

Examiners' Report January 2009

GCE

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

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

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

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

If you have any subject specific questions about the content of this Examiners' Report that require the help of a subject specialist, you may find our **Ask The Expert** email service helpful.

Ask The Expert can be accessed online at the following link:

<http://www.edexcel.com/Aboutus/contact-us/>

January 2009

Publications Code UA020794

All the material in this publication is copyright

© Edexcel Ltd 2009

Contents

1. General Comments	1
2. Unit 1: The Information Age (6951)	2
3. Unit 2: The Digital Economy (6952)	5
4. Unit 3: The Knowledge Worker(6953)	8
5. Unit 4: System Design and Installation (6954)	11
6. Unit 5: Web Development (6955)	14
7. Unit 6: Technical Support (6956)	18
8. Unit 7: Using Database Software (6957)	21
9. Unit 8: Managing ICT Projects (6958)	27
10. Unit 9: Communications and Networks (6959)	31
11. Unit 10: Using Multimedia Software (6960)	35
12. Unit 11: Using Spreadsheet Software (6961)	38
13. Unit 12: Customising Applications (6962)	42
14. Unit 13: Web Management (6963)	44
15. Unit 14: Programming (6964)	47
16. Grade Boundaries	50

General Comments

This report should be read in conjunction with previous reports, particularly the 2008 reports, and these can be found on the Applied GCE ICT section Edexcel website:

<http://www.edexcel.com/quals/gce/gce-leg/app-ict/Pages/default.aspx>

The e-portfolios and commentaries used in last year's INSET programme can be found on the ICT microsite:

<http://ict.edexcel.org.uk/home/eportfolios>

Edexcel has been running 'Ask the Expert' since September 2008 where your queries will be answered by the relevant Principal Examiner:

http://edexcelexperts.custhelp.com/cgi-bin/edexcelexperts.cfg/php/enduser/ask.php?p_sid=UglVI1Li

Examined Units

For this series the examined units used a common scenario, this may **not** always be the case in future series.

It was clear from the candidates' answers that centres are using past papers to prepare candidates for the examination. This is good practice, however the candidates still need to look carefully at the question or task set, there are variations from one series to another, and candidates need to be prepared to carry out tasks from any area of the unit specification.

In a number of cases the papers were late in arriving with the examiner, the papers should be sent to the examiner as soon as the centre has finished the final examination session.

Moderated Units

Assessment Issues

Candidates need to supply explicit evidence to support their achievement of the criteria in the various marking grids. It is easier to confirm marks if the evidence is easy to find and supplied in an explicit form.

Assessors must use the e-sheets as an opportunity to explain why they have awarded marks, there are two advantages to this for the centre. If the moderator can see why and where marks are awarded it is easier to agree with the centre marks. Secondly if the centre marks cannot be agreed then the moderator can give better guidance to help future assessment.

A number of centres still do not meet deadlines for submitting work to the moderators; the deadlines are published in advance and must be kept unless special permission has been obtained in advance from Edexcel. Permission will only be granted in exceptional circumstances. Centres who miss the deadline risk having the results delayed or the candidates recorded as absent.

Each unit must be on a separate CD, even if sent to the same moderator. Each unit will be forwarded to different principal moderators for monitoring and auditing purposes.

Principal Moderator's Report January 2009

Unit 1: The Information Age (6951)

This report should be read in conjunction with previous reports, particularly the 2008 reports, and these can be found on the Applied GCE ICT section Edexcel website:
<http://www.edexcel.com/quals/gce/gce-leg/app-ict/Pages/default.aspx>

The e-portfolios and commentaries used in last year's INSET programme can be found on the ICT microsite:
<http://ict.edexcel.org.uk/home/eportfolios>

Edexcel has been running 'Ask the Expert' since September 2008 where your queries will be answered by the relevant Principal Examiner:
http://edexcelexperts.custhelp.com/cgi-bin/edexcelexperts.cfg/php/enduser/ask.php?p_sid=UglVI1Li

General comments

The majority of candidates and centres had a good understanding of this unit and it was addressed well. Although some centres are still producing candidates' work as power-point slide shows, which are not an integral part of the e-book.

The majority of e-books were easy to navigate, with sections that were clearly labelled in a way that was meaningful to the audience. In most cases, all the links worked, so that the evidence was easily found. At the higher mark ranges there was good use of non sequential and sequential links. The use of menus often in a frame at the side or top of the e-book provided the non sequential links for the different sections.

Most work used a good range of original and ready made multimedia components and, in many cases, these were used very effectively. Although it is still sometimes difficult to tell which are original and which are ready made. Candidates must help evidence this aspect by including the origin of the multimedia components used in their bibliography.

Comments on Strand (a) On-line Services

In most cases this was well described and supported by good examples, illustrated usually with screenshots. In some instances the screenshots were too small to be read easily. A small number of candidates described fewer examples than the required number of services. Some are still including two types of the same online service which are presented as different services. This 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. This is essential for Mark band 3 level work.

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

Some candidates are still just evaluating a website. Candidates must evaluate the service itself, the websites serve as examples to illustrate the service.

Comments on Strand (b) Life in the Information age

The evidence for this strand is improving, with more candidates referring to the impact on life rather than the services themselves.

It is clear that a variety of sources of information are now being used, however all candidates should be encouraged to reference these in the bibliography which often contains internet links only.

Better candidates describe and evaluate the way that life has been affected by the information age, and use good examples of changes in life as a result of the use of these services. Candidates should be encouraged to focus on the effect that technology has on people's lives, rather than the technology itself.

This is essential to access the higher mark ranges.

Comments on Strand (c) Digital Divide

Evidence was often weak for this section. Some candidates appreciated the need to research the extent of the divide and the measures being taken to bridge the gap, but most omitted to do this. There was very little evidence of research for this strand. Many candidates focus on the factors of the divide but measures tend to be very brief and there is little evaluation of them. Few actually comment on what they feel the extent and impact of the divide is. There was more work this series on including local, national and global issues, which was good.

Comments on Strand (d) The e-book

The majority of centres now use the correct approach to this unit and the e-books use a hypertext structure linking a series of pages of information. This allowed users to navigate from page to page using the navigation links provided. Links and navigation are still an issue due to candidates using absolute link addressing which was subsequently broken when the CD was written.

Candidates need to understand the purpose of the e-book and ensure that they address an audience in 100 years' time. A number of candidates do not make this clear in either their introduction or their work.

Standard ways of working were not always observed in that filenames were not meaningful and moderators had difficulty in finding the start of the e-book.

Comments on Strand (e) Components and Structure

Often it very hard to see where original multimedia has been used as some candidates are not including references or indicating what elements they have made. Better candidates take into account the size/positioning and clarity of the media used. Weaker candidates still use a range of media but it does not look very good, cannot be read properly or is not related to the page it is on.

Comments on Strand (f) Evaluation

To gain full marks candidates must include feedback from others in the evaluation. Weaker candidates still tend to list what they did and how the e-book was produced.

Many did not cover personal performance adequately or missed it out completely.

Standard Ways of Working

In most cases the only evidence the moderators 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-portfolio 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 "Google" "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 websites; the specification requires a wide range of different sources to be used for strands (b) and (c).

Principal Moderator's Report January 2009

Unit 2: The Digital Economy (6952)

This report should be read in conjunction with previous reports, particularly the 2008 reports, and these can be found on the Applied GCE ICT section Edexcel website:

<http://www.edexcel.com/quals/gce/gce-leg/app-ict/Pages/default.aspx>

The e-portfolios and commentaries used in last year's INSET programme can be found on the ICT microsite:

<http://ict.edexcel.org.uk/home/eportfolios>

Edexcel has been running 'Ask the Expert' since September 2008 where your queries will be answered by the relevant Principal Examiner:

http://edexcelexperts.custhelp.com/cgi-bin/edexcelexperts.cfg/php/enduser/ask.php?p_sid=UqIV11Li

General Comments

A relatively small number of eportfolios were submitted for moderation this series with a range of moderated marks from 5-51.

Some candidates had spent a lot of effort on producing e-books rather than e-portfolios for this unit. There are no marks awarded for such effort. A simple html set of pages clearly linking the evidence produced for each strand is all that is required. This meant that some e-portfolios were hard to access and had broken links.

The evidence can be produced using html or pdf format. There was evidence of candidates not using 'standard ways of working' and this was particularly apparent in uncorrected errors and poor English in some of the content.

Overall the strands of this unit are being addressed but there were a significant number of e-portfolios that had been awarded marks in too high a mark band for the evidence presented. The Assessment Guidance on pages 42-44 of the unit specification gives clarification on how to award the marks for the 3 mark bands across the 5 strands. There was evidence that weaknesses highlighted in previous Moderator reports to centres had not been addressed. The Examiner's report for each series highlights these across the submission for that window.

It is important that candidates read what is required for each strand as sometimes irrelevant evidence was provided. The evaluation strands for the different units require different evidence which is not always recognised by candidates.

Comments on Strand (a)

Most candidates had selected appropriate transactional websites to evaluate but a few had chosen ebay despite previous reports indicating this is an auction site without a proper 'Shopping Basket'. A few candidates had also chosen sites without a 'Shopping Basket'. Most candidates addressed this strand well but sometimes the evidence was assessed leniently. This was usually due to the lack of evaluative comments. Mark band 2 requires detailed descriptions of all the main features. Some candidates had been placed in this mark band although there was no evidence relating to the 'shopping' aspects of the site. Many candidates commented on the content of the site, ie the products, rather than looking at the design and features.

Reference to the specification sections 2.3 and 2.5 give an indication on aspects to evaluate. Few candidates are explicitly evidencing their understanding of how organisations are capturing customer information overtly and covertly. Few candidates demonstrated understanding of accessibility.

Comments on Strand (b)

Overall this strand is being assessed correctly. There were still examples of diagrams being downloaded from the ICT microsite and copied from textbooks. There were also examples of cohorts annotating the same templates, which is not acceptable practice. Candidates are required to create and annotate their own diagrams. There needs to be at least 2 diagrams in order to address all of mark band 1 with a comprehensive set for mark band 3.

