in the form of screenshots or printed output. A detailed test specification indicating formative and summative testing should be produced and that all hardware and software functions are tested to ensure the complete system is 'fit for the purpose intended'. The comment 'test performed as expected' is worthless without the evidence to prove it.

Candidates who wish to achieve a mark in grade bands two or three would be expected to have produced detailed test specifications and not just refer to some testing. It is not acceptable to produce a series of tests all very similar in nature.

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. The main area for concern is that candidates are concentrating on the performance and structure of their eportfolios rather than the performance of the built, tested and configured system. Many often produced lists only stating what they had done whilst this is a basic starting point of an evaluation they need to be asking themselves why they did something, did it work as expected, and could they have done it differently. Using a basic check on their perceived skill level they started with at the commencement of the unit and then comparing this with the skills obtained throughout the unit can help candidates evaluate current skill level and should help them to evaluate their own performance during the undertaking of the unit. Feedback from others was often omitted and when present was found to be vague and lacking evidence of who provided the feedback and why.

Unit 6955 - Web Development

General Comments

There was a range of eportfolios presented for moderation which reflected marks across the range of 1-55 although there were a small percentage in the 40s and 50s. Some of the evidence seemed to indicate candidates who had found it difficult to adjust to the progression from level 2 to AS. It was disappointing to see that comments made in the Examiner's reports for the past 3 moderation windows had not been addressed by many centres.

It was apparent that not all candidates had been well prepared for all aspects of this unit with many concentrating on the production of the website which is only a proportion of the marks. Many candidates had failed to clearly address the planning, design and prototyping requirements of the unit. Centres should appreciate that the planning aspects form the introduction to the A2 unit 8, Managing ICT Projects. Section 5.1 of the unit specification clearly states the stages of the software development lifecycle which forms the basis of the approach to this unit.

The lack of a client meant that many candidates were unable to fully address the requirements for strands a, b and c. It was apparent that some candidates had not interviewed a client and produced comments mentioning a client in passing which were not convincing evidence. The Assessor can pose as a "client" to enable realistic role play exercises to take place in order to enable the candidates to be able to access all the marks available.

Comments on strand a - Outline Project Plan

The comments made in Summer 2006 and January 2007 are still relevant to this series:

Some of the projects plans produced appeared to have been done retrospectively. Many of the plans were very brief and did not illustrate the tasks that would be undertaken when planning and developing a website for a client. Many candidates did produce gantt charts using suitable software which is good practice. However some of the plans appeared to be just a list of tasks and did not demonstrate understanding of project planning. Many of the timescales allocated were unrealistic, tasks in incorrect order, no break down of subtasks and little reference to liaison with the client. 5.2 of the unit specification lists the main areas to be included in the plan.

To access all the marks in mark band 1, candidates are required to demonstrate the use of their plan to monitor progress throughout the duration of the project. Copies of the plan at different stages of the project (showing the changes made), annotation of the plan/s, project logs, minutes of meetings with the client, can all help evidence the monitoring process.

Note that 8 marks are available for this strand.

Comments on strand b - Customer Requirements

This strand addresses 5.3 and 5.4 of the unit specification. 16 marks are available for this strand. There are two main areas to be addressed and both these are related to the client needs. Without a 'client' it is difficult to evidence the higher mark bands. The assessor, and possibly other colleagues, can pose as the 'client' which is probably the easiest way to address this issue.

Candidates need to investigate the client needs fully using a variety of methods to establish the requirements for the proposed website. Interviews with the client, as

well as asking a variety of different types of people to complete questionnaires, ie the client, users, can provide good evidence. Some candidates researched websites with similar topics and needs to the “client” site which is good practice.

Questionnaires enabling comments to be given rather than just tick boxes are good practice. Presenting the evidence in the form of a report to the client and using headings that relate to 5.3 is also a good way of presenting evidence. Many candidates used the headings in 5.3 but the evidence did not relate to a ‘client’.

Most candidates evidenced the second aspect of this strand by producing design work required, ie site maps, storyboards/designs, flow charts so that the client can finally decide if this is what is needed. Some candidates produced page mock-ups in the software to be used which is an acceptable way of producing designs. Attention needs to be given to the topics listed in 5.4 and it is expected the designs will address many of these. Just producing the final website is not acceptable. However, without a ‘client’ these designs cannot be refined and prototyped effectively which is evidence required for strand c.

Comments on strand c - Development

There are 20 marks allocated to this strand which covers several areas. Many candidates did not appear to understand the prototyping process required in the implementation of the website. It is an essential aspect of mark band 1 to evidence the prototyping and show how feedback from others (client and potential users) enable the initial design to be refined.

Most candidates produced evidence that a website was created. Most candidates included the website in the eportfolio with a clear link to it. Although there were some websites that clearly demonstrated good evidence, addressing many aspects of 5.8 of the unit specification, there were others that contained few features and did not reflect the level of skill expected for this unit. Candidates did not always evidence the implementation of the site which should also demonstrate evidence of formative and summative testing. Prototyping and liaison with the client and proposed users can provide evidence for this. Candidates must ensure they use the feedback given from the prototyping to refine and improve the website until the final version is created and it is handed over to the client. This feedback can help evidence strand e.

The production of the website on its own does not enable all marks in this strand to be accessed. Some evidence of testing is required for mark band 1 and to access all marks in this mark band there needs to be evidence of prototyping and refinement. Mark band 3 candidates should have evidenced all areas of the strand, carried out extensive testing which demonstrates that a fully functional website has been produced which meets the client needs. Very often there is no reference to the client’s original needs in the testing of the final website. However, it was good to see some candidates had tested the websites in different browsers and had given thought to different screen resolutions. 5.6 gives guidance of areas that should be tested.

It should be pointed out that only the final version of the website should be included in the portfolio. A selection of appropriate screen shots can be included in the prototyping evidence.

