



# **GCE EXAMINERS' REPORTS**

## **GCE IN APPLIED ICT AS/ADVANCED**

**SUMMER 2013**

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**APPLIED ICT**  
**General Certificate of Education**  
**Summer 2013**  
**Advanced Subsidiary/Advanced**  
**AICT 1 – eBusiness**

*Principal Examiner:* Jen Gillies

**General remarks**

The AICT 1 paper is divided into two parts; Part A comprising a one hour written examination paper and Part B, a series of tasks to be carried out in a practical two hour examination.

The paper for Part A was provided to centres in an on-screen format that requires candidates to enter their responses into text boxes with one screen per question. Where centres were not able to access the on-screen examination, traditional paper-based examination papers were used. These papers required candidates to write their responses in the spaces on the paper. Neither examination format appeared to cause problems from the candidate's perspective nor did the format appear to influence candidate outcomes.

In many cases candidates provided brief responses to questions that carried a significant number of marks. Candidates should note the wording of the questions, which is designed to suggest the level of the detail required in candidates' responses by the use of words or phrases such as 'state', 'describe briefly', 'explain' or 'describe in detail'.

Centres and candidates are reminded of the value of giving examples to clarify an answer and in some cases to provide additional evidence of a candidate's understanding of the topic of the question. A good example, even if not specifically requested, can often help to secure a mark when a description is lacking clarity or detail.

Some candidates lost marks by not relating their responses to the context of the question or the given scenario. Candidates should be aware that this is an applied qualification and the examination is designed to test their ability to put their knowledge of ICT into the given situations. If a question describes a specific context, and invites the candidates to refer to the context, then marks will be lost if this is not done.

The standard of language used was generally good, though some weaker candidates lost marks through the apparent inability to express themselves clearly.

In Part B of the examination, candidates were required to carry out a series of on-screen practical tasks set in the same context as Part A of the examination. Many candidates were able to demonstrate good practical skills in the use of database and web authoring software. However, the ability of a significant minority of candidates to use database and web authoring software was concerning as they would all have been required to carry out the coursework tasks for AICT 2 as part of their AS studies.

## Part A – written paper (40 marks)

- Q.1 (a) *Name two methods that could be used to gather information from primary sources.*

The specification includes a list of methods that can be used to gather information from primary sources. Many candidates failed to gain two marks here identifying a survey and a questionnaire as different methods rather than recognising they were in fact the same method. Other candidates scored well.

- (b) *Describe one disadvantage of each of the methods you have identified.*

Most candidates were able to identify a disadvantage of at least one method of gathering information. Where candidates had identified two different methods many were able to identify a disadvantage for each method of gathering information.

- Q.2 *Using a relevant example, explain the difference between data and information.*

Some candidates scored well in this question and were able to explain the difference and to provide a relevant example. However, many candidates were not able to express the difference clearly in appropriate language and chose irrelevant examples including ice cream.

- Q.3 *Describe how SchoolConnect could provide access to the central computer system for the managers based in the local depots.*

This question was answered poorly with few candidates able to describe appropriate technologies and many demonstrating their lack of relevant knowledge and understanding.

Far too many candidates suggested the use of inappropriate technologies such as an intranet. Some candidates were able to describe suitable technologies such as virtual private networks.

- Q.4 *One method of keeping business data secure is the use of passwords. Describe **two other** methods that the company could use to maintain the security of its business data.*

Many candidates experienced difficulties in answering this question. The specification is clear on methods that can be used to maintain the security of business data. These include the use of access rights/levels of access, the encryption of data and the installation of firewalls.

Centres must ensure that candidates are familiar with the specification and the requirements of content in each section and sub section.

*Describe a method the company could use to back up the data held within the computer system*

Many candidates described methods that are not suitable for the volume of data that a commercial organisation is likely to hold. These methods include inappropriate technologies such as the use of an usb flash device, CDs and DVDs.

Appropriate technologies include cloud storage or backing up onto external drives that are then stored off site.

- Q.5 *Describe two technologies that the drivers could use to help them in their day-to-day work.*

Most candidates gained 2 marks for this question by describing the use of GPS based technology. Many candidates found it difficult to identify a second technology and most of them suggested a smartphone with GPS. To gain marks here they would need to justify another use in order to achieve marks in this section of the question.

- Q.6 *Describe two features of a database package that would help the business keep accurate records of all their resources.*

Many candidates failed to achieve good marks in this question as their responses did not take account of the context of the question, “*to keep accurate records of all their resources*”, and gave answers relating to other features and facilities of a typical database application.

- Q.7 *Information Flow question. Candidates are provided with a scenario and a partially completed diagram. Label the diagram to illustrate the information flows in the process.*

Most candidates gained 3 or 4 marks for this question. However, candidates' should ensure that they identify the information that flows through the organisation rather than the way in which it is sent. Responses should not include verbs.

- Q.8 *Explain the difference between internal and external methods of communication. Describe the advantages and possible disadvantages of two methods of internal communication and two methods of external communication.*

This extended question provided candidates' with the opportunity to gain a large number of marks. Most candidates were able to differentiate between internal and external methods of communication.

Some candidates were able to identify methods of both internal and external for which they could provide well-reasoned descriptions of advantages and disadvantages. However many candidates provided poorly described uses of methods of communication that would not be appropriate in a business context.

## **Part B – Practical tasks (60 marks)**

Many candidates were able to access marks for the three practical tasks. However, some candidates appeared to have difficulties in carrying out even the most basic tasks and some even discussed their lack of familiarity with the software applications to be used in their evaluation.

### **Task 1 – Marketing**

- (a) *The department has details of the routes and the stops. These details now need to be organised.*

Most candidates were able to recognise the need to split the data into a Routes and a Bus Stop. It was pleasing to see many candidates used action queries to achieve this, gaining additional credit for their work.

