AQA

ASSESSMENT and
QUALIFICATIONS
ALLIANCE

General Certificate of Education

Applied Information and Communication Technology 8751, 8753, 8756 & 8759

IT01   ICT and Society

Report on the Examination

2007 examination - June series

Further copies of this Report are available to download from the AQA Website: www.aqa.org.uk

Set and published by the Assessment and Qualifications Alliance.

Introduction

This was the first session with availability of all of the units for both the user and practitioner awards at A2 and the second session for AS. The general standard of work seen across the AS units showed a definite improvement over the last session. The general standard of work across the A2 units was very pleasing with much creative work seen and clear indications that candidates with a wide range of abilities are succeeding with this Specification. This of course is inevitably not true of all candidates. Many centres should be congratulated on their approach to these courses as they have embraced the meaning of Applied ICT. Some centres, however, do need to consider the approaches taken to some of the units so that they can help candidates to attain the best possible marks. Centres are encouraged to make full use of the advice, materials, such as the Teachers Guide, and training available to them and to attend the feedback meetings for the A2 units and standardisation meetings that will be held in Autumn 2007 for both AS and A2 units.

Unit 1: ICT and Society (IT01)

This was the fourth series for the examination of this unit. The format of the examination is an AQA-set assignment, for which candidates are allowed time for research and initial development work (the investigation time), then a period of controlled conditions during which candidates are expected to produce the final product and an evaluation.

General comments

Although the standard appeared to have improved in a substantial number of centres there were still centres where candidates work was poorly presented. The general impression was that there was more variation in the quality of work presented compared to equivalent work seen last June. Also, in most cases, the request for no unnecessary additional material was heeded, as was the requirement to number pages. As in the previous series, it was clear that many candidates gained more than just ICT knowledge and experience when carrying out the tasks in this examination. Many candidates had undertaken substantial research into the use of ICT in sport. There were still a significant number of candidates who quoted inappropriate applications or did not make the use of ICT apparent, thereby gaining no marks for those examples. The ICT aspects of the content of the examples are required. Those that did describe the ICT used produced some very informative pages. Centres should also remind their candidates that small dark fonts on dark backgrounds are not legible and therefore inappropriate.

Most candidates submitted their work in the order that the tasks were set out in the Candidate Booklet. This made it easy for the examiners to find the evidence. However a significant number of candidates are still submitting work in more or less random sequence, unnumbered, unlabelled and sometimes partially upside down. This makes the examiner's job much harder. In addition to numbering the pages, candidates should indicate the task letter on each piece of work to distinguish each part clearly.

Sometimes it was very difficult to know which were draft and which were final designs. Candidates should also be taught the difference between designs, prototypes and draft copies of the product. For this unit neither prototypes nor draft products are required and cause confusion if included. A significant number of candidates produced prototype newsletters instead of designs and this is very inappropriate. Hand drawn designs are recommended but designs created in an alternative piece of software to that used in the implementation would be permissible. For example if the final design is to be created in a desktop publishing package, word processing software would be suitable for the designs.

Design work was still often very poorly annotated and explained, not showing the features of the software and their appropriateness for audience and purpose. Many candidates had included design work that was only labelled with basic items (image, textbox). Better candidates gave full annotation of all features and all necessary measurements, explaining how their designs were appropriate for the purpose and target audience. These candidates also used a wide range of features in their designs showing clearly where they were to incorporate tables, bullets, margins etc.

The standard of grammar was very variable, the better candidates explaining all work very clearly. However a significant number of pages were seen that used very poor language. The best examples addressed the audience appropriately, giving a more professional presentation.

The Task

The task given for this examination series was to design and produce a set of newsletter pages for a target audience of candidates at a university. The purpose was to inform them of the effects that ICT is having on society. Candidates were required to include details of how the Data Protection Act would affect candidates providing their details to sporting organisations and to give six examples of the use of ICT in sport.

Candidates should be encouraged to study the booklet in detail before starting the task and then to keep checking throughout the weeks that they are working on it to ensure that they follow the guidelines. Candidates should be told to explain what they are doing. Many had carried out surveys with detailed questionnaires. However, there were several examples of these where candidates failed to state who the target audience was or worse still, stated the wrong target audience, so gaining no marks for this work.

Items (a) to (o) in the Candidate Booklet set out details of what candidates should hand in. The process that candidates were expected to go through is outlined below:

Candidates should have started by planning how to break down the overall task into chunks and planning their time in order to ensure that they completed everything within the overall time allowed.

Candidates should then carry out research into their target audience, in order to ascertain what their needs are. This should influence the design and layout of the newsletter, as well as informing the likely content. Research should be carried out in order to gather information and relevant pictures that will form the content of the newsletter. The results will be gathered into text and image files ready for the controlled conditions. Candidates should not forget that the content must be concerned with the use of ICT in the context of the scenario, in this case sport, and be accurate and relevant to the target audience.