Many candidates are producing diagrams showing the events leading up to a transaction but failing to clearly portray the back office processes. 2.4 of the unit specification gives further guidance. Many candidates omitted to cover stock control. There were some examples of candidates being awarded marks in mark band 3 although there was no evidence depicting the flows of information into and out of the organisation and between areas/departments as a result.

Comments on Strand (c)

Many candidates are still producing general notes on security rather than relating the evidence to the strand, ie 'threats to customer data collected by organisations via their websites' and then describing and evaluating the measures taken to protect this data by the organisations. Many candidates are still listing the content of acts of legislation rather than explaining their effectiveness in preventing threats. Some candidates are being awarded marks at the top of mark 2 or mark band 3 although no evaluative comments had been made.

Comments on Strand (d)

This strand was often leniently assessed. The summer 2008 Examiner's report, p11, clearly explains the main steps that should be evidenced. Candidates should be given a dataset that is one csv file and each candidate has to individually decide the structure. Some candidates had been given the data already split into tables. More candidates are showing testing of data prior to importation, but few are explicitly evidencing all the data that has successfully imported into the structure created, ie all the tables contain the relevant data. Some candidates neglected to evidence that the one-to-many link between 2 tables was there. Many candidates had been awarded all marks in mark band 2 or marks in mark band 3 although there was very little evidence supporting the manipulation of the database in order to produce meaningful data and/or trends. Just showing output on its own is not sufficient and candidates would be expected to show evidence of more than one query being used. The assessment guidance on pages 43-44 give an indication of the manipulation required for the different mark bands. There was very little evidence of search criteria used on more than one field. Many candidates presented output in datasheet view which is not presenting the information extracted in a meaningful way. Some cohorts produced very similar evidence, all using the same validation rules and queries. Such evidence does not support an independent approach which is required for the higher mark bands. Many of the graphs produced contained titles and labels which did not clearly identify the content. Incorrect use of the various charts and graphs was also seen, in particular poor understanding of the use of pie charts. Candidates are required to manipulate the database using database

software. The output can be exported to a spreadsheet to produce graphs/charts but spreadsheet software should not be used to manipulate the data. There were still candidates being asked to produce evidence that was not relevant to the strand, in particular the production of forms and switchboards.

Comments on Strand (e)

Some candidates failed to produce evidence for this strand which may be due to time management issues. Many candidates are still listing what they did using Access rather than evaluating the PERFORMANCE of the database they have CREATED. There were many examples of feedback being obtained and listed but then not used in the evaluative comments by the candidate. More candidates are making an attempt to evaluate their performance for the whole unit but still many are evaluating their e-portfolios and, indeed, some their e-books.

Comments on Administrative Procedures

Administrative procedures were not followed correctly by all centres this window. Many used correct naming conventions for the e-portfolios but failed to follow them for the e-sheets. Many e-sheets contained general comments that did not explain the assessment decisions made. The Assessors should explain why marks from the chosen mark band were awarded. Some e-sheets were not totalled correctly and some marks were different to those entered online.

Fewer centres used incorrect formats but there were examples of pdf files for each strand not linked to an overall html, index page.

Some work was received after the date for the submission of e-portfolios.

Principal Examiner's Report January 2009

Unit 3: The Knowledge Worker (6953)

General Comments

For this series the examined units used a common scenario, this may NOT always be the case in future series.

In a number of cases the papers were late in arriving with the examiner, the papers should be sent to the examiner as soon as the centre has finished the final examination session.

Although most centres seem to be preparing their candidates reasonably well there is evidence of a little too much reliance on past papers. In general looking at past examples is a good way of preparing candidates for the exam however, candidates should be made aware that the questions may not be exactly the same in each series. Many candidates lost a lot of marks by failing to read questions carefully enough and answering the question as if it were from a previous paper.

Comments on Individual Questions

Activity 1

In this activity, this series, there were seven marks awarded for background. This is consistent with previous series although candidates should not assume that this will always be the case. The background marks are awarded for aspects of the scenario which are **directly connected to the model or the task that the candidate has to perform**. A number of candidates included in their answers part of the "back story" which were not directly connected to the model. For example the fact that Steven doesn't normally wear aftershave is unlikely to have any effect on the workings of the model. The candidates will not lose marks for including these "red herrings" however their inclusion may cause the candidate time. Some candidates however try to find seven points because there are seven marks allocated. If they include a non relevant point they will not gain a mark. A large proportion of candidates referred to 'a department store' rather than a chain of stores (no mention of country-wide). Because of these reasons, only a minority gained the full 7 background marks this time.

Most managed to get the 3 marks for stating the decision to be made, though a substantial number thought they had to decide how much of the ingredients to use in the recipes. A few indicated that they were deciding the price the department store chain was charging Laura Elle. Some lost marks by saying that Laura and Steve had to find the price.

Few candidates gained more than 1 mark for the assumptions: this was usually for cost staying the same. Many candidates reiterated their decisions when stating the assumptions they were making. Some stated the 'credit crunch' as an assumption without developing their answer.

Activity 2

For this activity, the performance of most candidates was again very weak, with the answers bearing little relation to the question in many cases, even though many

candidates had a lot to say. The question changed slightly from previous series but few candidates seem to have noticed this. Most marks (usually only 2 or so) were gained for some comment relating to the survey - generally suggesting their ideas came from answers to past papers. They managed to comment on who had been asked, the sample size, and some noticed that only 2 stores in the south had been used.

A small minority managed to say enough about the accuracy of the measurements of the ingredients in the recipes or that cost might change to gain a mark.

Activity 3

Most candidates did well on this activity with the vast majority gaining marks in the 20s and 30s. Overall, candidates seem to be better at following instructions, though a substantial number were inconsistent with printing gridlines, row and column headers. These were requested for each question.

There were also several instances of candidates not gaining marks by printing data instead of formulae.

Overall most candidates were able to use the spreadsheet successfully to come up with a solution which showed a profit of some kind, most managing £1 m +. The biggest problem seemed to be getting all the formulae correct for the Summary sheet, with many candidates getting one or more wrong. There were also many instances of the inappropriate use of the sum function on this sheet, even if it had been used correctly elsewhere in the model.

Activity 4

The most obvious weakness with this activity is that many candidates still do not use a report format/structure for their recommendations. Very few include a suitable title or sub-headings, but the main reason for not gaining the report structure mark when otherwise presenting a reasonably structured activity, was the failure to include a date.

Most candidates used a screenshot to show at least some of their proposed solution and identified profit as the reason for making this recommendation. Only a minority managed to include the data and a suitable format for the 3 decisions.

A large number of candidates included graphs, which were generally more appropriate and better labelled than for previous sessions. Some candidate relied on graphs alone to provide the information for the 3 decisions, however, this was less successful as they failed to provide sufficient labelling or detail to allow actual figures to be read. Not many candidates were successful at identifying other factors to be taken into consideration. Factors which the management needed to consider were sometimes hidden away in the general discussion about their chosen values. Many candidates went into a lengthy debate about a range of possible options for the scenario and then stopped without considering other factors.

There were, once again, a great many examples of very poor grammar and inappropriate use of language.

Activity 5

Once again, this activity was weak with very few candidates gaining more than a couple of marks. Many candidates did not attempt this activity, or made no comments that gained marks.

More candidates than in the past managed to suggest that the model had helped to provide a solution to the problem, and quite a large number of candidates managed to say enough about ease of use to gain a mark for this, though few candidates managed both of these marks. Very few gained a mark for commenting on the accuracy of data.

Some candidates managed to suggest improvements to the model that gained one or two marks.

Comments on Administrative Procedures

There are still plenty of instances of scripts not being assembled correctly, including examples where all, or most, candidates from a centre assembled their folders incorrectly. The main problem is still that too the printouts being attached incorrectly to the coversheet. There were fewer examples of printouts being presented in the incorrect order or without headers and footers.

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.

Principal Moderator's Report January 2009

Unit 4: System Design and Installation (6954)

This report should be read in conjunction with previous reports, particularly the 2008 reports, and these can be found on the Applied GCE ICT section Edexcel website:
<http://www.edexcel.com/quals/gce/gce-leg/app-ict/Pages/default.aspx>

The e-portfolios and commentaries used in last year's INSET programme can be found on the ICT microsite:
<http://ict.edexcel.org.uk/home/eportfolios>

Edexcel has been running 'Ask the Expert' since September 2008 where your queries will be answered by the relevant Principal Examiner:
http://edexcelexperts.custhelp.com/cgi-bin/edexcelexperts.cfg/php/enduser/ask.php?p_sid=UgIV1Li

General comments

It was pleasing that a high percentage of the e-portfolios submitted were in a format, which allowed the moderator to easily find the evidence but there are still centres submitting evidence in incorrect formats, i.e. Word files and portfolios with links not working which indicated a lack of summative testing. It is not the moderator's role to have to search through e-portfolios and folders to find the relevant evidence. As stated in previous Principal Moderator's Reports e-portfolios should be in a format that can be read in a browser and the files should link together.

It was again disappointing to see that, some centre assessors are still giving none or almost meaningless feedback, comments like 'well done' or 'nice screenshots' which, do not aid either the candidate or the moderator. Assessors are advised to use the e-sheet to explain if the candidate worked independently, this is a requirement of the higher mark bands, and to indicate where evidence is located and how marks were awarded.

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.

Comments on strand (a) Needs Analysis

To access the top of mark band 1 and move into mark band 2 candidates should evidence that they have carried out and produced outcomes from at least two different investigations as part of their needs analysis. Candidates submitted non-completed questionnaires, referred to interviews and meetings with their clients but did not furnish any evidence that they had actually taken place. Almost all candidates had little problem in finding two existing systems but again many could not describe how they matched their client's requirements. There was still a distinct lack of evidence from the majority of candidates when it came to being able to evaluate fully the benefits and perceived drawbacks of the chosen systems in order to give their client an informed conclusion. The production of a proper needs analysis

for a client with complex needs is central to this strand and centres are again reminded to refer their candidates to section 4.1 of the unit specification.

Comments on strand (b) System Specification

The main requirement of this strand is still being misinterpreted in that the chosen system needs to be recommended to the client through a detailed and informative systems specification (section 4.7 of the unit specification). The completed report should be written as a non-technical explanation as to why all the components, both hardware and software have been chosen, these should be justified as to why they meet the clients needs and for the higher mark bands candidates' should offer their client alternatives. This latter point was either omitted completely or very briefly mentioned in a large number of candidates' evidence for this strand. As in previous reports centres should ensure that their candidates' are aware of the information in sections 4.2 to 4.6 of the unit specification as to what areas should be considered when putting together their system specification.

