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

2008 examination – January series

Unit 1: ICT and Society (IT01)

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

In most cases, the request to include no unnecessary additional material was heeded, but some centres need to pay attention to the requirements to number pages and to present work bound securely by treasury tags. It is not appropriate to present portfolios of work in folders and wallets as pages may become misplaced. Some candidates submitted illegible content, often through the use of inappropriate colour combinations such as small dark fonts on dark backgrounds. Centres should remind candidates of the need to print clear copies of their pages as a significant number of marks are awarded for the content within them.

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 health and medical insurance. Some candidates quoted inappropriate applications, or did not make the use of ICT in their examples apparent, leading to a number of candidates gaining no marks for those examples. However many candidates did not describe the benefits and limitations for the target audience of the examples given and were, therefore, restricted to the first marks available for those examples. Those that did include the implications of ICT examples for the target audience produced some very well written, informative pages.

Most candidates submitted their work in the order that the tasks were set out in the Candidate Booklet. This is the recommended approach. However, a significant number of candidates are still submitting work in a more or less random sequence, unnumbered, unlabelled and sometimes partially upside down, which can make it very difficult to know what parts of the task are being attempted.

Design work was often very poorly annotated and explained. Many candidates had included design work that was only labelled with basic items (image, textbox). Better candidates gave full annotation of all features including details (e.g. font style, size and colour) 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 Task

The task given for this examination series was to design and produce a set of web pages for a target audience of policyholders of a medical insurance company. The purpose was to inform them of the effects that ICT is having on society. Candidates were required to include details of how one piece of ICT related legislation would affect customers, which could affect the target audience and to give examples of the use of ICT in six different areas. It should be noted that the task only asks for web pages, not a complete website.

Candidates should be encouraged to study the booklet in detail before starting the task in order to ensure that they follow the guidelines set out. Candidates should also be encouraged to explain what they are doing and relate this to the purpose and audience detailed in the task. Although many candidates had carried out surveys through detailed questionnaires, there were several examples where candidates failed to state who the target audience was, or stated the wrong target audience, so gaining no marks for this work.

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. The actual date column was filled in by hand when the task was carried out. The best plans then included a column for monitoring comments, explaining the reasons for any revisions to the plan. The third mark was awarded to few candidates. The reasons for amendments were very often superficial and 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 on their own to show time management often leads to candidates gaining fewer marks, as they can be difficult to annotate appropriately, or in sufficient detail.

Item (b)

Many candidates had done this well and carried out a good amount of research that they were able to refer to throughout the development of their pages. 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 had no purpose stated 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 page designs and content discussed. Higher scoring candidates summarised their results and explained how they would use the knowledge gained in their web pages. Some candidates submitted unnecessary multiple 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 articles and DVD's. 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", usually the insurance company, needs rather than focusing on the needs of the target audience. It is important to emphasise that marks are awarded for an understanding of the impact of the target audience's needs on the design and content of the pages.

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 an area that could be improved on by the majority of candidates. Many examples of "to do" lists were presented and other candidates had included generic criteria which did not relate to the specific task, thus limiting the marks available to the first mark.

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 web pages' 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 sources so that bulky extracts are **not** included. A relatively small number of candidates included inappropriate content such as extracts from web sites and leaflets. It is only necessary to reference sources and research material should not be included here.

It is important to emphasise that Internet search engines are not sources of information and it is not appropriate to include these in the bibliography.

The Candidate Booklet gives examples of how various sources should be referenced in a bibliography. Candidates that formatted their bibliography entries in this way, or similar, gained the second mark available.

Some very good bibliographies were seen, with a wide range of sources quoted, indicating that considerable effort had gone into the research. Many candidates had used printed or other types of sources as well as large numbers of Internet sources, so gaining higher marks. Weaker candidates used only Internet research. These candidates also tended to ignore the instructions in the Candidate 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 hand-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 that was fairly neatly presented with some annotation. However, many designs showed little apart from the general layout of text areas and pictures, with some indication of colour or font size – these designs gained few 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 produce the designs, the

candidate should state what software is used. **Candidates should not produce designs in the software that they will use for the final web pages.**

Draft designs should be clearly labelled as such. In some cases it was not possible to distinguish between the draft designs and 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. Many candidates provided strong evidence of having done this, 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. It is not necessary to include these and candidates should be discouraged from doing so.