Most candidates attempted to create relationships between their tables. Some candidates failed to recognise the need for the use of primary keys for both tables. A minority of candidates attempted to add additional fields or use the bus stop field to create relationships. Candidates should ensure that they remove any duplicated data.

Few candidates gained all marks available for the adjustment of field lengths or the appropriate application of validation rules.

- (b) *SchoolConnect needs to give the bus drivers the timetables for routes A and D.*

A surprising number of candidates did not appear to be able to create the simple query for this report and created two queries, one for route A and one for route D.

Extremely few candidates were able to gain full marks for the report. Most inserted items to be displayed on each page into the report header rather than the page header and very few were able to insert the correct page break.

Some candidates who had recognised that the calculations needed to be carried out in the report rather than the query and were able to access the calculation and IFF statement marks.

- (c) *Explain why validation rules are used when creating data structures and describe the validation rules you have created for Task 1. Present your work as a word-processed document.*

Some candidates were able to access all marks available for this task and produced good explanations for the requirement of the use of validation rules.

Those candidates who had been able to apply validation rules to the bus stop table were able to access the additional marks available here.

## **Task 2 – Sales and marketing**

- (a) *SchoolConnect has decided to market their services via their company's website. You are required to produce a prototype website for the marketing manager.*

Most candidates were able create the three pages required by the question and insert the given titles. Many candidates inserted the required logo but fewer ensured that the logo was consistently displayed on the pages.

Some candidates appeared to struggle to create the viable links between the three pages. Most candidates were able to insert the text and images on the first two pages. However fewer candidates were able to apply appropriate formatting to the timetable information.

Many candidates were able to create most of the requirements for the data collection form. However, many used check boxes rather than radio buttons of a drop down combo-box for the choice of preferred method of communication.

Credit was given for the layout of the web pages. A significant minority of candidates appeared to have given little thought to the appearance of the completed website. There was little evidence of consistency between the three pages in terms of background colour, font styles or layout.

- (b) *Identify improvements that could be made to your prototype web site and present your suggestions as a word-processed document.*

Many candidates described improvements to their websites that had been required by the question paper and therefore did not gain any credit here. Some candidates were able to identify valid improvements to the website although fewer linked these improvements to the requirements of the context.

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**Advanced Subsidiary/Advanced**  
**AICT 2 – eSkills**

*Principal Moderator:* Linda Jennings

### **General Comments**

This summer many good projects were submitted for moderation with a large number of centres marking to the correct standard. The majority of centres correctly completed the required paperwork. It would help in the moderation process if the centres assessors could complete the comment/justification part of the cover sheet and indicate the mark awarded for the spreadsheet and database separately.

### **Specification**

Many candidates were able to analyse the scenario and produced a working specification summarising the purpose of the project. Most were unable to give technical justification of the methods to be used in the solution as they did not have the necessary prior skills and knowledge of the database and spreadsheet software.

### **System design**

This section was completed to a good standard by the majority of candidates, however those candidates that did not have the necessary prior skills were unable to design the processing requirements of the systems.

In some instances the design matched the completed system and seemed to have been completed retrospectively. It is essential that the design is completed before the implementation and should not be changed to match the completed system. Candidates would benefit from researching standard documentation in order to design effective outputs.

### **Implementation**

The quality of the database solution continues to improve with the majority of candidates producing a series of related tables and effective data entry forms, greater automation within the systems was also evidenced. The output of some of the reports would have benefited from additional formatting to replicate standard documents.

The quality of the spreadsheet solution continues to improve with the majority of candidates producing systems that met the requirements of the scenario.

### **Testing**

Candidates achieved good marks in this section, however many candidates failed to evidence prototyping and obtain sufficient feedback. It is felt that this is an area where higher marks could be achieved as many candidates fail to test calculations appropriately.

## **Documentation**

Most candidates produced good screen-based instructions for the use of both the database and spreadsheet solutions. Many candidates, however, failed to produce technical documentation that provided sufficient detail to allow a competent third party to carry out maintenance of the systems.

## **Review**

This section was completed to a good standard by candidates who had produced a specification that included measurable objectives. Some candidates were unable to comment on their own performance and changes of approach effectively and would benefit from keeping a record of their progress whilst completing the design and implementation sections.

## **Portfolio**

The majority of candidates produce good portfolios to showcase their work. However, it was noted that some centres gave candidates a template hence limiting the marks that candidates can be awarded.

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**Advanced Subsidiary/Advanced**  
**AICT 3 – eWare**

*Principal Examiner:* Martin Gillies

**General remarks**

In most cases candidates had addressed the requirements of the controlled assignment 'Home learning' and produced the required outcomes completed to an appropriate standard for AS level. As with the other units of the practitioner qualification the entry for this series was relatively low.

**Task 1 – Preliminary research**

Most candidates presented evidence of useful Internet based research that addressed the software and hardware requirements indicated in the scenario. The more successful candidates included summaries of the technical specifications of the hardware considered and noted why the various items would be relevant to the requirements of the scenario.

More candidates included bibliography of sources than in previous years.

**Task 2 – Specification**

Most candidates produced technical specifications that covered the hardware requirements indicated in the scenario. As in previous series less successful candidates tended to rely on manufacturers' technical specifications with little editing and little contextualisation.

Successful candidates included alternative specifications with some discussion on relative merits and disadvantages, leading to well-reasoned final recommendations based on technical appraisals.

The most successful candidates related their choices to their interpretation of the client's requirements and gave software equal consideration, covering operating systems and the application software indicated in the scenario, in addition to the standard office applications. Many candidates specified online application, security and back-up software, but omitted to include the associated costs in their quotations. The selection of Mac video editing software for use on Windows based machines was a common error.