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

Comments on strand (c) System Build

As mentioned in previous Principal Moderators' reports the system being built does not need to relate to the system recommended in strand (b) but there should be some indication as to the requirements and anticipated use of the system. It was again evident that a small minority of centres still created scenarios which asked candidates to dismantle then re-build the same system this is not the purpose of the unit.

The evidence for the configuration activities still did not reflect the candidates' level of work. It is important that centres advise candidates to address several of the activities listed in 4.9 of the unit specification. Many candidates still did not address working safely.

Comments on strand (d) Testing

Testing should show that the complete system meets the agreed specification standards as it is the quality of the evidence showing real understanding of testing, covering all aspects of the unit that is more important than producing evidence of every single test which results in many pages of similar tests being undertaken.

It was again pleasing to see 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.

Candidates should be encouraged to produce annotated evidence of a variety of tests that have been undertaken if they wish to achieve a mark in grade bands two or three. It is important that candidates' ensure the evidence produced covers all aspects of the hardware and software that they have installed in their built system.

Comments on strand (e) Evaluation

The evaluation in this unit is not about the performance and structure of the candidate's e-portfolio but the performance of the built, tested and configured system and whether or not it met the needs of their client. It was again evident that many candidates found it difficult to accurately evaluate the work undertaken in this

unit and comment reflectively on their own performance. Assessing their skill level at the outset and reviewing the skills obtained through undertaking the unit can help candidates evaluate both their skill level and their performance. Feedback from others was often omitted and when present was found to be vague and lacking evidence of who provided the feedback and why.

Principal Moderator's Report January 2009

Unit 5: Web Management (6955)

This report should be read in conjunction with previous reports, particularly the 2008 reports, and these can be found on the Applied GCE ICT section Edexcel website:

<http://www.edexcel.com/quals/gce/gce-leg/app-ict/Pages/default.aspx>

The e-portfolios and commentaries used in last year's INSET programme can be found on the ICT microsite:

<http://ict.edexcel.org.uk/home/eportfolios>

Edexcel has been running 'Ask the Expert' since September 2008 where your queries will be answered by the relevant Principal Examiner:

http://edexcelexperts.custhelp.com/cgi-bin/edexcelexperts.cfg/php/enduser/ask.php?p_sid=UglVI1Li

General Comments

A relatively small number of centres submitted e-portfolios for moderation this window. There was a range of marks from 5-46 with few candidates submitting work at the higher grades.

The comments made in the June 2008 report apply to the e-portfolio evidence submitted this window.

Candidates did not always evidence the process required for this unit well concentrating on producing a website. Many of the websites created did not reflect skills expected of AS ICT candidates.

5.1 of the unit specification was not well addressed and there was often very limited or no real evidence supporting the use of a client, or someone posing as a client. Evidence relating to the client appeared to be fabricated in some e-portfolios. Liaison with the client is an essential aspect of this unit and failure to address it limits candidate achievement. Some candidates chose websites for themselves which did not allow them to address this unit.

There were a few examples of candidates combining evidence for strands d and e which is not appropriate as the requirements for the 2 strands are very different.

Comments on Strand (a)

Overall this strand was leniently assessed. It was good to see many candidates using project management software which is the ideal way to evidence this strand as it provides the underpinning skills required for the A2 unit 6958. However, spreadsheets can also be used to produce the project plans for this AS unit although not for 6958. Some candidates produced Action Plans only in table format which does not address this unit. 5.2 of the unit specification gives guidance on aspects to be included in a project plan which needs to be produced prior to the design and implementation of the website and need to cover the Software Development Lifecycle as indicated in 5.1. The evaluation and proposal are not part of the plan. Many candidates neglected to provide a date when the completed website would be handed over to the client.

Some centres produced plans with the same content.

Few candidates provided evidence the plan had been used during the design, prototyping, testing and implementation of the website. Just providing different versions of plans without any explanation of how it was used is not sufficient evidence to move to the higher mark bands.

There was evidence that some plans were produced retrospectively which does not allow the candidate to address this strand.

Comments on Strand (b)

There are two aspects of this strand, the investigation into the client requirements and the design documentation. The strand was often leniently assessed and the lack of a client, in many cases, made it difficult for candidates to access the higher mark bands. There are 16 marks available for this stand which addresses 5.3 and 5.4 of the unit specification.

Many candidates failed to actually identify the client and did not supply evidence supporting the background to the requirements analysis process. A variety of techniques are required if candidates are to move to the higher mark bands. 5.3 needs to be addressed but clear liaison with the client should be evidenced. Records of meeting the client in the form of minutes, emails, research into competitive websites, questionnaires can all be used. The Requirements Analysis should be presented properly and a report to the client explaining the findings would be a suitable format.

Much evidence appear to just repeat a scenario given to the candidates with the result that the evidence supporting gathering information and analysing requirements for the client was weakly addressed.

Most candidates produced designs. A few scanned in poor quality, hand drawn designs which did not address this strand well. Many of the designs were storyboards containing little detail and some were obviously templates given to the candidates which were then not completed properly. Candidates should look at 5.4 and 5.8 when producing the design documentation and include detail relating to the features to be included as well as the layout of the design of the site. A few candidates produced a report explaining the designs to the client which was good evidence.

Some candidates included a mock up of how a page would look as part of the design evidence which was good practice. However, others produced the finished site pages as the designs which is not acceptable.

Most candidates produced site maps but still many of the flow charts were not relevant to this unit but more suited to 6952. 5.4 gives further clarification on this.

Comments on Strand (c)

There are 20 marks available for this strand. Some candidates were awarded marks in too high a mark band. It would appear that marks were allocated for the site produced without consideration to the other aspects of this strand. The various steps listed in 5.1 are relevant to this strand. There should be clear evidence of prototyping the design and obtaining user feedback to refine it. This often was not done even though marks in mark band 2 had been awarded. When there was

evidence of prototyping it often consisted as some superficial comments based on colour change. Some of the evidence purporting to be feedback from users/client was often not convincing. There should be evidence showing emails had been actually sent and received and minutes of meeting should clearly identify who was present. Questionnaires with a few tick boxes and no comments and no indication of who completed them are not good evidence.

Candidates who evidenced the use of software tools often produced a commentary with relevant screen shots showing the implementation. Annotated screen shots of the software being used can support this aspect of the strand. 5.7 also indicates candidates should 'understand the basic principles of HTML and be able to modify and edit HTML code'. It was good to see more candidates producing evidence supporting this but many did not.

It was good to see that candidates included the websites in their e-portfolios which is correct practice. Some sites were of a good standard and demonstrated good use of ICT skills as indicated in 5.7. Others were not of a good standard and did not reflect candidates having progressed.

The sites produced need to reflect the client requirements and this was not always the case. The designs produced for strand b are then prototyped, implemented and finally tested in this strand.

Testing was poorly evidenced by many candidates. There should be evidence of prototyping and the summative testing as indicated in 5.6. Too often just test plans of testing hyperlinks were produced.

The functionality of the site should be tested against the client needs as defined in strand b and prototyped and developed in this strand.

Standard ways of working is also part of this strand which includes quality assurance and legislation. Many sites contained uncorrected errors and poor navigation.

Comments on Strand (d)

Most evaluations seen this series addressed mark band 1 only. Some candidates produced a general evaluation of their e-portfolio and their own performance rather than relating the evidence to the requirements of strand d for this unit. However, it was good to see some candidates demonstrating understanding of the difference between performance and functionality of the site. Good summative testing should provide the underpinning evidence to support an evaluation of the performance of the website. Candidates need to evaluate the site against the client's requirements listed in strand b in order to evaluate functionality. To move to the top of mark band 2 and into mark band 3, candidates need to refer to feedback obtained in their evaluations.

Comments on Strand (e)

Some candidates produced evidence which appeared to have been produced for 6951 and 6952 which did not address the strand.

The evidence should be presented in a suitable format, ie a Proposal addressed to the client recommending an enhancement to the website created in order to increase functionality. Some candidates produced reports, which is a suitable

format, but then neglected to provide a conclusion. Others produced letters which were not properly presented. Many candidates provided irrelevant content. 5.7 gives suggestions as to what could be covered but the enhancement/s chosen need to be relevant to the site created and not just be general notes which was often the case.

Many proposals had been placed in mark band 2 although there was little detail.

Comments on Administrative Procedures

Administrative procedures were not followed correctly by all centres this window. Many used correct naming conventions for the e-portfolios but failed to follow them for the e-sheets. Many e-sheets contained general comments that did not explain the assessment decisions made. The Assessors should explain why marks from the chosen mark band were awarded. Some e-sheets were not totalled correctly and some marks were different to those entered online.

Some work was received after the date for the submission of e-portfolios.

Principal Examiner Report January 2009

Unit 6: Technical Support (6956)

This report should be read in conjunction with previous reports, particularly the 2008 reports, and these can be found on the Applied GCE ICT section Edexcel website:

<http://www.edexcel.com/quals/gce/gce-leg/app-ict/Pages/default.aspx>

The e-portfolios and commentaries used in last year's INSET programme can be found on the ICT microsite:

<http://ict.edexcel.org.uk/home/eportfolios>

Edexcel has been running 'Ask the Expert' since September 2008 where your queries will be answered by the relevant Principal Examiner:

http://edexcelexperts.custhelp.com/cgi-bin/edexcelexperts.cfg/php/enduser/ask.php?p_sid=UqIV11Li

General comments

It is essential that eportfolios should be in a format that can be read in a browser and the files should link together, there was a significant number of eportfolios submitted which did not meet this criteria, which indicated a lack of summative testing prior to dispatch to the moderator. It is not the moderator's role to have to search through eportfolios and folders to find the relevant evidence. Centres should refer to the following document "submitting eportfolio samples for moderation" which is on the Applied GCE ICT section of the Edexcel website.