Comments on strand d - Evaluation

Candidates did not always address the requirements of this strand and some evaluated their own performance which is irrelevant to this unit. The performance

and functionality of the website created is what needs to be evidenced. Candidates should evaluate how their website matches the needs specified by the client. There should be feedback from users who have tested the site and this feedback should be incorporated into the evaluation for the higher mark bands. The proposals for the improvement of the site should relate to any original objectives not met as well as enhancements.

Comments on strand e - Proposal

This strand was not well addressed. Many candidates produced evidence for this strand which was information about e-commerce but did not relate the evidence specifically to the requirements, ie the production of a Proposal addressed to the client explaining how the functionality of the website created can be enhanced to support e-commerce. The evidence needs to be in a suitable format in order to access all marks available for mark band 1. The majority of evidence was in the form of general notes. To move to mark band 2 and above, it is expected that the Proposal is in a correct format, eg a report addressed to the client.

Section 5.7 of the unit specification provides a list of suitable areas that can be included. The proposal needs to clearly define the recommendation and justify the reasons why this would be of benefit to the client. To access all the marks the proposal needs to give details of how the upgrade would be implemented and what would be involved in this process.

Unit 6956 -Technical Support

General comments

It was pleasing to see that the requirements of the higher mark bands were starting to be appreciated by assessors and candidates' but this was, unfortunately, only in a minority of the centres. Assessors are advised to use the e-sheet to explain if the candidate worked independently, this is a requirement if the candidate wants to enter the higher mark bands. A worrying aspect of this unit is the growing number of centre assessors failing to give feedback on the candidate esheet which showed how the marks for each strand of the unit had been awarded. Also some centre assessors are still giving almost meaningless feedback, comments like 'well done' or 'nice screenshots' which, do not aid either the candidate or the moderator.

Most of the eportfolios submitted were in a format, which allowed the moderator to easily find the evidence. Unfortunately there are still a small but significant percentage of centres submitting evidence in incorrect formats, i.e. Word files and also portfolios with links not working which indicated a lack of summative testing. Eportfolios should be in a format that can be read in a browser and the files should link together. Centres should refer 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 6.9 of the unit specification.

Strand (a) - Upgrade

A small number of candidates were still failing to explain 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 CD-ROM Drive. A small, but significant minority of the candidates that did the upgrade failed to relate it back to their original system build undertaken in unit 4 (see assessment evidence page 101 of the unit specification).

It was 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. Candidates' did not always demonstrate standard ways of working notably safety precautions undertaken prior to and whilst performing the upgrade.

The most common software upgrade was once again Windows. Overall the evidence for this was far better than for the hardware but once again, in a majority of eportfolios, only very limited testing many candidates' restricting their evidence to either worked or it didn't work. 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

Most candidates had demonstrated that they understood the basic purpose of the on-screen manual as a way of giving instruction and advice, to users, for the undertaking of some of the more routine maintenance tasks. The inclusion of step-by-step trouble shooting strategies for several potential problems was less well covered. Unfortunately a minority of candidates still 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. These navigational problems and the lack of a realistic and suitable maintenance schedule prevented many candidates moving into mark band three. Candidates 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.

It is expected at mark band two candidates' are able to describe, in detail, the key features of all four collaborative tools. Most candidates were able to describe in sufficient detail one or two collaborative tools but few described all four in the detail required for this mark band.

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

For this strand candidates' are expected to 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.

Unit 6957 - Using Database Software

General

Most candidates made a reasonable attempt at the examination and solutions ranged from poor to extremely good. Many candidates had difficulty deciding upon what evidence to include and tended to use an overkill approach. Guidance within the examination states what evidence is required. Many students included rough work in their folders, this is not required.

Activity 1

Activity 1 was to test the functional specification area of the specification. The question concerned itself more with the contents of the functional specification rather than the format. Edexcel has no particular preference for any format. As in January, a large number of candidates produced a page or more of repetitive prose and did not appear to understand the nature of a functional specification. Answers were often generalised and did not make the specific points required by the mark scheme. We would suggest that the candidates be advised to use a bullet point approach to these questions in future examinations.

Activity 2

Activity 2 was designed to test the ability of the candidate to create a suitable database structure consistent with third normal form. This activity was usually very well executed with many students getting a reasonable structure. There were issues with the evidence provided with many candidates including large narratives which are not required.

The mark scheme requires evidence of the number of records loaded onto the various tables. Many candidates did not show the number of records and therefore lost marks.

Validation was again a weakness with some candidates. Length checks are not considered worthy of a mark and input masks which simply change the presentation of the data, such as putting spaces in credit card numbers, are not considered validation.

Activity 3

The majority of candidates did not score highly on this activity and many candidates appeared to be at a loss as to what was required and what to include as evidence. Many candidates failed to read the question properly and produced form designs for all the processes of the warehouse. This clearly wasted time, which meant that many did not get as far as inputting the data and consequently lost many marks. Quite a few produced screen prints of queries that did not show clearly the formula they had used. Many did not use automated processes and updated the stock figures manually and used drop down boxes to select status.

Activity 4

The majority of candidates produced a clear input form usually gaining about 3 marks - fewer included stock search for the 4th mark. Very few tried to automate any of the processes and often the evidence to support the effects of the test data was not included.

The question asked for the report to be printed out and as this was the only evidence required the whole of the report was required. Some candidates supplied design work which was not required and others only supplied one invoice. Candidates who only supplied one invoice disqualified themselves from a large number of marks. For

example a mark was awarded if the word "Invoice" appeared on **each** invoice. If only one invoice was supplied there is no evidence to suggest it appeared on any others. There was also a conditional print which should appear on some but not on others and invoices should not be printed for some customers

Activity 5

Some candidates were able to score very highly on this activity; a significant number of candidates were apparently able to produce more printouts of their orders but deliberately chose to include only one or two which lost them a lot of marks. Some candidates disregarded the instructions on the paper and did not print off the report, only including screen shots of the orders and how they created them. Centres are encouraged to pay more attention to design; very few candidates produced report headers or footers correctly.

