

General Certificate of Education

Applied Information and Communication Technology 8751/8753/8756/8759

IT01 ICT and Society

Report on the Examination

2007 examination - January series

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General Comments

Controlled conditions

Some Centres appeared to have misinterpreted the requirements of the Controlled Conditions sessions for the externally assessed units. Centres should refer to the guidance provided in the Teachers Notes for each examination series on the organisation of Controlled Conditions sessions. Where Centres are in any doubt regarding the provision of computer facilities for the Controlled Conditions sessions, they should contact ICT Subject Support at AQA (ict-subjects@aqa.org.uk).

Unit 1: ICT and Society (IT01)

This was the third 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 their evaluation.

General comments

Although the standard appeared to have improved since last January, examiners noted that the ICT content included in the web pages was not as good as the equivalent work seen last June. However, many centres had followed advice given in the previous reports, leading to an improvement in other sections of the work submitted. Also, in most cases the request for candidates to include no unnecessary additional material was heeded. 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 motoring and motoring organisations and other topics directly related to the set task. Unfortunately, far too many candidates did not give regard to the fact that this unit is about ICT, as well as Society, and created web pages with a substantial amount of irrelevant content. Candidates should be reminded to concentrate on the ICT aspects of their examples. Those that did produced some very informative pages.

Centres should also remind their candidates that a key element of this unit is to do with presenting information in a way that is suitable for their target audience. Many candidates had produced pages that would have been difficult to read because of the amount of content included, or because of the choice of background and text colours.

Centres are asked to ensure that candidates number all pages before the work is submitted for assessment. Most students submitted their work in the order that the tasks were set out in the Candidate Booklet. This was helpful. Candidates should also indicate the task letter, as specified in the Candidate Booklet, at the beginning of each piece of work in order to distinguish each part clearly. A lack of labelling, as suggested above, made it very difficult, in some cases, to know which were drafts and which were final designs.

It is important to emphasise the difference between designs for the pages to be produced, and prototypes or draft copies of the pages. For this unit neither prototypes nor draft copies of the implemented pages is required. Marks are only awarded for designs of the pages to be produced.

Once again, 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

provided full annotation of all features in the design, including details (e.g. font style, size and colour) and all necessary measurements that would enable a third party to implement them, as well as explaining how their designs were appropriate for the purpose and target audience. These candidates also used a wide range of features in their pages. Centres are again reminded that these designs should be hand drawn or created in a word-processing package and should not be created in the software to be used for the implementation.

In this unit the web pages are the vehicle for presenting the content to the target audience. Many candidates had clearly spent a lot of time developing **websites** rather than a set of web pages. Many of the techniques used can not be credited in this unit, though marks can be gained for designing good layouts with the use of tables, bullets 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 task

The task given for this examination series was to design and produce a set of web pages, for a target audience of members of a motoring organisation. The purpose was to inform them of the effects that ICT is having on society. Candidates were required to include details of one piece of ICT-related legislation, which could affect the target audience and to give seven examples of the use of ICT for different purposes.

Candidates should be encouraged to study the booklet in detail before starting the task, in order that they follow the guidance given. Some candidates appeared to have missed the point of the task completely, resulting in a significant number of candidates producing very colourful and interesting pages that gained very few marks, as what was produced did not address the requirements of the task.

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 as follows:

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 web pages, 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 web pages. 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 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 web pages. The criteria should be informed by their research into the target audience and by the requirements of the task.

Alternative designs should then be produced by hand or by using a software package. If a software package is used it should be a different one from that used for the final implementation

and what software has been used should be stated. Candidates can misuse their time if the rough drafts are not created by hand, but they must be legible to be given to the target audience for testing. 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 for items a) to h) as hard copies, plus files of the research text and images in electronic format, to their teacher. Text may only be submitted as **plain text files**. Rich text or similar files are not permitted.

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, drawing tools and so on.

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 web pages construction.