It was again disappointing to see that, some centre assessors are still giving none or almost meaningless feedback, comments like 'well done' or 'nice screenshots' which, do not aid either the candidate or the moderator. There was continuing evidence that the requirements of the higher mark bands were being to be appreciated. Assessors are advised to use the e-sheet to explain if the candidate worked independently, this is a requirement of the higher mark bands, and to indicate where evidence is located and how marks were awarded.

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

Comments on strand (a) Upgrade

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

Those candidates' who obtained the higher grade bands provided clear screen shots and photographs' explaining through detailed commentaries what was happening and why it was being undertaken. Many candidates still did not include any evidence of relevant testing the upgrade or ensuring that the hardware components were compatible with the original system.

Candidates wishing to gain marks in the higher grade bands should produce annotated evidence of a variety of tests undertaken, covering all aspects to cover the hardware and software upgrades. The quality of the evidence showing real understanding of testing is more important than pages of similar test evidence. Candidates' did not always demonstrate standard ways of working notably safety precautions undertaken prior to and whilst performing the upgrade.

Comments on strand (b) On-screen Support Manual

Candidates and assessors seem to be still unaware 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. It was still evident that a minority of candidates failed to recognise the fact that the manual was to be viewed on screen and produced a product which needed the reader to continually scroll up and down and in some instances from side to side. It is essential, in order to access the higher mark bands, candidates and assessors are aware of the correct file format to be employed, page 107 of the unit specification clearly states that html should be used for on-screen publications.

Comments on 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). However it is evident that as this topic is more thoroughly researched candidates are becoming more aware of different types of tools which are available for use. There were once again 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. To enable the candidate to access the top of mark band 1 and move into mark band 2 the candidate must make some chosen collaborative tools. These omissions were not always reflected in the grading of this strand by centre assessors.

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

Comments on strand (d) Communication needs of a small business

Even after reinforcing and repeating the comments in the summer 08 Principal Moderators Report a number of centres are still allowing candidates to produce a generic report rather than undertake investigation into communication needs of a specified small business. The candidates are required to select a small to medium sized organisation carry out an investigation into its communications needs and then produce a report, in relatively simple and non-technical language, with justified recommendations for internet connectivity, 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).

A large majority of candidates did not produce recommendations for each of the above points, which is a requirement to reach the top of mark band 1; this requirement 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 the required 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.

Principal Examiner's Report January 2009

Unit 7: Using Database Software (6957)

General Comments

For this series the examined units used a common scenario, this may NOT always be the case in future series.

In a number of cases the papers were late in arriving with the examiner, the papers should be sent to the examiner as soon as the centre has finished the final examination session.

The evidence from this series seems to show that centres were better aware of what to expect. Candidates continue, however, to lose a large number of marks by not providing the correct evidence.

For example, there were many explanations about setting up macros, usually incorrect ones, but no evidence of the outcomes.

It is probably worthwhile here reiterating what is allowed as regards help and assistance during the exam period. The scenario is released prior to the examination and teachers are allowed to discuss with their candidates possible answers to the questions. The teacher does not know the final construction of the dataset so that any datasets they give to their candidates can only really be guesswork.

Once the teacher becomes aware of what is in the live data files they should no longer discuss the examination in context although they are allowed to discuss with the candidates aspects of databases in general terms. For example they can revise normalisation as long as the examination data files are not used as an example. Further, candidates are not allowed to take anything into their exam sessions or remove anything from the exam room at the end of each session.

The data files are released early in order for the candidates' examination user area and examination rooms to be prepared.

There was evidence in some scripts that obviously incorrect work mysteriously gave the correct results; in others there was evidence of creative layout- message boxes or annotations covering up things that went wrong. Screen shots did not always match the accompanying text.

With many scripts it was clear candidates had run out of time when they reached Activity 5. Candidates should look at the suggested timings on the exam and try to keep within these.

Comments on Individual Questions

The scenario seemed to baffle many candidates, who often lost marks as a result of misunderstanding this, rather than through lack of ability at using the software.

There was some confusion between 'order', 'batch' (of 100 bottles) and 'run' and between bottles of product and bottles of ingredient (which are clearly differentiated in the scenario).

Candidates sometimes found the use of the 'Processed' flag by Despatch rather than Production confusing and the Item and Order completion flags were frequently confused.

Activity 1

A surprisingly large number of candidates answered in text rather than in a diagram as required, thereby limiting their achievement. The diagrams were generally more successful than the prose answers.

A range of diagrams was submitted: flow charts, information flow diagrams, and data flow diagrams. Flowcharts were most frequent. Some candidates gave separate lists of processes, inputs and outputs with no correlation between any process and its inputs and outputs, presumably intending to match the bullet points in the question.

Data-flow diagrams, where attempted, were sometimes too abstract or generic, often with no understanding of the difference between processes, inputs and outputs. In particular many candidates failed to use verbs to define processes.

Processes were the most likely to score, but inputs and outputs were poorly understood. Arrows were often labelled with another process or a physical action instead of the data transferred. Many candidates failed to match the correct inputs and outputs with the associated process. Process boxes often listed several processes together.

Very few identified all the processes required and candidates tended to go beyond the scope of the question into taking orders, despatching, stock control and purchasing.

A few candidates charted Steven's activities, rather than what the system was doing.

Better answers included those where candidates recognised the processes included 'calculate the amount of each ingredient required' and 'check if there is enough of each ingredient'. The latter was most frequently identified with an input of 'amount of ingredient in vat' and an output of 'OK/Refill'.

Some candidates tried to cut and paste from the scenario to produce a flow chart. This generally scored poorly.

Overall, there was too much narrative and not enough concentration on the requirements of the task. Some candidates still tended to follow the rubric of unit 6953/01 and restated the scenario rather than explain the requirements of the system.

Activity 2

The vast majority of candidates managed to split the fields into six tables, mostly with sensible names. It is implicit that if the tables and links are correct that candidates can normalise to 3NF.

'Orderline' was the table most commonly omitted, with 'Recipe' the most commonly mis-named e.g. 'Process' or 'Production' which were incorrect. Similarly, the 'Recipe' table was sometimes identified as 'PerfumeIngredient' which is fairly standard, but also appeared as 'PerfumeRecipe' which implies something else entirely.

Sometimes fields were placed in the wrong tables, leading to problems with linkage and with later Activities. This was usually associated with one of the link tables- fields

from 'Order' and 'Orderline', or from 'Ingredient' and 'Recipe' a very few changed field names for no apparent reason.

Most candidates had created and used key fields but there was still too much evidence of screenshots of tables with the correct fields but without the primary key(s) showing i.e. one screenshot too early in the construction.

Data type errors were very common. Most candidates correctly changed the date to Date/Time, some left one or more values as text and nearly all spotted at least some of the Yes/No fields.

Better answers noted, for example, that in the Order table the 'date of order' should be date/ time, 'order processed' should be Yes/ No and 'Delivery note' should be Yes/ No; in the Order line table 'item processed' set to Yes/ No; in the Recipe table 'ml per bottle' set to Number.

The most common validation applied was a picture/format on ID numbers or postcode. Many candidates did this correctly. Candidates obviously know about input masks but rather fewer knew validation strings. Both were sometimes incorrect, usually through superfluous or incorrectly positioned double-quotes. Oddly, there was no evidence of these causing any problems at import.

Better answers on validation included setting the vat limit at 15000 and 30ml limits on the amount per bottle.

Some candidates made up range checks that are not in the scenario but missed the ones that are there.

Better candidates realised that being able to enter correct values is not sufficient evidence that the rule is working, but fewer realised that neither is evidence of rejecting incorrect values, on its own.

There is no point in showing a screen shot of a validation rule if there is no mention of what field it applies to, or a validation message that data is incorrect if the rule is not shown anywhere.

Some candidates wasted time and effort on data dictionaries that were not required.

Importing files:

Where the table structure had been correctly created most candidates were able to import the data correctly (often with a lengthy click-by click account which gained no marks).

However, many lost marks by cropping the bottom of the screen - and the record count- to make it smaller, instead of just shrinking the window. Some then pasted the record count back in.

Where too few tables were created there was still evidence of some correct import for which candidates were able to gain credit.

Unfortunately, there were too many instances of screenshots and commentary describing the import of data - none of which was required as evidence in the examination.

Activity 3

It was clear in this activity that those candidates who had a good grasp of the scenario and were comfortable with the software scored well. Too often, though, candidates showed poor organisation and produced too many of irrelevant material.

There were a surprising number of good answers which showed tables not previously seen in Activity 2; and many instances of very similar submissions by a number of candidates within a centre.

There were too many **reports** created when **forms** were specifically required by the question, this precluded candidates from gaining marks in this area. The minimum expected was a launch form to pick the perfume to be made, followed by a sub-form with ingredients and data, with buttons for re-fill and process. Most were more convoluted, splitting the process logically into a sequence of forms driven by a switchboard. Nearly all launched the process and despatch cycles from a central Laura Elle switchboard which was **not required**. Some weaker candidates just had a switchboard that opened a set of queries. There were a lot of unwanted extra 'useful' features that gained no marks but used up time and paper.

Some solutions were based on individual orders rather than products, presumably because the candidate did not understand the scenario well enough.

Better answers showed the purpose of the main form, the perfume ID and name, how many bottles were needed; followed by an ingredients sub-form showing the ingredient names and whether the vat levels were OK or Refill.

A good number of candidates gave a clear and reasoned account of their interface and gained the mark available. However, all too often 'how the interface works' became 'how the interface is used' or 'how the interface was made' - the latter at the level of individual menu choices. These latter explanations were not needed and wasted time and effort.

Evidence of queries was patchy. It was disappointing that frequently the design view showed formulae truncated while other columns were shown full width. Candidates seem to accept default column widths rather than adjust them to show the evidence clearly.

More able candidates tested each query in datasheet view to check that results were as expected. However, changes made while testing updates were not always reversed, so when they came to the LE01 walkthrough it gave wrong answers.

Although few candidates attempted to prevent production runs where vats were still below level, some excellent interlock systems were applied by more able candidates, for example the use of 'DCount'.

There were too many descriptions of coding or formulas that did not match what it actually does - and where the code or formula was identical to the work of the rest of the centre.

Weaker candidates attempted unsuccessfully to gain marks by mentioning otherwise undocumented macros i.e. not linked to a query. In other cases candidates showed evidence but seemed unsure of what they did - 'Here is a screen shot of another query.' was far too common.