Most candidates included quotations based on retail prices obtained from online catalogues. Several candidates were reluctant to use the full budget, seeking to save money and basing their final selections on cost, rather than performance.

Most quotations were presented using spreadsheet software, some designed to allow consideration of alternatives. Some effective examples of quotations cross-referenced by hyperlinks to the technical descriptions were seen.

### **Task 3 – Enhancements**

The scenario should guide candidates towards a selected area for further enhancement, in this case real time communication. A minority of candidates failed to identify this area and concentrated on general enhancements to their specifications.

### **Task 4 – Configuration**

Candidates were required to carry out five separate configuration tasks using the simulation software provided and use screen-prints to evidence the configuration work. Candidates were also asked to justify their selections for the various settings.

As in previous series, most candidates scored high marks in this section and carried out the required configurations correctly. Where marks were lost this tended to be the result of very brief or missing, justifications.

### **Task 5 – Customisation**

Candidates were required to create three automated routines or macros to help handle information relating hours spent using the home learning system and to provide evidence of their routines in the form of annotated code listings. No other evidence was required.

The majority of candidates produced the required listings although the standard of annotations was variable. Some candidates provided links to application files and/or screen prints of the recording process in progress, but lost marks by omitting the required listings.

### **Tasks 6 and 7 – Standard ways of working**

Candidates were asked to produce documentation (presentation and fact sheet) on standard ways of working to suit two distinct purposes.

Most candidates were able to produce presentations with concise guidelines for online safety when using ICT and produce fact sheets on data security and integrity that provided some useful information. Several well formatted documents with well summarised information were seen, although less successful candidates paid little attention to the presentation of their slides or included fact sheets with limited text formatting.

### **Task 8 – User support**

Candidates were required to create three flow charts, each designed to help trouble shoot a common ICT problem. Most candidates included three charts based on a sequence of questions with a reasonably logical flow between alternative responses.

The most successful candidates treated each problem individually and included charts with questions of increasing technical content leading to the problem being solved or reference to further technical support.

The user support charts, however, remain an area of difficulty, with few candidates progressing beyond very simple diagnostics to propose solutions to possible technical faults.

### **Task 9 – Review**

Candidates were requested to relate their technical specifications to the client's requirements and consider the value for money they had achieved and the efficiency of their automated routines.

As in previous series candidates scoring high marks presented evaluative comments about their work without lengthy narratives on process. They identified changes of approach likely to lead to improvement of performance and / or outcomes and avoided vague suggestions about organisation of time and making greater effort.

### **Task 10 – Client Information Pack**

Candidates are required to link their work to a given template, or Client information pack. The use of the template is intended to help candidates ensure that all work is completed and that the finished versions of the work for each task are presented to the examiner.

Most candidates linked all their evidence to the given template, adding links as required to suit their files and thereby gained full marks for the task. A minority of candidates had re-organised their work folders and files after linking to the templates, or had re-named the template after creating the hyperlinks and therefore did not provide a working information pack.

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**AICT 4 – eMobile**

*Principal Moderator:* Richard George

**GENERAL COMMENTS**

It was very pleasing to see that the majority of centres assessed their candidates' work to the correct standard this series. All centres completed the required documentation correctly. Again, it was interesting to see the variety of approaches to the completion of the coursework and how candidates took differing perspectives to the requirements of the brief.

A large number of candidates did not achieve good marks in the Networking, Connectivity and Internet Recommendations sections. A small number of centres gave credit for theoretical understanding and bookwork for these areas. Whilst it is important for candidates to have knowledge of the topics contained within the specification, it is expected that candidates make specific recommendations based upon the needs of the family as outlined in the scenario. Costings and options should also be included in these sections in order to access the higher ranges of marks.

The comments below are specific to the projects seen this series and reinforce previously published guidance for successful completion of each section. The recommendations to candidates should assist the completion of the projects.

**REQUIREMENTS SPECIFICATION**

The majority of candidates successfully completed Requirements Specification sections however all candidates should be encouraged to make clear any assumptions or interpretations of the scenario in this section in order to access the higher marks. Not all candidates summarised the budgetary limitations. Fewer candidates addressed the potential for future sales from the additional budget.

Overall recommendations to candidates for this section would include:

- Use the given scenario to summarise the requirements for each member of the family – take each member of the family separately. The specification should be a single document for the entire family.
- Use subheadings for each of the following categories: Hardware requirements; Networking requirements; Connectivity requirements and Internet requirements
- Discuss any assumptions you are making
- Include details of future requirements for the family
- Summarise the budget limitations

## **HARDWARE RECOMMENDATIONS**

Most centres gave accurate marks for this section and it was pleasing to see the variety of options recommended for the scenario. Many candidates did prepare this evidence for the eQuote as though they were working for the organisation, however sometimes the context of the presentation of the evidence lacked the professionalism one would expect from a business organisation.

This scenario made it clear that the family requirements were for higher specification equipment and the available budget was set accordingly. Many candidates chose to spend as little of the available funds as possible and often took a low value option. It was interesting to see that some candidates chose to offer price-range bundles as options for the family – this was seen to be representative of realistic practice.

A small number of candidates included external links to live Internet sites that would encourage the family to purchase from another provider and could also not be guaranteed to still be available at the time of moderation.

Overall recommendations to candidates for this section would include:

- Remember to put this into context – YOU are working for a company and you would like the family to purchase the items from YOU – avoid directing the family to another provider.
- Avoid copying and pasting copious amounts of detail here (focus on the necessary detail).
- Discuss the benefits and drawbacks of each option and make your recommendations.
- Include costings for each item

## **NETWORKING RECOMMENDATIONS**

Many candidates presented some good recommendations for the networking solutions for the family and included some schematic diagrams for connections and arrangement of devices – this is very good practice for this section. It was evident that work presented from some candidates focused mostly upon theoretical understanding of items covered in the specification rather than recommendations for the use and implementation of network hardware for the family. N.B. It is not necessary to repeat the networking recommendations for each member of the family should there be a household solution.