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. 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.

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.

Unit 6958 - Managing ICT Projects

General Comments

There was a large entry for this unit with a range of marks from 1-60. Although some centres had clearly understood this unit and presented eportfolios which were accurately assessed, it was disappointing to see a significant percentage of centres who had appeared not to have understood the unit and/or read the Examiner's report for the January 2007 window. There was also a significant number of eportfolios which did not reflect A2 standards.

Many centres combined this unit with 6960 or 6961 with a smaller number using a database product either for a client or to prepare for 6957. Many candidates seemed unaware of how to produce a software product demonstrating the use of project management tools. There was evidence suggesting some projects were undertaken with a limited time span which made it difficult for candidates to address the strand for this unit effectively. It is advised that 60 guided learning hours are allocated to this unit as with any other unit in this qualification.

A number of centres using a very structured approach with all candidates in the sample presented for moderation using the same templates and writing frames to present their evidence. This was observed mainly in strands a and b and is an inappropriate approach for A2 candidates.

Candidate need to evidence how they have used project management tools in order to produce a software product to defined criteria. The software product should reflect A2 standards which was not always the case.

Many centres combined this unit with producing the product required for units 10 or 11. This was an effective way of utilising resources. Many candidates structured their eportfolios well with defined links to unit 8 and to either unit 10 or 11. However, other candidates did not structure their eportfolios well and the evidence for the two units was difficult to find. It should be noted that the requirements for the evidence for the strands of 6958 and those of 6960 and 6961 are very different and just producing one set of evidence for the two units does not enable candidates to address either unit well. In addition it makes the moderation process very difficult and may disadvantage the candidates.

A better way of producing this evidence is to ensure that two clear sets of navigation links are shown on the home page. The links for the evidence for 6958 (or the unit for the product) should clearly address all five strands for 6958. It should be noted that strands a and e are very different to strands a and e for 6960 and 6961. There must be a link to the product for 6958 as this is needed to address part of strand d.

Some candidates produced illegible screen shots (even after trying to use the zoom facility) particularly evidencing strand b. Evidence presented for moderation needs to clearly represent the requirements of a strand.

Comments on strand a - Project Proposal

Two pieces of evidence are required for this strand, a Project Proposal (8.3) and a Definition of Scope (8.4).

Project Proposal - Many candidates did not cover impact on personnel and practices or demonstrate understanding of how the introduction of a new software system can affect the way present employees carry out their jobs. There were examples of candidates not actually specifying when the project will be finished. It is very

important that a date for the end of the project is given which is carried forward in the other strands. Candidates usually presented this evidence in the form of a document but some chose a Powerpoint presentation. If a presentation format is chosen, candidates should include the notes as well as there were instances when very brief slides were included which did not evidence this strand well.

Some candidates failed to include a Definition of Scope in their eportfolios which meant they were unable to address all mark band 1. However, there were some very good Definition of Scopes produced which addressed all aspects of 8.4. Key success criteria is an important aspect as this can form the basis of the End of Project Review Meeting, thereby enabling candidates to access all marks in strands C and E. Project deliverables needs to include the other aspects related to the product and not just the product itself, eg User and Technical Guides as well as the training of staff. Quality criteria should be clearly identified and, again, the Project Completion Date needs to be included in this document.

Constraints and areas of risk should be identified and then provision made in the Plans produced for strand B.

Most candidates included a list of the project's stakeholders but not all included the majority listed in 8.2 with the result that the evidence for strand C was poor. It is not sufficient just to have the candidate and a client for this unit. There was confusion as to the difference between the customer/client and the user. Interim review dates should be listed and, again, these included in the Plan as milestones.

There were a few candidates who seemed to be unaware that they were the Project Manager and what this role was.

It should be noted that to access all the marks in mark band 1, candidates should have demonstrated some awareness of the audience and evidence that is full of uncorrected errors does not do this.

As mentioned in the general notes, there were some centres where candidates used writing frames for the evidence and, in some instances, the guiding sentence remained incomplete. This does not reflect candidates working at A2 and such practice should be avoided.

Comments on strand b - Project Plan

It was good to see that nearly all candidates used project management software for this strand which is clearly stated in the specification. A variety of different software packages were used including some which had been free downloads from the Internet. Project management software is required to address this strand effectively. Most candidates produced Gantt charts which is probably the most effective evidence. Some Plans contained very little evidence and many showed little understanding of how to allocate time to different stages of the Project. Some candidates had allocated a disproportionate amount of time to the Planning and Design stages leaving little time for the actual implementation and testing.

Candidates should be encouraged to put the key aspects into the Plan and then build the rest of the requirements around these milestones. It was surprising to see some candidates failing to include the handover date of the project to the client. This date should reflect the date specified in the documents for strands a and b.

Building contingency/slippage into the Plan to take account of potential risks should be encouraged. Some candidates included this AFTER the date the project was due to be completed which is incorrect. There were a few candidates who included dates relating to the building of the eportfolio and producing the evaluations and not the project itself. The date the eportfolio is due to be submitted should not be in the Plan and it would be sensible for this to be after the handover of the project and after the End of Project Review Meeting giving the candidate time to write the evaluation for strand E.

It was good to see some candidates explaining the key points in their Plans. Some did this as a separate document in the eportfolio, others inserted comments on the Plan itself. Good practice observed was the production of a diary/log explaining the changes to the plans. This document could then be used to support some of the evidence required for strand c.

The Plan needs to be monitored and updated as changes take place. This should be done in conjunction with the Interim Review Meetings. Strands B and C are very closely linked.