Evidencing macros is a problem due to the 'helpful' way Access presents them. Some candidates carefully provided shots of every line but there seems no simple way around this.

Where good queries and macros were created candidates scored well on the final parts of the Activity although the 'before' was usually better evidenced than 'after'.

For example, better answers showed the levels of the 8 vats needing 'Refill' and the amount needed, followed by the amended amounts in stock.

Activity 4

This Activity seemed often to be misunderstood. As with Activity 3 there was a prescribed format for presentation namely a **form** not a **report**. Too often this was missed and stopped candidates gaining marks. This appeared to be solely the result of not reading the rubric. Not all candidates understood the requirements of the task or grasped the need for this screen. They often produced evidence of switchboards and discussed HCI considerations, focusing on the word 'interface' rather than the particular purpose in this system for which the screen is required. It was apparent that for many candidates the distinction between 'item processed' and 'order processed' had no significance.

Rather than starting with all the unprocessed orders, many worked on a branch-by-branch basis and/ or produced evidence of outstanding orders NOT orders ready for despatch.

Some candidates applied ingenious ways to show only orders that were fully complete, or to interlock the buttons so that only complete orders could be flagged as such, and only marked orders have a note printed. This could not be rewarded.

Others combined the marking complete process with printing the delivery notes.

Better answers showed a single order, or multiple orders for one branch, and included the Perfume ID together with a tick box showing each item had been processed. On the description of the interface a good answer might state "the interface showed orders directly from the Order table and the subform is from the Orderline table. This allows the despatch manager to check everything is processed and ready for despatch."

Activity 5

Where candidates did appreciate the requirements of this task they scored well with many getting half the marks or more. Some delivery notes had a very 'real' look to them.

It was clear many candidates had run out of time when they got to this activity probably having spent too much time on evidencing items not required in Activity 3. A lot of the evidence for Activity 5 was poor and in some instances candidates printed out everything they had done on this activity with no selection relating to the requirements.

Time was wasted on documenting the design process and user interface (not asked for and not required) at great length - sometimes not printing the actual report at the end.

Delivery notes and their purpose do not seem to be generally well known or understood. They appeared as 'Delivery report', 'Delivery check' or 'Delivery record' and a large minority of printouts were just a single list of branches and orders.

Unwanted tick boxes from the production and despatch process were often left on the notes.

Very few produced the correct range of order numbers; even fewer put any detail of the sender on the note. Many were happy to accept the default layout, often splitting the postcode from the address, or truncating data. Print previews should have shown when the note was too long for a page by one line or too wide for one page but was obviously not used. Candidates seemed to be happy with obviously unacceptable results as the printouts were frequently followed by further documentation of their production (not asked for).

Very few candidates produced 10 delivery notes and many produced reports on outstanding orders rather than those ready for delivery.

Another error by some candidates was to produce screenshots of what they had created when the rubric clearly stated a report was to be presented. Sadly, this was another example of candidates missing out on marks by not reading the rubric carefully.

The better answers comprised 10 individual delivery notes numbered 63-72, had the Laura Elle logo on, had 'Delivery Note' as a text box to indicate what it was, included the branch name and address for delivery and details of the order - all the features of a proper delivery note.

Comments on Administrative Procedures

Responses were not always supplied in the way required. A large number of candidates failed to supply the activity number and the other required items in the header or footer of their printouts. Some candidates included additional sheets with nothing on; others included the exam script. These add unnecessary bulk to the packages. There were also a large number of cases where the printouts were supplied in the wrong order. Centres should be aware that examination documents are considered to be the e-portfolio described in the Standard Ways of Working section of the specification (practical restrictions mean it is not possible at present to accept the examination work in an e-portfolio). Not having output correctly labelled or in the wrong order is considered to be not "creating an appropriate structure". Marks are awarded for Standard Ways of Working and candidates may lose these if their materials are not labelled or badly ordered.

Centres should be aware that using unsuitable printers, or ones where the toner cartridge is running low, may render scripts unreadable to the examiner and result in marks not gained. Similarly, screen prints that are too small to read will accrue no marks.

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.

Principal Moderator's Report January 2009

Unit 8: Managing ICT Projects (6958)

This report should be read in conjunction with previous reports, particularly the June 2008 report which gives very detailed comments and guidance on this unit. These reports can be found on the Applied GCE ICT section Edexcel website:
<http://www.edexcel.com/quals/gce/gce-leg/app-ict/Pages/default.aspx>

The e-portfolios and commentaries used in last year's INSET programme can be found on the ICT microsite:
<http://ict.edexcel.org.uk/home/eportfolios>

Edexcel has been running 'Ask the Expert' since September 2008 where your queries will be answered by the relevant Principal Examiner:
http://edexcelexperts.custhelp.com/cgi-bin/edexcelexperts.cfg/php/enduser/ask.php?p_sid=UqIV1Li

General Comments

A relatively small number of centres submitted e-portfolios for moderation this January. Most of the work arrived very late. Last summer had seen a very definite improvement in the delivery and assessment of this unit. It was disappointing to see that much of the work presented for moderation this window was not assessed to national standards. It would appear that weaknesses identified in the Moderator reports to centres and also the Examiner's report for last June had not been addressed.

Most candidates who provided e-portfolios containing two units, ie 6958/6960 or 6958/6961 did separate the two units and provide relevant links to both units. Two disks were usually also provided. This follows correct procedures.

There were still some candidates combining evidence for strand a and strand e although the requirements are not the same.

Comments on Strand (a)

Most candidates produced the 2 documents required to evidence this strand, ie the Project Proposal and Definition of Scope. Some candidates used the Functional Specifications produced for 6960 or 6961 which is not good practice as strand a for these units require different evidence to 6958. 8.3 of the unit specification gives details of what should be included in the Project Proposal and 8.4 details for the Definition of Scope. Many candidates still were not defining and naming the stakeholders used.

It was disappointing to see "writing frames" still being used by some candidates for this strand. This led to structured evidence being produced and often not all aspects required being evidenced.

Many risks described related to the product rather than the implementation of the project and few candidates categorised them.

The impact on personnel practices was often not done.

The handover date to the client denoting the end of the project was often not specified. This should be agreed and confirmed in the Definition of Scope and then used throughout the project.

There were instances of screen shots of final products being included in these documents which indicated that reverse engineering had been undertaken.

Comments on Strand (b)

It is disappointing to see a significant number of centres not using project management software despite comments made in previous Examiner's reports for this unit. 8.7 of the unit specification clearly states that such software is a requirement. There are various free downloads available through the Internet which allow candidates to address this strand well.

Some candidates neglected to save the plans produced in project management software in the correct file format which meant the evidence was unable to be moderated. All such files need to be converted to html or pdf format. Not all candidates include aspects relating to the management of the project in the plans, ie interim review dates, contingency/slippage to account for risks. It was apparent that some plans had been created after the product had been finished which is not acceptable and does not enable candidates to address this unit.

Several updated versions of the plan should be included to illustrate changes made during the implementation to enable the agreed deadline to be met. The deadline should not be changed as the aim is to make changes to achieve the deadline agreed with the client. There should be explanation of these changes in the form of comments/annotation/project log/diary and, of course, these need to be referred to in the evidence produced for strand c.

Comments on Strand (c)

This is a high scoring strand with 20 marks available. Therefore a range of evidence is required if candidates are to access all the marks. **There are very detailed comments relating to this strand in the June 2008 report.**

Many candidates did not produce evidence of different kinds of communication with a range of stakeholders and many only produced evidence of meetings held. Many of the minutes produced were poorly presented and did not clearly indicate who was present, the date, what was discussed and decided. Few candidates included any reference to the progression of the project against the project plan which is an essential aspect of this strand. Many candidates commented on the product only and the evidence was often more suited to the prototyping required for 6960 or 6961.

Candidates should clearly demonstrate that a range of stakeholders have been used; communication with just one other is not sufficient and does not enable all the marks in mark band 1 to be addressed.

There was evidence that some minutes had been produced after the product had been finished. Conflicting dates were seen and content that appeared to be fabricated. Candidates are required to hold meetings with stakeholders throughout the progression of the project and record the details in the form of well presented minutes.

Some candidates neglected to include informal communication and, again, the June 2008 report gives some guidance here. Some of the emails produced did not appear to have been sent or received.

Not all candidates held an End of Project Review Meeting which meant that strand e was not addressed.

Progress reports are another aspect of this strand and these should be used at the review meetings to show how the project is progressing against the plan.

Comments on Strand (d)

Most candidates included the product in the e-portfolio which is good practice. Some of the products did not reflect A2 standards or were not sufficiently complex to support a project of at least 10 weeks being required.

As detailed in the June 2008 report, evidence for this strand can be found through the evidence produced for strands a, b, c and e.

It is essential that project management has been used to produce the product for this strand to be addressed.

There were many instances with dates not being in sequence in the evidence for strands b and c.

Comments on Strand (e)

Still there are candidates being awarded marks in this strand although there was no evidence to support an End of Project Review meeting having taken place and feedback obtained and documented from the stakeholders. Without this candidates are unable to address this strand.

Many candidates related the evidence to the product rather than the project management of the product.

Comments on Administrative Procedures

Administrative procedures were not followed correctly by all centres this window. Many used correct naming conventions for the e-portfolios but failed to follow them for the e-sheets. There were cases of e-portfolios and e-sheets named with nicknames, and candidate names which made it difficult to identify them. Centres are required to follow the naming conventions which are in the document: 'Moderation of e-Portfolios: Guidance for Centres' which can be found on the Applied GCE ICT section of the Edexcel website. Many e-sheets contained general comments that did not explain the assessment decisions made. The Assessors should explain why marks from the chosen mark band were awarded. Some e-sheets were not totalled correctly and some marks were different to those entered online.

Many centres did not include candidate authentication which is required as part of the moderation process.

Most work was received after the date for the submission of e-portfolios and, in many cases, more than one week late.

Fewer centres used incorrect formats but there were examples of pdf files for each strand not linked to an overall html, index page. Some candidates submitted evidence for strand b in .mpp format which is not an acceptable file format and cannot be moderated.