Overall recommendations to candidates for this section would include:

- As with the previous section, remember to put this into context – YOU are working for a company and you would like the family to purchase the items from YOU – avoid directing the family to another provider.
- Make specific recommendations. Avoid copying and pasting copious amounts of detail here (focus on the necessary detail).
- Discuss the benefits and drawbacks of each option and make your recommendations.
- Include costings for each item
- Consider a network diagram / animated model
- Explain security issues and options for the family

## **CONNECTIVITY RECOMMENDATIONS**

Many candidates still compile evidence referring to theoretical understanding of items within the connectivity section of the specification. Candidates should concentrate on specific recommended solutions to complement the hardware and networking recommendations for the family. N.B. It is not necessary to repeat the recommendations for each member of the family if there is a household solution.

Overall recommendations to candidates for this section would include:

- As with the previous section, remember to put this into context – YOU are working for a company and you would like the family to purchase the items from YOU – avoid directing the family to another provider.
- Avoid theory bookwork here – make sure you concentrate on making specific recommendations for your solution
- Include wired and wireless options
- Discuss the benefits and drawbacks of each option and make your recommendations.
- Include costings for each item
- Consider a connection diagram / animated model

## **INTERNET RECOMMENDATIONS**

Some candidates produced good evidence for this section and most centre marks reflected this accurately.

N.B. It is not necessary to repeat the recommendations for each member of the family should there be a household solution.

Overall recommendations to candidates for this section would include:

- As with the previous section, remember to put this into context – YOU are working for a company and you would like the family to purchase the services from YOU – avoid directing the family to another provider.
- Avoid theory bookwork here – make sure you concentrate on making specific recommendations for your solution
- Include Internet, email and VoIP solutions where appropriate
- Discuss the benefits and drawbacks of each option and make your recommendations.
- Include costings for each option

## **CULTURE AND SOCIETY**

Some candidates provided very lengthy evidence for this section giving almost too much detail about specific issues that could affect the family with the use of the recommended items. A summary of issues relevant to the members of the family would be more appropriate – each member of the family exist in different environments in their daily lives and the use of mobile phones and other devices could impact on their individual circumstances. It is not expected for example, that a lengthy description of the effects of radiation on the brain, would necessarily cover this section in isolation. A more appropriate view could include a discussion of relevant issues to the scenario such as: issues of using mobile phones when driving (further opportunities for future accessories sales?); use of mobile phones within school/college environments or trains (quiet carriages?) and buses etc. The relevant issues considered should include all items of recommended hardware.

Overall recommendations to candidates for this section would include:

- Avoid theory bookwork here – make sure you concentrate on making specific issues for consideration and recommendations for the appropriate use of your specified options.
- Consider the benefits of adopting your proposals, and summarise the benefits to the family.

### **eQUOTE**

Some candidates presented their recommendations to the family in what was seen as a very professional on-screen multimedia product. This contained all of the required information to the family and incorporated a variety of relevant multimedia features. This allowed access to the high marks in this section. A small number of candidates presented their on-screen information using very trivial formatting – this did affect the allocation of marks to the candidates.

Overall recommendations to candidates for this section would include:

- The eQuote should:
  - Be professionally formatted in the context of the scenario
  - Introduce you as the contact for the organisation
  - NOT include links to external websites – all links should be self-contained. Remember external web pages frequently change!
- Look at other published examples of multimedia publishing – some on-screen books are textual only, investigate other methods of utilising multimedia to effectively present information.
- You will gain credit for incorporating suitable multimedia components e.g. Images, Animations, Sounds, Videos, again remembering the need for it to be fit for purpose in a business context and relevant to the recommendations. Avoid the use of multimedia content which does not support the recommendations.
- Make the eQuote interesting and exciting for the recipient!

### **REVIEW**

In general, centre assessment of candidate's work for this section was accurate. In order to access the higher marks, candidates should consider the following recommendations:

Overall recommendations to candidates for this section would include:

- Use subheadings...
  - State sources of information.
    - if web-based state URL and date information retrieved
  - Comment on your own performance
    - How did you feel you performed in completing this coursework?
    - What skills did you develop?
    - What difficulties did you encounter?
    - What would you do differently or improve next time?
  - Compare your eQuote to other methods of electronic communication of similar information
  - Make sure you spell-check and proofread your work.
  - Use appropriate technical terminology in your review

## **ePORTFOLIO**

There are no specific marks for an eportfolio, however it would be seen as good practice to have an opening screen with the intended audience being the assessor / moderator. The following links are suggested:

- Requirements Specification
- eQuote to the family from the organisation containing:-
  - Hardware Recommendations
  - Networking Recommendations
  - Connectivity Recommendations
  - Internet Recommendations
  - Overall Costing within budget
  
- Culture and Society
- Review

**APPLIED ICT**  
**General Certificate of Education**  
**Summer 2013**  
**Advanced Subsidiary/Advanced**  
**AICT 5 – eProject**

*Principal Moderator:* Peter Lewis

### **Introduction**

Once again, candidates have produced some quality work using industry standard project management software in a realistic environment during this examination series.

### **Outside Controlled Conditions**

Most candidates in most Centres engage fully in the group work stage of this unit and use the original scenario to prepare as much as they can as a group in readiness for the individual work in controlled conditions. That said, despite repeated warnings to the contrary, there is still some concern about the way in which some members of the groups engage with the main software titles in this unit during the group work time. In particular, some candidates in some groups do not appear to have involved themselves fully in the development of the prototype spreadsheet during the group work stage and consequently have difficulty amending the model in light of the Revised Client Requirements during the controlled time.