It should be noted that at least two potential risks need to be identified in the Plan for mark band 1. These can be evidenced by including slippage/contingency time to take these into account and some form of annotation can clearly identify them. Only one version of the Plan does not enable candidates to access full marks in mark band 1. It should be noted that the Plan must have been produced at the start of the Project and not produced retrospectively.

There was evidence of some candidates using pre-prepared Excel templates which, again, is not acceptable evidence for A2 candidates. These templates were incorrect in that they contained inappropriate tasks and were more in keeping with level 2 action plans.

Comments on strand c - Managing the Project

The eportfolio should contain evidence demonstrating that the candidate has managed the project. The organisation of the eportfolio should be structured to show this. There should be a section with links to the various Plans produced as well as a section containing all the evidence of communication with the Stakeholders.

This evidence will include minutes of the formal meetings, ie Meetings with the Client, Interim Review Meetings with various Stakeholders and also the End of Project Review Meeting. Informal evidence could include a diary of contact with reviewers, testers, emails, memos, letters etc. The majority of candidates did not include explicit evidence of informal communication with stakeholders which is required in order to access all the marks in mark band 1.

Many candidates produced evidence of several meetings at the very beginning of the Project but then none during the actual implementation of the product. Few candidates included minutes of an End of Project Review Meeting. Another failing that was observed was the lack of content in the Minutes which did not enable candidates to clearly evidence they had adopted a proactive approach to project management. Few minutes referred to the Project Plans. Many candidates ignored the project management process and only minuted details about the production of the product. Good minutes should include reference to both the product and the progress of the project itself. The best way of evidencing the project progress is to refer to the current Plan.

Changes may need to be made to the current version of the Plan and these can form the basis of new targets to be set for the next Plan period. The changes can be updated and a new version produced which will form the basis of the next Interim Review. Feedback given by the stakeholders is needed so the candidate can evidence how this has been acted on.

It is a good idea to have evidence of the handover of the project to the client and this should include feedback from the client.

Candidates need to provide evidence they have taken a proactive approach to managing the project in order to address all the marks in mark band 3. A comment on the e-sheet by the Assessor can only support the evidence that is in the project management folder which has been produced by the candidate. The content of minutes of the meetings is one source of evidence for this and a project log/diary can also help support this aspect. The Assessment Guidance for this strand explains the requirements for the 3 mark bands.

Some candidates appeared not to understand the purpose of the End of Project Review Meeting and, even if produced evidence of one, often did not include appropriate evidence. This meeting should be held after the Project Handover and be a debriefing of the project itself. Ideally all stakeholders would be present and contribute towards this. The Project should look at the key success criteria specified in the Definition of Scope and make comments on this. There needs to be evidence of detailed feedback from all the stakeholders as this is required to address strand e.

Many candidates did not present the evidence for Agendas and Minutes in a professional format. Many candidates fabricated stakeholders and venues which did not enable them to address this strand effectively.

Comments on strand d - The Software Product

It should be noted that the assessment guidance clearly states: "A product that meets the objectives but was not developed in line with the sequence/timings of phases and activities specified in the project plan should not be awarded any marks."

It is very important that the end of project handover date is clearly evidenced in the Definition of Scope and Project Plans. This date, once set, should not change as candidates are required to manage the project to meet this date. There can be changes in dates within the Plan itself to enable this to happen and these changes should be clearly evidenced in the different versions of the Plans and the minutes of the meetings can provide the explanation for the changes.

Many candidates gave several dates in the various documents. Some plans did not contain the handover date. Candidates were awarded high marks in this strand although only the product and not the project deliverables were completed. 8.9 of the unit specification covers deliverables. Candidates can achieve marks in mark 1 if some of the deliverables were delivered on time but there needs to be evidence to support this. There was some confusion whether this date was the submission of the eportfolio or delivery of the project.

The date that is important for this strand is the end of project handover to the client which includes the deliverables. The End of Project Review Meeting should take place after this date and then the candidate should write up the evaluation for strand e and then have a date to submit the eportfolio. It is sensible to have

different dates for the completion of the project and the submission of the eportfolio.

Some candidates had built contingency/slippage into their plans at intervals and allowed enough time when carrying out the summative testing to include a buffer to ensure that the end of project handover date was met.

Many candidates included the products in their portfolios which is good practice. Deliverables such as user and technical guides can also help provide evidence that a product was produced.

The evidence supporting this strand is obtained from several sources and strands b and c are the underpinning evidence that the product has been produced using project management tools.

It should be pointed out that products produced several weeks before the stated handover deadline have not been produced in accordance with the project plan.

Comments on strand e - Evaluation

If there was no evidence of an End of Project Meeting, candidates could not access the marks in this strand. Poor minutes of this meeting also made it very difficult for candidates to access these marks as full feedback needs to be well documented so that it can be used as a basis to evidence this strand. The Assessment Guidance for this strand on page 138 of the unit specification gives further clarification on this.

Unit 6959 - Communications and Networks

General Comments

Some centres are still failing to make full use of the research sessions of the exam. During this time candidates should have access to the question paper as well as any online resources. It is quite permissible for them to put the hard copy of any research undertaken into their research folder to aid the question response sessions. 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.

Comments on individual questions

Activity 1:

Characteristics, Properties and uses of network types

Most candidates managed to answer this activity to some extent although explanations were often very brief showing little evidence of prior research into the subject. Most candidates had a fair understanding of PANs, LANs and WANs, MANs were recognised as a city-wide connection but few were able to give more than this.

Justification

A lot of candidates repeated what they had written as a description of the above network types and therefore did not gain any marks for this part of the activity. Where justifications were attempted, they lacked detail and did not relate to the Bonningtons scenario. Very few candidates achieved full marks in this section.