Many centres submitted disks which contained 6958 and the product unit undertaken with the unit. This is acceptable but candidates need to ensure links are provided for each unit to each strand within that unit. Each unit is moderated separately.

Principal Examiner's Report January 2009

Unit 9: Communications and Networks (6959)

General Comments

For this series the examined units used a common scenario, this may NOT always be the case in future series.

In a number of cases the papers were late in arriving with the examiner, the papers should be sent to the examiner as soon as the centre has finished the final examination session.

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.

There were no CDs or other electronic submissions. This is an improvement on previous examinations.

Most centres adhered to the ICE document guidelines which prevents access to the Internet and any electronic storage during the question response session, but there were several instances of network topology diagrams which appeared to come from Wikipedia, Webopedia and other web sites. This raises the question of supervision standards and whether or not text answers had been literally copied and pasted.

Comments on Individual Questions

Activity 1 - Network topologies

Document describing network topologies.

Candidates generally did well in this task. Most candidates were able to draw all of the topologies successfully and include relevant notes about them. However, the Activity asked for an explanation for Steven, who was confused by technical jargon. Far too many candidates produced large quantities of notes, up to a page per topology, much of which was technical.

It should be noted that in future examinations full credit for this sort of answer may require that the work is presented in a style suitable for the given target audience.

Document which identifies and compares the two best options.

This was less well completed. Many candidates simply repeated the information about two topologies and left the examiner to try and find the bits that corresponded to each other. In far too many cases this resulted in a low mark because the information given about one topology had no counterpart in the information about the other one.

The best results were achieved by candidates who made the effort to split the information up themselves and who were thus able to present information on e.g. costs for two topologies in one paragraph.

Activity 2 - Components of a network

Tables giving quantity, cost and function of hardware and software.

Most candidates made a good attempt at this and were able to describe a complete system and keep under budget.

However, common errors included:

- Including PCs, Servers, or other items that had already been purchased.
- Not including the required five printers.
- Not including the cables, sockets and connectors needed to join the system up.
- Exceeding the budget, sometimes by several hundred percent.

Notes describing two ways of connecting Laura's laptop to a Virtual Network while she is on sales trips. A recommendation as to which is most suitable.

There seemed to be a serious misunderstanding about this Activity in many centres. The key words here are **connecting to**. Most answers were about types of virtual network, not about how Laura could connect to such a network from her Laptop.

Activity 3 - Network design

A one page design for the total network.

This was a question where many candidates achieved a high mark. A lot of candidates showed a good understanding of network design and were able to construct an appropriate diagram showing a layout for the network.

Candidates lost marks for not labelling the devices, not identifying cable types, not showing a wireless access point, and failing to show how Laura and Steven were connecting from outside of the building.

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

Notes justifying each major decision made with regard to the network design.

Too many candidates simply described their network diagram, with no justifications as to why they had set things out as shown. Where justifications were given they were generally describing reasons for position of WAPs, switches, and the server, and the reasons for their choice of cable.

A diagram explaining the route her data will take between her laptop and the network in the building.

This was another poorly answered activity. In most cases, candidates simply drew a cloud, or possibly a cloud with a lot of routers inside of it. There was rarely any mention of how the laptop was connecting and what it was connecting to.

Activity 4 - Network addressing

A document to Steven which explains, using examples, what the leaflet means.

Most candidates scored quite well here and there were some good examples of writing an explanation in a language suitable for the non-technical Steven.

A document which answers Steven's concerns about changes to his home PC or Laura's laptop.

There was some misunderstanding here. The Activity was clearly concerned with IPs and network connections, but far too many candidates took this as an opportunity to give lengthy explanations of anti-virus, VPN servers, ISPs, and other information, which although factually correct, could not be credited with marks.

A scheme for implementing IP addresses across the private network. Explain and justify your decisions.

Most candidates lost a lot of marks in this section as they did not give adequate reasons for their decisions. Candidates need to be able to justify their choices. Simply stating that the router always has the lowest IP is not worth a mark unless a technical reason is given for the router having the lowest IP.

Candidates also failed to take the scenario into account. There were numerous instances of IPs being arranged to allow room for e.g. 4 extra servers, 10 extra switches, 20 extra PCs, etc. -all in a small business being run from a unit with six rooms.

A response to Laura's e-mail.

Most candidates knew that the public IP address should be used, although a significant minority wanted to put in one of the Laura Elle private addresses. Ports were reasonably well described and there were some good examples of everyday language. There were however far too many 'cut and paste' explanations from technical sources.

Most candidates who identified a port were able to give one that would be suitable for a remote connection, although there were a few interesting ones e.g. Ones reserved for the US Coastguard and mobile phone testing software.

The section on Network Address Translation (NAT) was poorly answered. Once again candidates failed to read and / or understand the scenario. The situation is one where Laura has to connect to the Laura Elle network from outside, not one where she needs to access the Internet from inside.

Most of the answers described the latter situation and, although factually correct, they did not answer the question.

One easy mark, saying yes the NAT should be enabled, was often thrown away.

Activity 5 - Network management

Word processed notes which state the key tasks which Steven will need to carry out, with an explanation of why they are needed and an easy way for them to be carried out.

There were some very good answers to this Activity, showing that some candidates had thought about what Steven needed to do and the sort of task that a normal user would be able to carry out.

Unfortunately there were also a lot of generic network management tasks described where no attempt was made to relate them to the scenario.

Standard Ways of Working

Most candidates gained both marks, however careless marks were lost by putting work in the wrong order or not completing the headers and footers as required. Before every examination series an 'Instruction for the Conduct of Examination' document (ICE) is published on the Edexcel website. This document gives guidance to centres about the location of data files and the conduct of exams. Centres must read this document before the examination window.

Principal Moderator's Report January 2009

Unit 10: Using Multimedia Software (6960)

This report should be read in conjunction with previous reports, particularly the 2008 reports, and these can be found on the Applied GCE ICT section Edexcel website:
<http://www.edexcel.com/quals/gce/gce-leg/app-ict/Pages/default.aspx>

The e-portfolios and commentaries used in last year's INSET programme can be found on the ICT microsite:
<http://ict.edexcel.org.uk/home/eportfolios>

Edexcel has been running 'Ask the Expert' since September 2008 where your queries will be answered by the relevant Principal Examiner:
http://edexcelexperts.custhelp.com/cgi-bin/edexcelexperts.cfg/php/enduser/ask.php?p_sid=UglVI1Li

General comments

There was a limited range of material entered in this window, however there were some very good multimedia products. Better candidates included excellent videos where candidates produced, edited the video and used sound to good effect.

Several centres are still developing websites rather than multimedia products. It is possible to use a web type interface to host a good multimedia product. The most important thing in this type of approach is that the design must concentrate on the multimedia part of the product rather than the layout of pages that are mostly text based. Weaker examples are simply websites with a couple of minor components.

Candidates should still be aware of the size 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.

Centres often combine this unit with unit 8, in which case it is vital that the candidates realise that the two units require different documentation.

Comments on Strand (a)

The better candidates had a client driving the design and development of the product, this leads to better testing and better evaluation sections. Many candidates could not achieve mark band 3 because there was no evidence of measurable objectives. Better candidates 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.

This strand should focus on the product. Centres that combine unit 8 with this need to produce a separate document for this purpose.

Comments on Strand (b)

Often considerable work has been completed but only in relation to screen layout and content rather than the multimedia elements. There was limited evidence of prototyping and refinements to designs. Many candidates did not evidence creation and editing of original material and did not use a timeline/timings.

Most candidates had created design documentation that addressed screen layouts. However, there were many instances where candidates had not addressed aspects of the multimedia design and the use of timelines.

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

Comments on Strand (c)

The quality of the products was variable. Better candidates produced good multimedia experiences, with little text, the main focus of the product being video of animation with sound. Some candidates included downloaded or ready made videos. There is a place for such items, however to obtain higher marks the candidates also need to produce some original material.

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 e-portfolio, from where the product should be launched for the purpose of assessment.

Comments on Strand (d)

Candidates frequently produced long test plans, and often indicated that the test was successful, however no evidence was given to show the process of testing had been carried out. Evidence was usually just in a table form and there was no visual evidence to show that the testing had been done. Better candidates provided screen shots to illustrate successful testing.

Few candidates did any testing at all related to the functional specification or the client's requirements. This is necessary to access the higher marks in the range.

Comments on Strand (e)

Candidates who combine this unit with unit 8 must evaluate the final product for unit 10. In some cases the focus was the project management techniques.

This section has a large mark range, evaluations were often far too brief and narrative to access the full range of marks.

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 moderators had for this aspect was the file structures and names used by the candidates.

Comments on Administrative Procedures

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

The centre assessor should use the e-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 indicate 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. This could easily be missed by a moderator who is unfamiliar with the work.

Principal Moderator's Report January 2009
Unit 11: Using Spreadsheet Software (6961)

This report should be read in conjunction with previous reports, particularly the 2008 reports, and these can be found on the Applied GCE ICT section Edexcel website:
<http://www.edexcel.com/quals/gce/gce-leg/app-ict/Pages/default.aspx>

The e-portfolios and commentaries used in last year's INSET programme can be found on the ICT microsite:
<http://ict.edexcel.org.uk/home/eportfolios>

Edexcel has been running 'Ask the Expert' since September 2008 where your queries will be answered by the relevant Principal Examiner:
http://edexcelexperts.custhelp.com/cgi-bin/edexcelexperts.cfg/php/enduser/ask.php?p_sid=UglVI1Li

General Comments

Unit 6961 is quite clearly defined in the unit specification. The assessment criteria indicate the primary focus of the work to be submitted with the assessment guidance documents explaining how and where marks are accessible and to be awarded. In addition, comprehensive Examiner's reports on this unit have been published several times; on each occasion the principal weaknesses in centre and/or candidate interpretation and approach have been identified. Disappointingly there are still centres that do not appear to have considered and implemented the main points of the above mentioned documents and/or taken advantage of the other systems in place to support them and their candidates.

Whilst some strands were well done, in this particular window there were few examples of overall outstanding portfolios of work.