As the research is being conducted, the candidates should form a bibliography, in the format suggested in the Candidate Booklet.

Once the research has been completed, the candidates should create criteria that will allow them to evaluate the final version of their newsletter. The criteria should be informed by their research and by the requirements of the task.

Several alternative designs should then be produced by hand. These rough drafts should include sufficient detail for the target audience to be able to comment on their suitability. It is expected that they will show these to several members of the target audience for testing. The candidates should record how they carried out the testing as well as the results. A final design should be created, on which the implementation of the product will be based. The candidate should annotate this design to show its features, including accurate dimensions, so that a third party could implement the pages from this design. The annotations should explain why and how it is appropriate for the target audience. The annotations should also show where all content is going to be inserted, with reference to the information stored in the research files.

At the end of the investigation time candidates should submit all work in sections a to g as hard copies plus the researched text and images in electronic format, to their teacher. Text should ONLY be submitted as basic text files. Word and similar files are NOT APPROPRIATE.

During the controlled conditions, candidates should create the template or structure for the implementation of the product. The template or structure should be printed out and annotated to show the features of the software that have been used in creating it, such as text boxes, tables and drawing tools.

Candidates should then show how the product is constructed, through a series of screen shots that illustrate how and where content has been inserted and how the pages were refined, e.g. by rejecting or enhancing certain parts. How problems were solved should also be recorded by before and after annotated screen shots. These screen shots will also be useful in the evaluation of the candidate's own performance. Once the product has been constructed, the candidate should evaluate it using the criteria that were originally set. The candidate should also evaluate their own performance, using their original time plan, their amended time plan and screen shots of the newsletter construction.

Items (a) to (g/h) should be produced during the investigation time; items (h/i) to (o) during controlled conditions.

Items (a) and (n)

Most candidates gained the first mark and a significant number gained two. This was best done using a time plan, or a dated task list, that showed dates when the candidate planned to carry out a task, with another column to show actual dates. This column was to be filled in by hand when the task was carried out. The best plans then included a column for monitoring comments explaining the reasons for the revisions to the plan. The third mark was awarded to few candidates. The reasons for amendments were very often superficial and did not did not reflect realistic monitoring of the original timescale and how it would affect the remaining time allocation. Marks were not given for just giving a description of the work done nor for comments such as "done" or "no changes". The use of Gantt charts is not necessary and often leads to candidates gaining fewer marks as they rarely annotate them appropriately.

Item (b)

The marks in this section were for explaining the impact of the needs of the target audience on content and layout. In some centres candidates had done this well. However, far too many failed to state or explain who the target audience was and just included copies of poorly constructed questionnaires. Where the questionnaires themselves also did not explain who the audience should be, it was not possible to award any marks. Better candidates had used questionnaires appropriately and gained much useful information about their audience's needs and experiences. This was then summarised and the implications for their newsletter designs and content discussed. Higher scoring candidates summarised their results and explained how they would use them in their pages. Several candidates submitted unnecessary copies of completed questionnaires that are **not required**. One copy of the questionnaire with a summary of the results is sufficient.

Many candidates had also carried out extensive research via the Internet and some had looked at catalogues, TV, magazines and articles. The majority appeared to have enjoyed the research and gained much knowledge from that and the interviews they carried out with people in their target audience. A minority lost marks by talking about a "client's", often the magazine editor's, needs rather than focusing on the target audience. Teachers should remind candidates that marks are awarded for the impact of the target audience's needs on the publication.

Item (c)

The evaluation criteria should enable the candidates to assess the product's suitability for purpose and audience. Criteria should be both qualitative and quantitative. To gain full marks candidates should also explain how they derived the criteria.

This task is still being done very badly by the majority of candidates. Many examples that were not criteria but merely a "to do" list were seen and others had included criteria which did not meet the requirements because they were derived by rewording either the task, as written in the Candidate Booklet, or the items from the 'What you should hand in' section of the Candidate Booklet. Better candidates had used their research for item (b) to create criteria then enabled them to assess the suitability of the content, design and layout in terms of the newsletter's purpose and audience in their evaluations. These candidates clearly cross-referenced the criteria to their research.

Item (d)

The bibliography is used to reference all the research so that bulky extracts are NOT included. This was tackled much better than in the past with few candidates including inappropriate content.

The Candidate Booklet gave examples of how various sources should be referenced in a bibliography. Candidates that followed this gained an extra mark.

Some very good bibliographies were seen, with a wide range of sources quoted, indicating that considerable effort had gone into the research. More candidates had used printed or other types of sources as well as large numbers of Internet sources so gaining more marks. Weaker candidates used only Internet research and this was seen in the work from several centres. These candidates also appeared to have ignored the instructions in the booklet and only achieved one of the three marks available.