Activity 2:

Series of questions

A few candidates managed to gain full marks for this section although marks were lost by asking things that are irrelevant from a design view. The most common answer in this activity was to find out the budget that was available. Candidates were also able to identify the need to establish how many users would need access to the network and the location/layout of the buildings or whether equipment would need to be upgraded.

Network design

This was the question where most candidates achieved the majority of their marks. A lot of candidates showed a good understanding of network design and were able to construct an appropriate diagram showing a layout of the network for the Bonningtons Holiday Village. It was apparent that centres had spent a lot of time on this section of the specification. Network diagrams tended to be created using Visio or Network Notepad, there was a degree of creativity over symbols with hub/switch/router symbols being used interchangeably, fortunately most candidates labelled them.

Candidates were able to identify that a server was needed but did not always make it clear that it was to be placed in IT services. Nearly all candidates were able to show the 5 rooms with the number of PCs and printers that would be needed and how they would all be linked to the network. Switches/hubs/routers were also selected and were usually sensibly linked to the server and PC's.

Candidates lost marks for not identifying cable types or the lack of wireless access points on the diagram. Some candidates did not always show a good understanding of the location of printers as they were sometimes connected to individual PC's. More care needs to be taken with neatness and clarity of the diagram as some component locations or cable connections were ambiguous.

Annotations

Very few candidates annotated their design showing that they had not read the activity instructions thoroughly.

Activity 3:

This activity was attempted by a high proportion of candidates but it was very poorly answered by the majority of them. Very few achieved high marks in this question.

Candidates had, again, failed to read the instructions carefully. Many candidates preferred to use domestic equipment such as a wireless router from PC World instead of commercial equipment such as access points. A large number of candidates merely copied out the advertising documentation making no attempt to justify their choice of components.

Candidates did not go into enough detail when describing the function of the components, operating system software or cables. Many candidates only gave "1 line" answers which did not give the full explanations required. Once again it appeared that the research time was not used wisely here. Where marks were awarded, they were generally for descriptions of the network operating system and the transmission media. These, generally, had more detail in their descriptions.

Costs were frequently stated but without the source of the information which meant that they could not be awarded the mark. The best answers were given in bullet point format/lists with a number of points made about each component covering function, advantages and disadvantages.

A number of centres clearly still had access to the Internet during the examination as images were evident on their printouts.

Activity 4:

Connectivity

This question was often poorly answered question with candidates failing to read or understand the requirements of the activity. A lot of answers were probably copied from any research that had been carried out and, therefore, failed to answer the question properly.

Some candidates were able to discuss the role of the router in packet routing but very few were able to discuss anything other than this.

Issues with security implications was often well attempted but most candidates only achieved marks for stating the use of a firewall which was the most common answer.

Candidates failed to answer the compatibility issues of this activity correctly with many discussing the OSI model and transferring data between layers. Some candidates were able to achieve marks by discussing the need for compatible operating systems but few mentioned the use of gateways.

Activity 5:

Security Procedures

Although most candidates were able to identify the need for passwords, access rights and anti virus software they did not always give detailed explanations. This was particularly evident when discussing anti virus software - an outline of procedure should have been attempted but was regularly absent. The above answers were, generally, the only answers given for this activity.

Many candidates seemed to base their answers on the security activity in the January 07 paper as the Network Code of Practice was frequently mentioned or implied and a lot of the security procedures stated related to this.

Legislation

Most candidates were able to score on this part of the activity as they were able to state some of the consequences that the company would suffer if they used unlicensed software. Candidates were able to state the threat of a prison sentence or a fine as their answer. However, few candidates stated the legislation that needed to be taken into consideration. Those who did were able to give a brief description of the law.

Standard Ways of Working

Most candidates gained both marks however careless marks were lost by failing to attach their work to the cover sheet face up.

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.

Unit 6960 - Using Multimedia Software

General comments

The standard of the entry was encouraging. Candidates often linked this unit to Unit 8 - Managing ICT Projects. This is good practice however the candidates need to be aware of the different documentation requirements of the two units.

Some centres submitted very large e-portfolios, in some cases ten times larger the specified 30 Mb. usually this was due to the size of the video file associated with the work. The limit on size was increased this year, candidates should be made aware of this limit and it should form part of the functional specification for the product. Compression techniques are part of the specification and candidates should be taught how to control the size of the multimedia elements.

Stand (a)

A good functional specification is essential to gaining marks later for the product. Better candidates had a "real" end user for the product and could therefore produce a detailed functional specification for the client.

Candidates in the higher mark ranges produced functional specifications with clear and measurable outcomes, the final product was then judged against these and the evaluation made better by referring to them.

Stand (b)

Design documentation varied in quality. Better candidates referred to the functional specification, the needs of the user and how this was met by the design.

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.

Designs should include the timeline for the product and a storyboard.

Those candidates with real users involved them in evaluating prototypes however there was no clear indication where feedback was incorporated.

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.

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.

A fully working multimedia product was evidenced in the e-portfolios of most candidates and many also met the functional requirements.

In some cases, the work for each candidate was very similar, with interactive games or quizzes used which clearly made use of some kind of template.

In some the products had some functionality problems and some were not fully completed, many lacked complexity. There was good use of the some of the facilities of the software but the getting started instructions in many cases were confused, candidates being unsure what to put and in some cases the candidates simply described how to find the product in their user area on the network.

Stand (d)

Basic testing was frequently over valued by assessors. Not all products appeared to have been genuinely tested in all circumstances, as the products provided on the CDs submitted frequently did not appear to work correctly, even though the candidate's testing showed that everything was fully working.

Evidence was usually just in a table form and there was no visual evidence to show that the testing had been done.

Better candidates produced evidence of testing on users, including evaluation of prototyping and feedback, and many have received feedback on the final product but have no evaluative comments on the prototype and why or how they have changed anything based on feedback from the client. Apart from in the prototyping stage of the project. Involvement of others was very poorly evidenced

Few candidates did any testing at all related to the functional specification or the clients requirements.