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

Items (a) and (n)

A small number of candidates who had attempted this section scored no marks as they had failed to put any dates or times on their list of tasks. Most candidates gained the first mark and a significant number gained a second. 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 the actual dates, filled in when the task was carried out. The best plans included a column for monitoring comments explaining the reasons for the revisions to the plan. The third mark was awarded to few candidates and was not awarded for comments such as "done" or "no changes". A few candidates submitted a time plan from one part of the exam and a work record for another. This could only gain 1 mark in total.

Item (b)

Some candidates had done this well. However, far too many failed to state or explain who the target audience was and just included copies of questionnaires. Where the questionnaires

themselves 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 web page designs and content discussed. Higher scoring candidates summarised their results and explained how they would use them in their pages. A few candidates submitted multiple copies of completed questionnaires that are not required and gain no additional marks. Most candidates did provide the necessary evidence of their research using a single example of their questionnaire and the summary of results.

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 it and the interviews they carried out with people in their target audience.

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 part of the task is still being done very badly by the majority of candidates. Many generic criteria were seen that gained just one mark. As in previous series, many candidates 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 by rewording the items from the 'What you should hand in' section of the Candidate Booklet. Few understood what was required. Many just submitted a list of tasks to be done.

Better candidates had used their research for item (b) to create criteria that 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 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 who followed this guidance gained an additional 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. These candidates often also ignored the guidance in the Candidate Booklet and only achieved one of the three marks available.

ltem (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, although 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 image 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 not be using 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 tell which the draft designs were and what the final design was.

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 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.

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 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. 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 (and ruler!)-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. The candidate should not use the same application that they will be using to carry out 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 part of the task was better executed than in January 2006 with a very few excellent examples. Some candidates 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 dimensions of various elements, 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 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. 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. A significant number had included formatted text files, which are not acceptable and **contravene the examination requirements**.

ltem (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 features of the software have been used, for example to change fonts, create tables, produce numbered lists etc.

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 web pages.

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

ltem (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.

This was done far better than in previous series, with many candidates providing extensive records of development. 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 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)

Few 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.

Candidates are also reminded that the assessment of 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 can not be awarded marks in this section.

Eight examples were asked for, one relating to legislation that affected the target audience and seven that showed how ICT is used for different purposes that would affect members of a motoring organisation.

For each of the examples, one mark was given if the example was relevant, one mark if the candidate had shown the advantages and disadvantages of the example to the target audience, if the example was factually correct, and a third mark if the advantages and disadvantages were well explained.

A large number of candidates concentrated on aspects of motoring that did not involve ICT, or ignored 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.

As before some candidates produced excellent work and the standard of writing and creativity seen in their web pages was particularly pleasing. Better candidates had generally tried hard to appeal to their target audience and some informative and entertaining copies were seen. However rather too many examples of over long texts were also submitted. Candidates should be encouraged to produce original work and should be discouraged from adapting the work of others.

Most candidates had explained the Data Protection Act for their example of legislation and most were able to explain how this would affect data held on motorists in various databases. A common mistake was to state that the law prevents illegal access to data rather than the requirement to protect data.

A wide range of examples of the use of ICT was seen, amongst the most popular being speed camera, traffic light and congestion systems, the DVLA and insurance company databases, driving theory and hazard perception tests and practice software, and the use of satellite navigation and route finder software systems. 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 some benefits or drawbacks to the target audience but few explained them well. Examples such as teleworking reflected a good knowledge of the effects of ICT on society and were well discussed.

One common error was to describe control systems such as ABS and cruise control or 35mm cameras as an example of ICT, though they are in fact examples of technology. No marks could be awarded for these.

Some candidates included many more examples than were required. In these cases, credit was given for the examples that would gain the most marks.

Item (I)

The evaluation of the web pages should have been influenced by the criteria that had been set prior to controlled conditions and this was addressed much better than in the previous series. 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 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, testing 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 web pages 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 one of the three 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 used screen shots, or referred to those created for item (j) to explain how problems were overcome. However some candidates just included screen shots or reference to j without explaining how these illustrated how they had overcome problems.

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 <u>Results statistics</u> page of the AQA website.