Item (e)

Candidates were expected to include no more than three different draft designs that could be tested for suitability with the target audience. These draft designs should be sufficiently detailed to enable the target audience to make a choice about layout and content. This may be achieved through annotation of the drawn designs. The annotations should explain why the different designs are suitable for the target audience.

 Most candidates had included at least one draft design, though generally the designs were untidy sketches with no real annotation. Many designs showed little apart from the general layout of text areas and pictures, with some indication of colour or font size. Many candidates drew designs that only showed text and images areas, getting very little marks.

It is sufficient to draw the draft designs neatly by hand, though some candidates had used drawing tools to show the layout of pages and annotated them by hand. Where software is used to draw the designs, the candidate should state what software is used. **Candidates should be discouraged from using the software that they will use for the final newsletter.**

Draft designs should be clearly labelled as such. In some cases it was not possible to tell which the draft designs were and what was the final design.

Some candidates had included no draft designs at all.

Item (f)

Candidates were expected to test their draft designs for suitability for the target audience. The better candidates showed them to a sample of their target audience, recorded the feedback and then summarised their findings. Most candidates provided strong evidence of having done this

well, with the better candidates using this information to prepare their final design and including it in their annotations.

A large number of candidates asked their target audience to choose from two or three designs and then explained the implications of their findings.

A few candidates included large numbers of questionnaires that had been used to test their designs. Again, it is not necessary to include these and candidates should be discouraged from doing so.

A few appeared to test their newsletters and not their draft designs. Centres should be aware that candidates are not allowed to take the final implementation out of the controlled conditions. Nor should they construct the newsletter outside controlled conditions. Others used the evaluation criteria for the final product to test their drafts which was clearly inappropriate as they contained references to content.

Item (g)

The final design should be sufficiently detailed that a competent third party could implement it with no additional detail. It should contain details of measurements, layout and content, cross-referenced to their text and image files, as well as colours and sizes and types of fonts. The annotations should also explain the features of the design and why they are suitable for the audience and purpose, for example using a large font size to make text clear or using a table to lay out information clearly, and reflect the input gained from the audience and its requirements in order to achieve high marks. More marks are awarded to those candidates showing a wider range of features than just basic layouts of text and images. If candidates draw designs to scale this should be clearly stated on their work or it cannot be attributed.

An annotated hand drawn design is perfectly adequate, though the design may also be produced using a software application. Where a software application is used, the application should be clearly named and should be different from that used for the implementation.

It must be stressed that the designs are created in the INVESTIGATION TIME. Some candidates had printed out pages that were very similar to their actual web pages and annotated these as their final design. Others had included draft pages in this section. The final design should not be confused with any work that the candidate creates in the controlled time.

This is still a weak part of the unit for the majority of candidates. Some had produced very detailed design work, but not enough of these had annotated the design in sufficient detail to gain the full marks. Most candidates had annotated details of fonts and font sizes, with some measurements but very few produced a design that could have been implemented by a third party. Some candidates made an attempt at justifying their choice of features but very few fully explained why they were suitable for audience and purpose in their annotations.

Item (h)

Once research has been undertaken, candidates should have a number of files containing the text and pictures that they intend to use in their product. These should be contained in one or two folders. The text files should be in plain text (ASCII text) with no formatting. Microsoft Word document files (.doc) and rich text files (.rtf) are not acceptable formats. Candidates should take a screen shot that clearly shows the folder contents with all the files that will be used during controlled conditions.

Most candidates had provided screen shots of their files as required. Some candidates made life difficult for themselves by saving files singly in different folders. The contents of each of these folders had then to be shown to gain the mark. Some candidates misunderstood the instruction and produced screen shots of the content. This is not required. Formatted text files are not acceptable.

Item (i)

From the final design, candidates should use appropriate software to produce the structure or template for their pages. This should be printed out (screen shots may be used) and annotated to show the features such as page sizes, margins and tables. Further annotation should demonstrate that features of the software have been used, for example to change fonts, create tables, produce numbered lists.

To gain the maximum marks candidates should also explain why they have used these features in the context of the target audience and purpose of the newsletter.

Most candidates who did provide evidence did not explain many of the features, though some others did this very well.

Item (j)

Candidates should produce screen shots of their work, showing how the product was composed and developed, including items that were enhanced or rejected. The screen shots should be annotated to cross-reference the content to the files of researched material. Tutorials for the use of the software are not appropriate.

Some very good work was seen with many candidates providing extensive records of development. Most candidates had produced screen shots of their pages as they were being developed. However, a few did not annotate the screen shots at all. A high number of candidates produced good evidence of the development of their pages with the better ones showing enhancements, which they justified, and gained maximum marks. They also produced detailed evidence showing how all the content was related to the files of research material. Some lost a mark through not referencing their images as well as the textual content.