Stand (e)

The evaluation in some cases was more about the process of producing the completed product. The emphasis should be on the actual product. Reference should be made to the functional specification identifying each key element and the degree to which this is met by the product. The candidate's own performance was limited in content in most cases.

In order to achieve MB3 candidates need to produce well-rounded analytical and critical evaluations. Few candidates provided any evidence of feedback on their work.

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 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 record 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. Where the candidate has combined the work with unit 8 it is essential that the assessor indicated where the evidence can be found for this unit, some parts of the evidence for example feedback, was often hidden in the minutes of meetings for unit 8.

Unit 6961 - Using the Spreadsheet Software

General Comments

A large number of centres submitted eportfolios for moderation this window and a range of marks 1-59 was seen. Although some excellent work was seen for this unit, it would appear that many centres have failed to appreciate the main requirement of this unit which is clearly stated in 11.1 of the unit specification, ie: "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 requires the spreadsheet solution to "use functions and formulae to analyse complex data". Unfortunately many of the spreadsheets submitted for moderation appeared to be ordering systems which could more effectively use database software to achieve the solution. This approach prevented some candidates from accessing all the marks available in the assessment criteria. Candidates should ensure that if such systems are used for this unit, there is sufficient scope for the requirements of the unit to be well addressed. Some further development of the basic scenarios could enable candidates to do this. Many scenarios used appeared to be more suited to other past qualifications and not the Applied GCE in ICT.

The use of inappropriate scenarios meant that few candidates were able to show the power of spreadsheets used in decision making. Leading on from this point is the lack of the use of charts and graphs to portray trends and produce results.

It was disappointing to see that some candidates had not produced solutions to a complex problem which reflected candidates working at A2. These candidates were not able to access many marks in the assessment criteria which requires a "technically complex spreadsheet" to be designed, prototyped, produced and tested in order to address all the strands.

Some centres had used the spreadsheet solution created for the complex problem as the project for unit 8. This is good practice but centres should ensure that candidates clearly evidence both units. There should be links in the eportfolio which lead to the relevant evidence without ambiguity.

Some centres had adopted a very structured approach with all candidates producing very similar evidence with the same formulae, controls to forms etc being produced. It is acceptable for the Assessor to act as a "client" and give the same brief to a cohort. However, the brief should be sufficiently open ended to enable the more able candidates to develop an independent approach to the solution which is required for the higher mark bands.

It was disappointing to see that many candidates had not adhered to the correct file formats required as specified in the document on the following link:

<http://ict.edexcel.org.uk/home/eportfolios/file-formats/Technical> and

<http://dida.edexcel.org.uk/home/spb/toolkit/>

Some eportfolios contained only Word and/or Excel files.

Centres are reminded that the eportfolios should have an index page with links to all the evidence for strands a - e and that all evidence should be able to be read in a Browser. The final spreadsheet should be included in the eportfolio but candidates should ensure that the key evidence is in the correct format. Strand c includes

standard ways of working for all mark bands, and file management/choosing appropriate file formats is part of this requirement.

Comments on strand a - Functional Specification

11.2 of the specification explains the underpinning knowledge required for this strand. Many candidates did not give precise details on how they would “judge the effectiveness of the solution”. Although only 4 marks available in total, good evidence enabled candidates to address the requirements for strands d and e more effectively. The more effective eportfolios showed candidates had responded to a “client” brief and presented a clear Proposal to the “client”. The Assessor can pose as a “client” to ensure the candidates are given the best opportunity to address the Assessment Criteria.

Comments on strand b - Design

It is important that candidates give consideration to 11.3 - 11.9 when thinking about the design of the spreadsheet. The candidates that produced a clear Definition of Scope accompanied by a Prototype and then clearly evidenced liaison with the “client” producing different versions of the Prototype as a result of this evidenced this strand well. It should be pointed out that candidates need to have evidenced “appropriate use of functions and formulae to analyse complex data” in order to address the main requirements of mark band 1. Prototyping, accompanied by explanatory notes, are required to address all marks in this mark band. It is very difficult to evidence prototyping without the use of a “client” and/or “testers/reviewers”. Some candidates showed how they implemented the spreadsheet solutions step-by-step and thought this was prototyping.

Validation was poorly evidenced by many candidates and it should be noted that mark band 3 candidates need to produce at least 4 different measures to validate data and trap errors. Many candidates who had included validation did not evidence this explicitly in the design documentation.

Many candidates referred to functions and formulae but did not produce evidence to show these in use. These should be clearly evidenced in the prototyping and testing of the spreadsheet as well as the evidence required for strand c. It was disappointing to see a significant number of candidates evidencing skills which had not progressed beyond level 2, ie 2 cell formulae, sum function, single if statement, min, max, average etc.

It was good to see that many candidates referred to appropriate future proofing facilities and most incorporated them into the final spreadsheet. Not all candidates clearly evidenced these aspects in the “Technical Guide”.

As already mentioned, few candidates demonstrated good use of charts and graphs in the presentation of output/results from the spreadsheet - 11.8.

Comments on strand c - Working Spreadsheet Solution

To be able to access any marks in this strand, candidates must have included evidence in the eportfolio to show they have produced a “technically complex working spreadsheet”. Candidates need to explain how the spreadsheet relates to the “Functional Specification” produced for strand a.

Many spreadsheets submitted were the shell of the system without actual data entered. This is not appropriate as this does not reflect a fully working spreadsheet.