Some centres still fail to appreciate the main requirements of this unit. 11.1 of the course specification states "spreadsheets are used in all sorts of contexts for tasks involving the analysis and interpretation of complex numerical data, such as: modelling; statistical analysis; cost-benefit analysis; simulation; forecasting; budgeting and planning". Assessment evidence (b) states "appropriate use of functions and formulae to analyse complex data". Both of strands (b) and (c) use the phrase "technically complex spreadsheet". The design, prototyping, development and testing of such a spreadsheet is required to fulfil the requirements of this unit. If all elements of this process are completed every strand of the unit will be addressed and, by definition, a good grade secured.

It was disappointing to see that some candidates had not address the above mentioned issue of complexity and had produced solutions that did not reflect A2 standards. These candidates were not able to access many marks in any of the strands. Conversely, some centres and/or candidates are using Visual Basic - and particularly user forms - to address the issue of complexity. More often than not, this approach does not address the unit 6961 requirements well.

A recurring trend in this window was the very structured approach being taken at centres to the production of the material for assessment and moderation. In many cases not only was the structure of the portfolios identical but so too were the

contents, including the spreadsheet artefact. Whilst it is quite acceptable for the Assessor and/or other member of the organisation to act as “client” and provide a generic brief to all candidates, such brief should be sufficiently open ended to enable candidates to adopt an independent approach to a solution - as is required for the higher mark bands.

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

Comments on strand (a) Functional Specification

The nature and contents of the requisite functional specification are well explained in section 11.2 of the unit. Many candidates addressed this strand very well but, as in previous windows, the majority failed to include details of how they would “judge the effectiveness of the solution” by presenting measurable success criteria. It is quite acceptable for the functional specification to develop - following discussions with a client for example - resulting in several updated versions being submitted. However, far too frequently it was apparent that a ‘reverse engineering’ approach had been taken to the production of the functional specification and this restricts the marks available.

Comments on strand (b) Design

11.3 - 11.9 of the unit specification details the aspects to be considered when candidates are designing their spreadsheet product. In fact, candidates often incorporate some, or all, of these aspects in their product without acknowledging them in their design work.

Overall, the design work presented was particularly weak in this moderation window; many candidates considering little more than the user interface and associated colour schemes and font styles. As already mentioned, all too frequently candidates presented commentaries on what they had done rather than what they were planning to do in relation to the incorporation of complex functions and formulae, future proofing, validation etc. There were innumerable examples of screenshots from the finished product being presented as ‘design’.

Comments on strand (c) Fully Working Spreadsheet Solution

To be able to access this strand, candidates must include evidence to show they have produced a “technically complex working spreadsheet”. There were very few quality products incorporating appropriate complex functions and formulae in this January moderation window. As mentioned above, some centres appear to be addressing the issue of complexity by incorporating extensive use of Visual Basic. The resultant product is often far more appropriate for Unit 6962 (Customising Applications) than this unit. Some limited use of VB is reasonable but moderators cannot be expected to examine code to establish use of formulae.

Despite all previous Examiners’ reports and individual reports to centres, it was disappointing to see, as in previous windows, a very significant number of candidates evidencing little beyond level 2 skills in relation to functions and formulae used. 2

cell formulae, If statements and vlookups are insufficient on their own in this context.

Some products were presented as templates, devoid of numerical content, others were text based and much more suited to alternative software. Neither of these approaches is appropriate, as they cannot reflect a fully working spreadsheet and preclude the opportunity to demonstrate analysis of complex data.

Although often very nicely produced and presented, many of the User Guides did not fully demonstrate the facilities within the spreadsheet nor show that the spreadsheet had been produced to meet the requirements of the Functional Specification.

Technical Guides are often presented as “how to” documents rather than identifying “behind the scenes” aspects of the spreadsheet produced.

Comments on strand (d) Testing

This strand was not addressed well in this window.

Based on the material submitted, much of the testing carried out was superficial and tended to concentrate on elements such as hyperlinks and macros rather than the spreadsheet itself. Whilst there was some evidence of feedback from others, there was little indication of candidates appreciating the relevance of the prototypes to this strand.

Candidates should be discouraged from just submitting test plans and/or long Word tables merely describing tests on their own. These should be supported by screenshots showing direct evidence of tests having been undertaken, e.g. testing of validation using test data. A structured and rigorous approach to each test would be evident where candidates have addressed this aspect well - incorporating acceptable, unacceptable and extreme data.

Summative testing could include “end users” working through the User Guide to see if they can make effective use of the spreadsheet produced and/or a peer reviewer working through the Technical Guide.

As well as functionality, the testing should evidence the spreadsheet meets the requirements of the Functional Specification. The design of the spreadsheet and features and facilities may well change during these processes; if so, the candidate should explain the changes by referring the process back to the “client” requirements and the evidence produced for strands (a) and (b).

Comments on strand (e) Evaluation

There were few good evaluations presented at this moderation window with many concentrating on the product rather than addressing the three aspects of the strand.

The majority of candidates failed to acknowledge their client, end user and/or peer tester’s opinions. The evaluation should relate to the initial requirements and good evidence produced for strand (a) enables a candidate to do this effectively. Many candidates were not able to identify or explain shortcomings of their final spreadsheet.

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

Principal Moderator's Report January 2009

Unit 12: Customising Applications (6962)

This report should be read in conjunction with previous reports, particularly the 2008 reports, and these can be found on the Applied GCE ICT section Edexcel website:

<http://www.edexcel.com/quals/gce/gce-leg/app-ict/Pages/default.aspx>

The e-portfolios and commentaries used in last year's INSET programme can be found on the ICT microsite:

<http://ict.edexcel.org.uk/home/eportfolios>

Edexcel has been running 'Ask the Expert' since September 2008 where your queries will be answered by the relevant Principal Examiner:

http://edexcelexperts.custhelp.com/cgi-bin/edexcelexperts.cfg/php/enduser/ask.php?p_sid=UqIV11Li

General Comments

There were very few submissions in this moderation window. Most centres submitted the sample required on one disk and included the e-sheets and candidate authentication sheets all labelled according to the correct naming conventions as detailed in the document "Moderation of e-Portfolios: Guidance for Centres". Many candidates' e-portfolios were in the correct file formats, within the stated file size of 25 MB and most contained a clear index file which started the e-portfolio. It was good to see many assessors giving clear feedback in the e-sheets explaining the assessment decisions made and marks awarded. Refer to the section on administration at the end of this report which details some poor practice relating to the submission of work for moderation.

Although most candidates addressed the strands correctly, there are still instances of candidates being placed in too high a mark band for the evidence produced. The Assessment Guidance on pages 203-205 of the unit specification gives clarification on how to award the marks for the 3 marks bands across the 5 strands.

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

Comments on strand (a)

Good evidence in this strand facilitates effectively addressing the requirements of all the other strands. Some candidates address this strand very well but, as in previous windows, the majority failed to include details of how they would "judge the effectiveness of the solution" by presenting measurable success criteria.

Comments on strand (b)

Those candidates who address this strand well have detail and clarity in their objectives - strand (a) - and generate prototypes, produce evidence of liaison with a

client, develop the product following feedback and fully document the entire process.

At times however candidates present details of what they have done rather than what they plan to do including screenshots of the final product and/or copies of final programming code. Others consider design to be a collection of hand drawn screen designs with little attention to the programming aspects that are so important and, at times, little or no evidence of prototyping. In this unit it is important that we see how the programming is going to be done. It would be difficult to gain the higher mark bands without some kind of structure diagram or process specifications such as flowcharts or pseudo code.

Comments on strand (c)

Most centres are providing projects which are suitable for A2; however there is evidence of candidates being placed in too high a mark band for the evidence present. Standard ways of working are important in this strand. With regards to programming code that includes good use of indentation and comments clearly explaining the purpose of the code and clearly showing where candidates have written/modified code to include at the very least iteration and selection moving to different types of selection, iteration and a sequential search to (for the highest mark band) amending information using a sequential search. At times moderators found it very hard to see what code had actually been written by the candidates and what had been generated using wizards etc.

Comments on strand (d)

If the candidate has good measurable objectives in their specification this section is fairly easy. It only becomes complex if the program is not specified well. Evidence of some of the successful tests should be shown and for the higher mark bands there must be evidence of testing using a good range of data to test boundaries ie normal, out of range and illegal. Good evidence will specify what the test data is. There is no penalty if the program works perfectly.

Comments on strand (e)

Evaluations are still weak. At A2 there are a significant number of marks for evaluation and many candidates are missing these. Again, a good functional specification with clear objectives and success criteria really makes a difference here. It is also worth noting that for mark band one there must be evidence of the candidates commenting on the **effectiveness of their coding** and reaching some conclusion about whether or not it was the best way to meet the requirements. Mark band two requires consideration of alternative solutions and the justification for the use of coding. Mark band three requires full justification for the use of coding. Very few evaluations included evidence of any of this.

Principal Moderator's Report January 2009

Unit 13: Web Management (6963)

This report should be read in conjunction with previous reports, particularly the 2008 reports, and these can be found on the Applied GCE ICT section Edexcel website:
<http://www.edexcel.com/quals/gce/gce-leg/app-ict/Pages/default.aspx>

The e-portfolios and commentaries used in last year's INSET programme can be found on the ICT microsite:
<http://ict.edexcel.org.uk/home/eportfolios>

Edexcel has been running 'Ask the Expert' since September 2008 where your queries will be answered by the relevant Principal Examiner:
http://edexcelexperts.custhelp.com/cgi-bin/edexcelexperts.cfg/php/enduser/ask.php?p_sid=UgIV11Li

General Comments

Most of the e-portfolios submitted were in the correct file format, easy to navigate and accompanied by e-Record sheets that indicated the reason for the assessment decisions. Centre Authentication Sheets were either supplied using the Edexcel on-line form or in hard copy. Packaging varied but provided adequate protection for the CD material.

Late samples were once again a problem, with some centres providing material some weeks after the deadline date. This could lead to a delay in the publication of results or the centre not receiving results at all in the current window.

As in previous moderation windows, several of the sites produced continued to sell fictitious products and offer a prize for registration. Sites of this nature are not accounting for legal constraints and will be penalised in future moderation windows. eCommerce sites are not to be encouraged due to legal implications for the centres and candidates concerned. This message has been clear and repeated in every Principal Moderator's report since the inception of the course.