Some candidates used the final evaluation criteria from item (c) to test their drafts, though these are intended to be used to assess the final web pages.

A few appeared to test their web pages 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 pages outside controlled conditions.

Item (g)

This is an area of the task where the majority of candidates could achieve a substantial improvement.

Most designs lacked measurements and other specific information; nor did many contain enough detail of how features were appropriate for the audience and purpose. The final design should be sufficiently detailed that a competent third party could implement it with no additional information. It should contain details of measurements, layout and content as well as colours, 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. The designs should reflect the information gained from the audience and their requirements in order to achieve high marks. More marks are available to those candidates showing the use of a wider range of features than to those who use just basic layouts of text and images. If candidates draw designs to scale this should be clearly stated on their work, as the examiner can not assume that this is the case.

An annotated hand-drawn design, using a ruler, 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. **As with the draft designs, the candidate should not use the same application that they will be using to implement the web pages.**

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.

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 are best contained in a single folder. 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. It is important that all files are shown, rather than just folders, which is what some candidates mistakenly, provided screenshots of. Some candidates made life difficult for themselves by saving single files in individual 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.

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, tables and so on. Further annotation should demonstrate that facilities of the software have been used, for example to change fonts, create tables, produce numbered lists, set backgounds, and provide hyperlinks.

Some candidates produced screen shots of the software facilities used without showing any part of the web pages and did not meet the requirement to show "screen shots of your set of web pages". To gain the maximum marks candidates should not only show the facilities but also explain why they have used these, in the context of the target audience and purpose of the web pages.

Item (j)

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

In this series many candidates provided extensive records of the development of their web pages. Most candidates had produced screen shots of their web 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 web pages with the better ones showing enhancements that had been made as a result of reviewing their work and deciding that improvements were needed in order to meet the audience needs, 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. In order to achieve the full marks on this section images as well as the textual content need to be referenced.

Item (k)

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

Some candidates presented work that was not legible, which meant that examiners could not determine the content of the web pages. As the marks for this item are awarded for the content of the web pages, the marks that can be awarded are clearly affected. Candidates should be advised, in particular, that some colour combinations which appear to be clear on screen can be difficult to read when printed.

Seven examples were asked for, one relating to how a piece of ICT related legislation affected the target audience and six that showed how ICT is used for different purposes which would affect policyholders of a company offering medical insurance.

Better candidates had generally tried hard to appeal to a more adult audience and some informative copies were seen. However rather too many examples were included that contained long tracts of technical detail which render the information unsuitable for the target audience.

Most candidates had identified the Data Protection Act, or another appropriate example of relevant legislation, and explained it well. A high percentage of these placed their example in context and were able to explain how this would affect data held on policyholders in various medical or insurance databases.

A wide range of examples of the use of ICT was seen, amongst the most popular being patient record databases, GPS systems for ambulances, various on-line facilities such as NHS Direct, other diagnostic programs, scanning techniques involving computer analysis and various computer modelling systems. These were 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 better candidates wrote their articles in appropriate language and addressed the content to the target audience.

It was pleasing to see that centres had noted the need for ICT examples though some candidates described simple monitoring equipment systems, such as heart monitors which gained them no marks. Where candidates had expanded on these examples to show, for example, input from the monitoring system to a computer for analysis then marks were awarded.

Item (l)

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 many 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. In a few cases candidates with weak criteria had gone on to produce far more detailed comprehensive evaluations and these were given appropriate credit.

The candidates that did gain full marks gave in depth evaluations by making 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.

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 pages and how they overcame any problems that occurred. This should be illustrated by screen shots, preferably referencing those used in item (j).

The majority of candidates gave a brief description of their own performance or described how they had overcome a problem; other candidates made comments about spending too much time on a task, or using the Internet to find research materials. A significant number of better candidates also explained how they had overcome problems in some detail. Others used screen shots, or referred to those created for item (j) to explain how problems were overcome. Very few candidates provided detailed explanations, cross referenced to their time plan and the development of the pages.

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.

However many candidates seemed to think they had to show additions to their folders (including work completed for (i) to (m)) rather than additions to their researched material. 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 Range and Award of Grades

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