The eportfolio should include both a User Guide and a Technical Guide. These Documents should be produced as stand alone documents which are accessed from links in the eportfolio. Many of the documents produced did not demonstrate the facilities within the spreadsheet nor show the spreadsheet had been produced to meet the requirements of the Functional Specification. Few candidates appeared to understand how the content differs between these 2 documents. Many candidates gave instructions for the user to unprotect the worksheets that were protected to stop users negating the structure of the spreadsheet created. Such instructions should be included in the Technical Guide.

Many of the Technical Guides did not evidence all the “behind the scenes” aspects of spreadsheets produced. Indeed, some candidates failed to produce screen prints of the worksheets in formulae view. Some candidates used very few formulae and many did not use formulae reflecting A2 candidates. Vlookups and single if statements were widely used. Few formulae enabling analysis and interpretation of complex data were evident. A2 candidates would be expected to be able to use complex formulae such as nested ifs or a combination of different formulae.

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 on their own. These should be supported by screen prints showing evidence of testing that had been undertaken, eg testing of validation using test data.

Comments on strand e - Evaluation

Many evaluations did not address the requirements of the strand. The evaluation needs to relate to the initial requirements and good evidence produced for strand a enables a candidate to do this more easily. 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 related to the solution produced. Many of the candidates struggled to evaluate their own performance throughout the project and often produced lists of what they had done. Looking at the skill level they started with at the commencement of the unit and then comparing this with the skills obtained throughout the unit can help candidates evaluate current skill level and should help them to evaluate their own performance during the undertaking of the project.

Unit 6962 - Customising Applications

The June series has produced a wider range of quality than the previous series. Very few candidates, however, attained the really high marks. There were still cases of complete centres entering candidates whose projects were either not of an A2 standard or the coding required was insufficient. Creating command buttons using the wizards does not count as customising an application.

Strand a

Strand a was usually adequately done if the project was of A2 standard, though few candidates provided measurable success criteria, even when the assessor stated that they had done so - these statements were far too vague, and assessors tended to give Mark Band 3 too easily. 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. Some seemed confused as to whether they were designing a database or a spreadsheet and most forgot about the coding. There was very little in the way of anything resembling program design such as 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 some cases, only automatically generated code could be found in the eportfolios. Where there was evidence that candidates had written code themselves little could be seen in the way of complex programming structures. Where code could be seen, it was rarely commented or explained. The assessment for this strand was extremely generous for the work seen. Often listings of the code were not included and as this is often the only evidence the moderator sees of the customising, it is hard for them to support centre marks.

Strand d

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. Marks seemed to be awarded based on the number of tests and not the quality of the tests. The moderator cannot support centre marks unless there is evidence of the testing being carried out. A test plan with just ticks is not enough.

Strand e

For much of the work seen, there was either little coding or it was of an insufficient standard to make it possible for the candidates to comment adequately on it. Consequently candidates were unable to mark above the top of Mark Band 1

Unit 6963 - Web Management

General Comments

A reasonably amount of centres submitted for the June window. Generally, the candidates had supplied front sheets that were easy to navigate and the centre had produced eRecord sheets that indicated why the assessor had awarded the marks. Some of the centres did not produce any front sheet, making the moderation of the sample very difficult, and Centre Authentication Sheets were often again forgotten.

Most of the eportfolios submitted were in the correct file format.

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. The centres may decide to allow the student to develop a new site if the original site topic of client does not have the depth to provide full evidence for this unit. This could be notified to the moderator when supplying the sample for moderation.

There was a noticeable reduction in the proportion of candidates providing an eCommerce site, selling fictitious products or services. The production of eCommerce features, such as Shopping Baskets and item sales, should be avoided. The resulting web site for this unit should be filled with features that promote a product or service, for instance product reviews, information, help files, tips and troubleshooting guides.

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. There was little evidence that any of the intended audience actually used the feedback facility, yet many candidates seemed to claim great success of their chosen promotion method. The two must go hand in hand, but success is not always a pre-requisite for accessing marks in the upper mark bands.

Comments on strand a - Web Hosting and upload of files

Web Hosting services were generally well discussed using a selection of different hosting companies, however the focus of this strand is on a report for the client and discussion should be aimed at the requirements of that client. Evidence to justify the choice of provider must refer the actual client's needs and not general considerations. Without clear identification of the client, and their web publishing needs, the candidate cannot fully justify the choice of provider.

Evidence of uploading files was very much improved on the January window. Testing of the files once uploaded was often weak and usually included in the evidence for strand d). The candidate must provide clear evidence that the files were transferred by providing sheet shots of the files on-line. Similarly, testing of the pages once transferred must also be supported with screen shot evidence showing the links working and images and any coded features in place.

If the candidate transfers the files to a local site, such as a college Intranet, the choice of visit strategy is crucial. Candidates often published to an Intranet and applied Meta Tags or hidden text options without realising that the web crawlers that capture this information cannot see it. Cross marketing and shared links with other student sites would be more suitable.

The web site needs to be available to the general Internet public in order to attract web crawler programs and general user feedback.

Comments on strand b - Promoting the website

Generally, candidates supplied evidence of five measures identified in section 13.2 on page 213 in the unit specification. Two methods were often implemented, but their effectiveness was rarely assessed. Feedback from users and hit counts are essential to thoroughly test the effectiveness of the web site over the eight weeks required by strand d).

Success is not essential to access marks in the higher mark bands. Even for the highest mark band, a critical evaluation could identify the reasons why the two methods of promotion implemented were not effective.

The moderator will try to identify the methods and techniques used to market the web site that are not included in the specification i.e. Web Rings. The process of moderation will be greatly assisted if such techniques are described in full by the candidate.

Several candidates incorrectly identified totally unsuitable methods and would have been better advised to keep within the range identified above.

Comments on strand c - Capturing visitor information

Data capture forms were often high quality and well discussed. The inclusion of several features such as Combo box controls, presented an easy to use method of capturing information. Testing was generally improved in this window, with several good examples of testing the feedback form on-line. It was still disappointing to see very few real viewers, with many of the on-line tests carried out by the candidate and tutor.