There is concern over structured evidence that appears common to several centres. Candidates from different centres are producing very similar evidence presented in a very similar manner. It appears that some centres are using common frameworks that do not provide the opportunity to meet several important aspects of the evidence required and asks the candidate to supply additional material that offers little to meet any of the strand requirements. It is the duty of the centre to ensure that any assignment or project material used allows the candidate the opportunity to meet all evidence required for all strands across all the mark bands.

Working with structured assignments that do not offer full opportunity to meet all criteria is impeding the candidates. Centres that continue, despite clear messages going out in the centre moderation reports, will be reported to Edexcel.

Comments on strand (a) Web Hosting and Upload of Files

Web Hosting services were generally well discussed using a selection of different hosting companies and the client's needs were often identified. This supported evidence to justify the choice of provider as the candidate was able to refer to the actual client's needs. This allowed more candidates to access top marks in mark band two and above.

Evidence of testing the files once published was varied with several candidates applying detailed and effective tests. This was much improved, but weak evidence was still found where the only tests involved checking links.

Comments on strand (b) Promoting the Website

This strand produced some high quality content with evidence that some of the centres had a clear understanding of the requirements. Several candidates critically assessed the strategies using search engine ranking but the use of statistics was often unbelievable. High hit counter statistics are not essential to access marks in the higher mark bands as a critical evaluation could identify the reasons why the two methods of promotion implemented were not effective. It was very pleasing to see a large percentage of the samples doing just that. It is essential to provide an understanding of the effectiveness of promotion to the candidates.

However, several centres authenticated evidence that purported success beyond the wildest imagination. For example, it is inconceivable that the introduction of Meta Tags would result in an increase of hundreds of thousands of hits the very next day, or even at all. Centres continuing to present extraneous hit statistics will be asked to provide control panel passwords to the moderator in order that the statistics can be verified.

Comments on strand (c) Capturing Visitor Information

Data capture forms were often high quality and well discussed. Several centres had attempted to combine the forms with a database using active server scripting to some success. This has to be applauded.

It was again disappointing to see very few real viewers, with many of the tests carried out by the candidate and tutor. Friends, family and fellow work colleagues should be motivated to try the website and leave real opinions.

There is a problem with the Mailto method in several centres that has caused investigation and implementation of web based form providers. This resulted in mixed evidence, with some excellent forms linked to tables and discussion on the protection provide by the web host. Unfortunately there were several examples where the form consisted of two or three fields. This is clearly limited evidence.

It was also disappointing to see many centres asking their candidates to take the data captured to produce a mail shot. This is not a requirement of the unit and is only using up time that could be spent more effectively.

Comments on strand (d) Site Management

Almost all of the centres were published for the eight week period and several reasonable changes were applied. However, once again a selection of centres

allowed the e-Marketing updates as evidence of maintenance. Maintenance activities should be as a direct result of user feedback, current news, new products or services and web layout improvements.

Once again it was encouraging to see that many of the sites had some form of testing using online accessibility tests or software based tools built into authoring applications.

Technical documentation was very weak. The candidate should provide enough information to allow effective future maintenance to take place. The evidence of all updates and a site map is only sufficient evidence for mark band one. Code for special features such as feedback forms, internal and external link lists, passwords to offsite facilities such as hit counters and structures for folders and files are just a small selection of the possible technical information needed that is often missing.

A substantial amount of the evidence can be provided by including a copy of the web site in the e-Portfolio.

Evidence of checking that the site conformed to legal requirements was not supplied in the majority of the samples seen. 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. Unless a real client is involved, eCommerce solutions are obviously not complying with the requirements of the Sale of Goods Act or the European Directive on Distance Selling, as the product cannot be supplied. Candidates who publish could find themselves in very 'hot water' indeed. It is the responsibility of the centre to guide the candidates and restrict the risk.

Comments on strand (e) Evaluation

Evaluations provided very few examples of higher quality work. Where these were found, the candidate had made a clear attempt to gather feedback from users and site statistics in order to support their claims and provide reasons for success and failure. They had discussed their ability to create and manage the implementation of the site rather than discuss their project management skills.

In the majority of cases, they were often over complimentary for no reason and tried to use statistics that were clearly unreasonable. As stated in previous reports, evidence for the highest mark band could be provided by a critical evaluation that 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.

Several of the candidates provided a copy of the discussion seen in the other strands that clearly did not offer any further evidence of evaluation.

Principal Moderator's Report January 2009

Unit 14: Programming (6964)

This report should be read in conjunction with previous reports, particularly the 2008 reports, and these can be found on the Applied GCE ICT section Edexcel website:

<http://www.edexcel.com/quals/gce/gce-leg/app-ict/Pages/default.aspx>

The e-portfolios and commentaries used in last year's INSET programme can be found on the ICT microsite:

<http://ict.edexcel.org.uk/home/eportfolios>

Edexcel has been running 'Ask the Expert' since September 2008 where your queries will be answered by the relevant Principal Examiner:

http://edexcelexperts.custhelp.com/cgi-bin/edexcelexperts.cfg/php/enduser/ask.php?p_sid=UglVI1Li

General Comments

There were very few submissions in this moderation window. Most centres submitted the sample required on one disk and included the e-sheets and candidate authentication sheets all labelled according to the correct naming conventions as detailed in the document "Moderation of e-Portfolios: Guidance for Centres". Many candidates' e-portfolios were in the correct file format, within the stated file size of 25 MB and most contained a clear index file which started the e-portfolio. It was good to see many assessors giving clear feedback in the e-sheets explaining the assessment decisions made and marks awarded. See the section on administration at the end of this report which details some poor practice relating to the submission of work for moderation.

There were some good examples of challenging and sophisticated programs which were well designed and executed. However, although most candidates addressed the strands correctly, there are still instances of candidates being placed in too high a mark band for the evidence produced. The Assessment Guidance on pages 240-243 of the unit specification gives clarification on how to award the marks for the 3 marks bands across the 5 strands.

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

It is essential that a full listing of the program is included in the e-portfolio. Preferably as a text document. Without this it is difficult for the moderator to follow the structure of the code. A working copy of the program should also be provided.

It is not a requirement for the candidate to produce the functional specification; however one must be included to enable a judgement to be made as to how far the design meets the specification.

Comments on strand (a)

Stronger candidates produced designs that were linked to the functional specification, and it was clear that the design met the needs of the client. At times however candidates presented details of what they have done rather than what they planned to do including screenshots or the final product. It is the level of detail within the design that leads to the mark band placement. For the top of the higher mark bands the design needs to be detailed with, at mark band two, explanations of how input data will be validated and at mark band three identification of the processing to be carried out in each event.

Comments on strand (b)

Most centres are providing projects which are suitable for A2; however there is evidence of candidates being placed in too high a mark band for the evidence present. The evidence for this should be a complete listing of the program code and a working program. Centres should ensure that the program does work on the CD prior to despatch.

Standard ways of working are important in this strand. With regards to programming code this includes good use of object names, indentation and comments clearly explaining the purpose of the code.

How the candidate uses codes etc determines the mark band placement. Mark band two requires **appropriate** use of controls, event procedures, selection and repetition, local and global variables whilst mark band three requires **effective** use of the aforementioned and general procedures/parameter passing. Higher marks are hard to justify where candidates repeatedly use If..Then..Else statements where loops/case would be much more **appropriate** or where they repeat sections of code over and over again as opposed to writing general procedures to handle the tasks which would be much more **effective**.

Evidence for this should be in the form of a complete listing of the program in text form, and a working version of the program in a format that can be used by the moderator

Comments on strand (c)

If the candidate has good measurable objectives in their specification this section is fairly easy. It only becomes complex if the program is not specified well. Evidence of some of the successful tests should be shown and for the higher mark bands there must be evidence of testing using a good range of data to test boundaries ie normal, out of range and illegal. Good evidence will specify what the test data is. There is no penalty if the program works perfectly.

Comments on strand (d)

Candidates must also include two separate documents ie technical and user guide. It is not appropriate for both documents to be in one file.

Comments on strand (e)

There is evidence of candidates being placed in too high a mark band in this strand especially at mark band three. To achieve mark band three the evaluation must be

well rounded and include an evaluation of both the quality of the user and technical documentation and the efficiency of the final program including data structures. These aspects were often missed though some candidates were awarded full marks.

Grade Boundaries January 2009

6951	Total	A	B	C	D	E
Raw Mark	60	47	41	35	29	24
UMS	100	80	70	60	50	40

6952	Total	A	B	C	D	E
Raw Mark	60	47	41	35	29	24
UMS	100	80	70	60	50	40

6953	Total	A	B	C	D	E
Raw Mark	90	62	54	46	39	32
UMS	100	80	70	60	50	40

6954	Total	A	B	C	D	E
Raw Mark	60	45	39	34	29	24
UMS	100	80	70	60	50	40

6955	Total	A	B	C	D	E
Raw Mark	60	45	39	33	28	23
UMS	100	80	70	60	50	40

6956	Total	A	B	C	D	E
Raw Mark	60	46	40	34	28	23
UMS	100	80	70	60	50	40

6957	Total	A	B	C	D	E
Raw Mark	90	60	50	40	30	20
UMS	100	80	70	60	50	40

6958	Total	A	B	C	D	E
Raw Mark	60	45	39	33	27	22
UMS	100	80	70	60	50	40

6959	Total	A	B	C	D	E
Raw Mark	90	60	52	44	37	30
UMS	100	80	70	60	50	40

6960	Total	A	B	C	D	E
Raw Mark	60	46	40	34	29	24
UMS	100	80	70	60	50	40

6961	Total	A	B	C	D	E
Raw Mark	60	45	39	33	27	22
UMS	100	80	70	60	50	40

6962	Total	A	B	C	D	E
Raw Mark	60	44	38	32	27	22
UMS	100	80	70	60	50	40

6963	Total	A	B	C	D	E
Raw Mark	60	44	38	32	26	21
UMS	100	80	70	60	50	40

6964	Total	A	B	C	D	E
Raw Mark	60	46	40	34	28	22
UMS	100	80	70	60	50	40

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

Telephone 01623 467467
Fax 01623 450481

Email publications@linneydirect.com

Order Code UA 020794 January 2009

For more information on Edexcel qualifications, please visit www.edexcel.com/quals

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