### **Problem Definition**

Candidates are expected to redefine the scope of the *whole* problem in light of Revised Client Requirements and reappraise the impact of these requirements on the *whole* project. In most cases, candidates are showing how they develop this document as an individual in the controlled time by highlighting the changes in red which aids the marking at the centre, as well as the moderation process. In the worst examples, candidates simply added the Revised Client Requirements to their individual Problem Definition almost word for word without considering the wider implications of these changes.

Any assumptions made by the candidate must be clearly explained. A number of aims are clearly identified in the scenario, but further aims could be identified and developed based on the research undertaken at the group work stage.

### **Project Organisation**

Most candidates are using the Project Management software well and appreciate how useful this type of software is in managing large and complex projects. To award marks in the top mark band, candidates would be expected to show how the project has been broken down into tasks and then these tasks broken down further into sub tasks. Candidates should show some indication of a critical path using predecessors as well as allocating resources to each of the subtasks. Suitable checkpoints and opportunities for contingency should be included in the plan. The notes section of the software should be used to communicate progress throughout the 15 hours of the controlled time.

The only requirement of this unit in this section is to use project management software to plan the 15 hours controlled time. It is not necessary for candidates to show evidence of project planning of the group work stage. Whilst it is acknowledged that this may be good practice and that some centres may use this as part of their teaching of the project management software, this must not be done at the expense of the detailed planning that is required for the 15 hours. In some cases, candidates used the project management software well during the group work stage but then used it only superficially during the controlled time. Centres must be clear that, even though the plan may look detailed, it is only the planning which goes into the 15 hours that can be counted towards the mark for this section and that the project management outside the controlled time must be ignored.

Candidates must be encouraged to make good use of the project management during the 15 hours controlled time. Candidates are expected to produce a number of versions of their plan and to communicate their progress throughout the 15 hours controlled time.

### **The Project**

Centres need to be clear that what they are marking is the way in which the candidate has developed the solution in light of the Revised Client Requirements. Therefore, it is the way in which the candidate has developed the solution *as an individual* during the controlled time that determines the mark for this section. Without fully addressing the Revised Client Requirements, candidates can expect to have a very low mark for this section.

It is expected that candidates look to fully embed the changes outlined in the Revised Client Requirements into their spreadsheet models. It is most likely that this will involve changes to a number of worksheets within the model as well as amending macros and calculations.

Centres and candidates should also note that moderators actually test the spreadsheet solution during the moderation stage to ensure that the Revised Client Requirements have been properly addressed and that they work correctly. In most cases, candidates present very impressive and innovative solutions to the Revised Client Requirements which justifiably attract high marks for this section. However, in a small number of cases, candidates do not appear to have addressed the Revised Client Requirements at all, or very superficially, and yet have been awarded high marks by the centre.

### **Review**

The importance of quality evaluation and review cannot be overstated. Some candidates produced very long reviews which were mainly based around comments on screen dumps resulting in very superficial reviews. In some cases, the review was more of a reflective 'diary' of what happened during the 15 hour controlled conditions.

Candidates must ensure that they devote sufficient time to this section and that they engage in proper evaluative writing of the length and detail expected at A2 level.

### **Presentation**

In most cases, candidates produced excellent ePortfolios which were used effectively to demonstrate evidence. In some cases, however, high marks were awarded, even though there were some broken links which necessitated browsing through the folder structures. Centres need to take care in ensuring that the links within the ePortfolio are not pointing to networked drives and that the ePortfolio works as expected after burning it to the disk.

Candidates must be encouraged to use the given ePortfolio template and the emphasis should be on the efficient demonstration of evidence linked in an appropriate format, rather than the appearance of the ePortfolio itself. Candidates can, of course, expand the given ePortfolio template if necessary to afford them every opportunity to demonstrate the work that they have undertaken for this unit.

Candidates should be discouraged from password protecting documents that are linked from their ePortfolios.

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**AICT 6 – eStudio**

*Principal Moderator:* Martin Gillies

**General Remarks**

This was the most popular of the A2 project units and many very good e-portfolios of work were seen. Centres had generally ensured that their candidates had access to a range of suitable software and the skills to produce effective graphic and multimedia products.

The unit requires candidates to produce both graphic and multimedia products and for this series was based on the 'Wish you were here' scenario.

**Requirements Specification**

**Produce a requirements specification document to summarise:**

- **the purpose of the campaign**
- **measurable success criteria related to the campaign objectives**

**Produce a test plan to give details for testing the final products.**

Most candidates scored well in this section, producing an accurate summary describing the purpose of the campaign and listing a series of success criteria based on the given campaign objectives. As in previous years identifying success criteria that were both realistic and measurable proved to be a difficulty and candidates were not penalised at moderation if this was not fully achieved.

The majority of candidates produced test plans that provided for objective testing, where this was possible e.g. length of video, navigation of website etc. and subjective testing of graphic outcomes, usually involving peer surveys.

**Graphic Design**

**Produce a design log for the required graphic products to include stimulus material, initial ideas, illustration of their development and related design decisions.**

**Include details of elements and tools and techniques required for further development of the proposed designs.**

The design sections were generally well addressed in comparison with previous series, with most candidates presenting initial ideas and some illustration of their development. The recording of stimulus materials and the explanation of design decisions were also areas of noted improvement, but, as in previous series, there were examples where significant changes in the designs occurred without any accompanying explanation. The most successful candidates addressed the requirements to include details of elements for further development and demonstrated their knowledge of the available software by identifying the tools and techniques they intended to use in the development of their work.

## **Multimedia Design**

**Produce a design log for the required multimedia products to include stimulus material, initial ideas, illustration of their development and related design decisions.**

**Include details of components and tools and techniques required for further development of the proposed designs.**

The use of detailed storyboards and timelines in the design of multimedia products remains an area for further development that should benefit final outcomes, as is the early identification of the requirements for any accompanying sound track. Scripts for voice overs could also be used to support the design process.