Friends, family and fellow work colleagues should be motivated to try the web site and leave real opinions.

Although the techniques involved in capturing details were often high quality, the information captured was often minimal and usually limited to the viewers name and email address. The crux of any on-line feedback form is to gather information about the user to later use in eMarketing. Capturing the viewers comments on the site, their likes/dislikes, interests and extracting information about the products they buy are essential if the form is to be totally fit for purpose.

Comments on strand d - Site Management

In general, candidates did not present evidence that the site had been uploaded and maintained for eight weeks. The site was usually incomplete and not checked before uploading or it was uploaded as is from the Unit 5 implementation. Changes to the web site once published should not result from applying eMarketing updates to meet the Unit 13 specification, but should be as a direct result of user feedback, current news, new products or services and web layout improvements.

Sites were not generally assessed for their accessibility and compliance with current legal requirements. Where they were tested with on-line tools, such as W3C, the code authentication and links were the only features tested and not the accessibility of the web site. Accessibility should concern itself with the ability to allow a wide range of viewers, of differing abilities, to view it successfully.

Assessment of legal aspects was similarly misinterpreted. The candidates should use guidelines found in such documents as the Computer Misuse Act and The Data Protection Act to assess whether or not the site complies with the guidelines. Too many examples of general discussion were found that barely mentioned the site created.

Technical documentation was still very weak with few site maps, code prints or site history evidence being found.

Spelling and grammar seen in many of the reports was below the standard required. Candidate must check their work to ensure that obvious errors are corrected. Text included in the web site could be written in a word processing application that allows the text to be checked for spelling and grammar before being pasted into place.

Comments on strand e - Evaluation

Candidates generally evaluated their own performance well and produced several areas for improvement.

The use of statistics was very disappointing, with very few evaluations assessing the success of promotion methods and features even when there was a wealth of statistics available to use.

Too many candidates claimed success when all the evidence pointed otherwise. Even for the highest mark band, a critical evaluation could identify that despite the best efforts of the author the site did not become popular and gathered little feedback.

This would also feed the need for proposed enhancements.

Unit 6964 - Programming

General comments

The standard of program written by the candidate must reflect that fact that this is an A2 level qualification. The programs need to be both challenging and sophisticated. If the program is of this standard then the candidate can only achieve MB1 overall. A full listing of the program must be included in the eportfolio. Preferably as a text document. Candidates must also use an object orientated language to write their own code.

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.

Stand (a)

Better candidate produced comprehensive designs and were able to access MB3. Good designs included the interface, validation of data and the structure of files used

Those who produced programs below A2 standard were limited by the simplicity of the task undertaken. Such tasks limit the scope for navigation diagrams, validation procedures and data structures.

The candidates that did produce more complex solutions were able to use more complex validation procedures and had better opportunity to fully describe the content and layout of forms.

Stand (b)

The program must be fully working to gain marks above MB1. Evidence for this is mainly provided in the test results.

The program should also meet the program specification, and although this need not be produced by the candidate it is essential that it is included in the eportfolio.

Only a few candidates used meaningful variable names in their code, this is a standard way of working and an opportunity to gain marks.

The task undertaken must be of a level expected for and A2 candidate, many of the programs submitted used only one or two forms and processed little or no data. Several candidates used code that was not appropriate or effective, 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 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. It would be good practice to provided a reference or a link to evidence of the completed test.

Some of the better candidates tested the program against extreme and boundary data in their testing.

Stand (d)

The user guide and the technical guides should 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 an 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, which is required to reach MB3. The evaluation should be presented as a separate document in the eportfolio. To reach MB3 the evaluation should make suggestions for the improvement of the user interface, at this level the changes should be concerned with the effectiveness of the interface and the meeting of the users needs.

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.

Statistics

6951	Max	A	B	C	D	E	N
Raw Mark	60	47	41	35	29	23	17
UMS	100	80	70	60	50	40	30

6952	Max	A	B	C	D	E	N
Raw Mark	60	46	40	34	28	23	18
UMS	100	80	70	60	50	40	30

6953	Max	A	B	C	D	E	N
Raw Mark	90	60	52	45	38	31	24
UMS	100	80	70	60	50	40	30

6954	Max	A	B	C	D	E	N
Raw Mark	60	46	40	34	28	23	18
UMS	100	80	70	60	50	40	30

6955	Max	A	B	C	D	E	N
Raw Mark	60	46	40	34	28	22	16
UMS	100	80	70	60	50	40	30

6956	Max	A	B	C	D	E	N
Raw Mark	60	47	41	35	29	23	17
UMS	100	80	70	60	50	40	30

6957	Max	A	B	C	D	E	N
Raw Mark	90	56	47	39	31	23	15
UMS	100	80	70	60	50	40	30

6958	Max	A	B	C	D	E	N
Raw Mark	60	46	40	34	28	23	18
UMS	100	80	70	60	50	40	30

6959	Max	A	B	C	D	E	N
Raw Mark	90	44	39	34	29	24	19
UMS	100	80	70	60	50	40	30

6960	Max	A	B	C	D	E	N
Raw Mark	60	47	41	35	29	24	19
UMS	100	80	70	60	50	40	30

6961	Max	A	B	C	D	E	N
Raw Mark	60	47	41	35	29	23	17
UMS	100	80	70	60	50	40	30

6962	Max	A	B	C	D	E	N
Raw Mark	60	46	40	34	28	23	18
UMS	100	80	70	60	50	40	30

6963	Max	A	B	C	D	E	N
Raw Mark	60	46	40	34	28	22	16
UMS	100	80	70	60	50	40	30

6964	Max	A	B	C	D	E	N
Raw Mark	60	47	41	35	29	23	17
UMS	100	80	70	60	50	40	30

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