Item (k)

Several candidates gained high marks on this section, for which there were twenty-four marks available. Marks are awarded for the content of the pages. This should be about the use of ICT in the context given in the scenario.

Candidates are also reminded that this unit is also concerned with suitability for the target audience and pages that have been presented in such a way that they cannot be read cannot achieve marks. Pages with colour schemes such as dark text on dark backgrounds are not suitable candidates can fail to gain marks as a result of the work being unreadable.

Seven examples were asked for, one relating to how the Data Protection Act affected the target audience and six that showed how ICT is used for different purposes that would be of interest to candidates at a university who are interested in sport. For each of the examples, one mark was given if the example was relevant and factually correct, one mark if the candidate had included a good description and a third mark for justifying its inclusion for the target audience. A major mistake was to concentrate on aspects of sport that involved technology that was not ICT or to

ignore the ICT aspects of the example. Such descriptions scored no marks. Weaker candidates also assumed the audience's knowledge and gave inadequate descriptions of uses.

Some candidates produced excellent work, well targeted to the audience, and the standard of writing seen in their pages was particularly pleasing. Better candidates had generally tried hard to appeal to university candidates and some informative and entertaining copies were seen. However rather too many examples of long and tedious texts were also submitted. All candidates' work should be original, composed and typed into an unformatted text file in investigation time, and should acknowledge the source of the information.

Most candidates had explained the Data Protection Act well and most were able to explain how this would affect data held on candidates in various databases in the context of sport. A common mistake was to assume that the reader knew the law and not describe it. Better candidates then explained how the subject rights would affect the university candidates whose details were held by a sporting organisation.

A wide range of examples of the use of ICT was seen, amongst the most popular being virtual systems such as Hawkeye, performance monitoring and assessment systems, interactive TV, the use of ICT in booking and using tickets and sporting organisations members databases. Some candidates also included practice software and the use of satellite navigation and route finder software systems for a variety of sports. These were only awarded marks if the use of ICT was clear. Many of the examples were well explained and factually correct. Most candidates were able to give good descriptions and many went on to explain the implications for the target audience. The best of these wrote their articles in appropriate language addressed to the target audience.

One common error was to describe simple monitoring equipment systems such as heart monitors or timing devices or simple scoreboards as an example of ICT, though they are in fact an example of technology. No marks could be awarded for these. However if these had been developed to show how the input was then analysed using ICT then they did get the marks.

Some candidates included many more examples than were required. In these cases, credit was given for the six examples that would gain the most marks. However these candidates normally only achieve one mark out of the three for any example and candidates are strongly advised to keep to the requirements of the task.

Item (I)

The evaluation of the pages should have been influenced by the criteria that had been set prior to controlled conditions and this was addressed well by the majority of candidates. Candidates with weak criteria generally produced weak evaluations so it is important to make the original evaluation criteria as accurate and detailed as possible.

However, several candidates did gain full marks when their evaluations were detailed and comprehensive by explaining how their pages met the original criteria and how they were suitable for purpose and the target audience. This was done by reference to their original criteria and by discussion of the content and design.

The majority of candidates gained two marks for showing why the pages were suitable for purpose and audience. Better candidates who did not refer to their evaluation criteria often missed the third mark.

Item (m)

In the evaluation of their own performance, candidates should make reference to their time plan and any significant changes that they had to make to it. They should also make reference to their own use of ICT in creating the newsletter and how they overcame any problems that occurred. This should be illustrated by screen shots, preferably those used in section (j).

The majority of candidates gave a brief description of their own performance, gaining 1 of the 3 marks available. Many candidates gained one mark for comments about spending too much time on a task, or using the Internet to find research materials. A significant number explained how they had overcome problems in sufficient detail to gain the second mark. Others used screen shots, or referred to those created for item (j) to explain how problems were overcome. Some candidates confused evaluating their newsletter and their own performance. Very few candidates provided detailed explanations, cross referenced to their time plan and the development of the pages, that would have gained the third mark.

Item (n) – see (a) and (n)

Item (o)

Candidates were expected to provide a second list of files – those actually used during controlled conditions. If this list of files was different from those in item (h), either because research material had not been used, or because research material had been added to the original list, then these changes should be annotated to show the changes and why they had been made.

Most candidates listed the files actually used and the majority of these annotated them to show the changes made. It was not clear, in a few portfolios, which was the list provided for item (h) and which was provided for item (o), particularly where the lists were identical. Both lists should be clearly labelled. If the candidate has made no changes to the list of files, then this should be stated.

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the **Results statistics** page of the AQA website.