In general the multimedia design work lacked detail, with only a minority of candidates identifying the tools and techniques they intended to use in the development of their movie and animation.

## **Graphic Products**

**Carry out prototyping and testing to develop the final graphic products. Prepare evidence of prototyping and testing for your design log.**

Most candidates provided screen shots that confirmed the software used and some extensive records, comprising step-by-step screen shots of the production process were seen. The most successful candidates were more selective and presented screen shots to demonstrate significant developments and the use of software tools that they had found to be particularly effective.

## **Vector based drawing of an original mascot**

Most candidates included clear evidence of their consideration of alternative ideas for the mascot and of their development of the designs, although several candidates would have benefitted from obtaining feedback on their work at an earlier stage.

Many candidates produced mascot designs based on tracings of clip art characters. The approach worked well when the tracings were modified and customised. It was less successful when clip art images were used without modification other than the overlay of additional features.

The most successful candidates produced original designs that were clearly relevant to the campaign and demonstrated good use of vector tools and effects, including fills, gradients, highlights and blends in their production of effective and attractive drawings.

### **A paper based net of the mascot**

The net provided an opportunity to demonstrate accuracy in vector work and several candidates achieved this, although, as in previous series, many drawings without titles, dimensions and scale were seen.

The most successful nets had been derived as part of the mascot design process and included colours and other features applied to fold correctly and produce a convincing model. Less successful examples comprised simple cube designs with images of the mascot on each face.

### **Daigrammatic map of the local area using original symbols and icons**

Many effective maps featuring original symbols and icons were seen, although in several examples the use of a standard map or aerial photograph taken directly from the internet detracted from the overall effect and missed the opportunity to design and create an original diagram. The symbols and icons used on the maps were generally well done, in particular where meaning was obvious and did not rely on a legend. Several candidates made good use of slice tools to link features on the maps to pop-up images or additional information. The most successful candidates included these interactive features and were able to export their products such that the interactivity was retained when embedded into a page of their web site.

### **An advert for a travel magazine a poster and a billboard.**

As in previous series, some candidates would have benefited from reviewing similar adverts in professionally produced magazines before attempting to produce their own. However, many effective adverts were seen, most effectively when presented in situ, with use of distortion tools to replicate features such as arching and page folds.

The wall posters tended to be adapted versions of the magazine advert, with text reduced, as intended. Candidates who produced a new design for the wall poster, without reference to the magazine advert missed the point of producing a set of products. The most successful examples included the wall posters within well-chosen images that were realistic but also presented the posters clearly.

Successful bill board adverts were also designed to be part of the set, with re-purposed elements taken from the posters and magazine advert, but with reduced content to suit the intended purpose. Most candidates included realistic images of their bill board adverts in situ.

### **Three alternative versions of a single item of merchandise.**

Some imaginative products were seen with the more successful candidates producing three versions of one product, adjusted to suit differing audiences and taking the opportunity to demonstrate their photo-editing skills by including well formatted images of their items in use. In other examples candidates presented very simple designs and demonstrated only limited software skills by only superimposing their mascot drawing without further editing.

## Multimedia Products

In previous years the overall impression from moderating the multimedia work presented for this series, and in particular the videos, was one of work that had been produced when time was limited and with deadlines approaching. However, some good products were seen, but the standard of the supporting evidence of the development of these products remains an area for improvement

### **A timeline animation featuring the mascot at a local attraction.**

The intention of this product was to produce an asset or assets that could be used to improve the user experience provided by the website. Most candidates produced tween based animations as required. The products ranged from simple page banners to complex animated tours of the local area, featuring local attractions and often making use of the diagrammatic map as a back drop.

The most successful animations focussed on the mascot and combined tweens with background transitions that highlighted a local attraction.

### **A 60 second video advertising a local event or activity**

A wide range of approaches to the authoring of the videos were seen. The most successful examples focused on the chosen event and involved both original and secondary video sequences, well timed transitions and synchronised sound, sometimes with voice over. Less successful videos included examples of work that omitted to address the advertising purpose and simply comprised video with little editing, context or sound.

### **'Wish you were here' website to comprise:**

- ***Home page featuring the diagrammatic map and images of the three adverts in use;***
- ***Events and activities including the video.***
- ***Heritage and culture page with suitable content.***
- ***Mascot page with animation, links to the net, with images of the finished model and links to the merchandising options.***

Most candidates produced a website of 4 pages that presented the required information. Several candidates included images of their graphic products on the web pages, usually to good effect, although several pages with images missing were seen. Many effective animations that had been well integrated within the page designs were presented.

The most successful candidates demonstrated skill in the use of roll-overs, transitions etc. and produced web pages with well-designed navigational features, carefully chosen colour schemes, clear fonts and consistent layouts.

## Review

### **Produce a review document that evaluates and suggests improvements covering:**

- **the final products**
- **the tools and techniques used • own performance**

As in previous series and as for other units the review was well done in cases where the evaluation of the final products included some consideration of end user feedback, leading to suggestions for further improvement. The reviews of the tools and techniques used ranged from simple descriptions of process to the consideration of the effectiveness of a range of software facilities, as required for the higher marks.

The most successful candidates commented on their own performance and identified changes of approach likely to lead to improvement of performance and / or outcomes. They did not include comments about needing more time or vague suggestions about their level of effort and organisation.

## **ePortfolio**

### **Produce an eportfolio to provide a context and showcase for the campaign products.**

Most candidates produced a functional e-portfolio that was distinct from the campaign web site and provided access to the products and supporting evidence. In general the e-portfolios provided limited context but were usually easy to navigate, although the index pages of some candidates had not been clearly named.

The more successful candidates were able to target their work towards the assessor and design pages that showcased their achievements and highlighted their final products.

**APPLIED ICT**  
**General Certificate of Education**  
**Summer 2013**  
**Advanced Subsidiary/Advanced**  
**AICT 7 – eConnect**

*Principal Examiner:* David Pearce

The AICT 7 paper is divided into two parts; Part A comprising a one hour on-line examination paper and Part B which is a practical two hour examination. The responses to Part B are submitted on CD.

**Part A**

**General Comments**

Part A of the examination was completed on-line using the BTL secure web site.

**Comments regarding specific responses**

- Q.1 (a) Briefly describe why using networked computers makes efficient use of hardware.
- Many candidates were able to identify that sharing expensive hardware such as colour printers makes efficient use of hardware.
- (b) Identify an activity that could be monitored using the network management software.
- Few were candidates were able to explain the idea of monitoring user activity in relation to accessing files or web sites.
- (c) Describe how using a client server network can improve the safety and security of data.
- Many candidates were able to gain one mark here but few went on to gain the second mark.
- (d) Describe how using a network enables collaborative working.
- Many candidates were able to gain one mark for sharing files or communicating idea but again few failed to expand and gain the second mark.
- Q.2 Many organisations have an Acceptable Use Policy (AUP) which often include rules about using their networks and writing emails.
- (a) One rule often issued is 'Always read your emails before you send'. Explain why this is a sensible rule.

Some very good answers were seen to this question, which met the requirements of the markscheme.

- (b) Write two other rules the organisation should include in their AUP, explaining why they are required.

Many candidates were able give a sensible rule but then did not go on to explain why the rule is required and failed to gain the second mark.

- Q.3 Gwesty'r Pentref will be creating an intranet and developing a website. Describe the difference between the Internet and an intranet. Give two examples of information that would typically be found on their website and two examples of information found on their intranet.

Many candidates did not describe the intranet as being a logical network that can be accessed from anywhere with some method of authentication.

Most candidates were able to gain marks for the examples of data found on an intranet and the internet.

- Q.4 Identify the function of the hardware devices named below.

- (a) Repeater

Most candidates were able to answer this question fully.

- (b) Wireless Access Point

Most candidates were able to answer this question fully.

- (c) Media converter

It was pleasing to see that many candidates were able to answer this question fully.

- Q.5 Name four networking protocols describing a suitable use of each.

Most candidates were able to name three or four protocols but less were able to give a suitable use of each.

- Q.6 (a) The organisation could install a thin client network. Describe why thin client workstations have lower running costs compared with standard workstations. Many candidates were able to gain at least two marks here for the less hardware and power consumption ideas.

- (b) Describe in detail one specific role of a file server.

Some candidates were able to describe one specific role of a file server but disappointingly many were unable to gain this mark.

- (c) Describe in detail one specific role of an Internet (proxy) server when dealing with client requests for web pages.

Many candidates were able to describe one specific role of an internet server.

Q.7 Wide area networks can use packet switching or circuit switching. Explain in detail how packet switching operates describing the contents of a typical packet and give advantages of packet switching compared with circuit switching.

Many good responses were seen for this question, which met the requirements of the markscheme.

Candidates should, however, be reminded that clear extended answers are required to gain high marks.

## **Part B – The Recommendation**

### **General Comments**

This part of the examination was completed using network design software and print screen evidence in a word processed document. Candidates typed written responses to some tasks in the same document.

The scenario and tasks were of a similar type to previous papers.

### **Comments regarding specific responses**

#### Task 1

Centres should remind candidates that a ‘scatter gun’ approach of placing all hardware in all rooms will not gain marks as marks will be deducted for inappropriately located hardware.

The location of each component is important. Thought should be given to where the servers and switches should be located. However, a sensible justification of a poorly located piece of hardware could gain the mark

#### Task 2

Many candidates were able to give detailed reasons for using a wireless communication infrastructure to connect the physical network components.

#### Task 3

Most candidates were able to identify a router but fewer went on to explain the role of a router.

#### Task 4

This was well answered with many candidates gaining full marks. Many candidates, however, did not give the correct answer with regard to transferring information outside of the EU.

## **Part B – The Implementation**

### **General Comments**

The Implementation part of the examination was completed using server simulation software and print screen evidence in a word processed document. Candidates typed written responses to some tasks in the same document.

Candidates labelled their screen shots as instructed. Centres, however, should encourage candidates not to severely crop their screen shots as evidence may be lost. Also there is no need to reduce the size of the screen shots to make many fit on one page. They are not printed, therefore no paper is saved and it is important that the examiner can read all the detail on the screen.

The examiner must have clear evidence to be able to award marks.

Candidates were expected to create users, computers, groups, folders and set share permissions to meet the given objectives.

Generally most candidates were able to carry out the practical tasks but many seemed unable to justify their choices and failed to refer back to the given objectives.

Centres must direct candidates to read and refer to the objectives when justifying their choices, particularly when deciding on share permissions.

### **Comments regarding specific responses**

Candidates should be reminded to refer to the objectives when completing the practical tasks in The Implementation.

Many candidates gave suitable rules with examples of names that would both satisfy the rule and break the rule. Some candidates, however, confused rules with conventions. Rules are required so that the names can be created and will not cause any technical issues. Naming conventions help the users to identify hardware and help technicians maintain and expand the system.

Some candidates were able to justify and give reasons for naming conventions as well as use them.

Candidates should refer to the given objectives to determine who should be in which group and what permissions each group should be given. Some candidates correctly set the permissions for each of the groups in task 16 and task 17 but were unable to justify their reasons for setting the permissions in task 11 and task 12. These candidates failed to gain high marks.

Candidates should describe the permissions that they are going to set using the correct terminology such as 'Full Control' or 'Read' and not in general terms such as 'update' or 'view' the database.

**APPLIED ICT**  
**General Certificate of Education**  
**Summer 2013**  
**Advanced Subsidiary/Advanced**  
**AICT 8 – eLearn**

*Principal Moderator: Martin Gillies*

**General remarks**

As with the other units of the practitioner qualification the entry for AICT8 in this series was relatively low. The following comments from previous series remain relevant.

In most cases candidates had addressed the requirements of the specification, coded eLearning systems and produced good quality solutions that were appropriate for audience and purpose.

**Problem Definition**

Most candidates had undertaken some analysis of current practices for the delivery of their learning content. In some cases this included consideration of the national curriculum programmes of study for their intended purpose and audience.

Many candidates were able to use this research to form a problem definition that identified the broad aims and limitations for the proposed eLearning system. Some candidates were able to produce detailed problem definitions and to form clear and measurable criteria for the evaluation of the finished eLearning system.

A few candidates failed to carry out sufficient investigations and therefore they struggled to create a detailed problem definition and also had difficulty in setting measurable success criteria.

**Design an eLearning package**

Most candidates were able to produce basic designs for an eLearning system. Many candidates produced designs that were sufficiently detailed to allow the system to be implemented by a competent third party. Some candidates produced comprehensive designs for eLearning systems that were clearly suitable for the intended audience and purpose.

It is important that all candidates consider both the data to be handled and the processes required to produce the eLearning package. These processes should be included in the design section of the work.

It also important that all design work is carried out before the system is created. Candidates will not be given credit for retrospective design work.

Some candidates had given a great deal of thought to the nature of their eLearning systems and the needs of the learners and had created engaging and interesting interfaces and scoring systems.

### **Create an eLearning package**

A range of eLearning systems was seen. Most candidates were able to produce systems that were functional and many produced systems that included well thought out features.

Candidates should ensure that they concentrate on producing an interesting product rather than demonstrating the use of complex code whilst losing sight of the audience and purpose of the system.

### **Tutorial**

The production of the tutorials provides the candidate with an opportunity to showcase their work. Some excellent examples were seen. Candidates, however, should ensure they make the most of the on-screen environment to demonstrate the use of their systems. Candidates should also ensure that the tutorials are each directed at their intended audiences.

### **Test an eLearning package**

Some good test plans were seen during the moderation process. Many candidates were able to design effective test data to test both the functionality and logic of their implemented systems.

Candidates should be aware of the importance of the commentary they provide to accompany the testing outcomes. In many cases screen prints of outcomes were seen but the work lacked the discussion required to access the higher marks for this section.

### **Review**

Many candidates provided reviews that comprised narrative rather than evaluative content. Centres should ensure that candidates are aware of the requirements of the specification for the review for this unit. In a minority of cases candidates failed to cover all five of the areas contained in section 8.8 but simply provided a description of their work.

### **Eportfolio**

Almost all candidates provided e-portfolios that allowed access to their work. Some of the best work was seen where candidates had themed their e-portfolios to reflect the context of their eLearning packages.

One centre provided movies of their eLearning systems in use. Although this is not a requirement of the specification it was pleasing to see all facilities of their work in action.

Candidates should test their e-portfolios to ensure that all links will be functional when the work is removed from the network.

**APPLIED ICT**  
**General Certificate of Education**  
**Summer 2013**  
**Advanced Subsidiary/Advanced**  
**AICT 9 – eTransact**

*Principal Moderator: Jen Gillies*

**General remarks**

As with other units of the practitioner qualification the entry for AICT9 this series was relatively low. The following comments from previous series remain relevant.

In most cases candidates had successfully addressed the requirements of the specification and had created ecommerce websites that allowed the end user to view and purchase goods. In some cases candidates had presented work of an extremely high standard and are to be congratulated on their outcomes.

**Design an eTransact system**

Many candidates presented clear designs for the layout of a website intended to present product information, promote user confidence and enable transactions to take place. Some designs included all information required to create the website including clear structure diagrams, proposals for navigation, user interaction and graphic content.

Most candidates had given some consideration to the structures required for efficient storage of all information required to carry out efficient transaction. Some candidates had designed data entry facilities and validation routines.

A minority of candidates appeared to have created retrospective 'designs' for their implementations. Retrospective work will not be given credit at moderation. It is essential that candidates create up front designs for their systems.

**Create an eTransact system**

Most candidates created functional websites that comprised a series of web pages designed to present products. Most of the websites enabled some stages of a transaction to take place. Some candidates created fully functional, easy to navigate websites comprising a series of well-structured web pages that enable efficient transactions.

Many candidates produced structures that stored data and their systems generated some automated output. More successful candidates created efficient data structures that stored all information required to carry out a transaction and provide the consumer with the details expected from a commercial system.

### **Test an eTransact system**

Many candidates appeared to have created prototype systems and had taken on board feedback to allow them to improve their websites. Most candidates had created test plans that would allow them to test their systems. Some candidates had created comprehensive test plans that would allow them to test all areas of their system. The results were often presented with appropriate commentaries.

### **Provide customer advice**

Most candidates had carried out some research into distance selling regulations and the terms and conditions documented on a range of commercial websites. The results of the candidates' research were presented in a variety of ways and some candidates would have benefited from adopting a more professional approach to the presentation of this information. This information should form a part of the transactional website and not be presented as in essay format as an attachment to the e-portfolio.

### **Review**

Some candidates' reviews tended to contain a narrative account of the work carried out rather than an evaluation of their finished systems and own performance. Candidates would benefit from ensuring that their reviews covered the areas included in section 9.8 of the specification.

### **Eportfolio**

The majority of candidates presented their finished systems and supporting evidence in an e-portfolio. Most of these e-portfolios allowed access to all of the candidates' work. In some cases candidates would have benefited from testing the navigational links to ensure that work and other web pages could be accessed when the completed work was removed from the school/college network.



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