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 – June series

Unit 1: ICT and Society (IT01)

This was the sixth series for the examination of this unit. Centres new to the unit should also refer to Examiner's Reports for previous series.

General comments

A high proportion of candidates presented their work extremely well and scored high marks, although the standard of responses to the task set varied enormously. There also appeared to be a significant number of candidates who struggled with the tasks. It is expected that candidates will have sufficient experience of the research, practical and evaluative skills necessary to succeed in this examination before receiving the Candidate Booklet. Centres should remind their candidates of the requirement for the examples given to be about ICT systems.

Candidates should be encouraged to submit work in the order of the tasks in the Candidate Booklet and to number the pages consecutively. Some candidates submitted unnecessary material, such as multiple copies of questionnaires, for which a summary would have been sufficient.

It should also be stressed that screenshots or pages that cannot be seen or read by the examiner, as a result of screenshots being too small, or through the use of inappropriate colour combinations, will not gain marks. This is particularly important in item (k) where 24 of the 70 marks available are awarded.

Centres are also reminded that candidates should submit work securely bound using treasury tags. Loose pages, even when submitted in a folder can become detached from the rest of the work.

There were a number of administrative lapses where the required documentation was not submitted with the candidate's work. All portfolios should have a Candidate Record Form, correctly signed by both candidate and supervisor, securely attached and the work from the centre should be accompanied by the attendance list, Centre Declaration Sheets and Record of Controlled Conditions, thus avoiding unnecessary delays.

The task
The task given for this examination series was to design and produce a set of web pages for a local authority, to promote environmental awareness to its residents showing how ICT systems are or could be used in given areas. The purpose was to inform them of the effects that ICT is having on environmental issues affecting society. Candidates were required to include details of how one piece of ICT related legislation could affect residents and to give examples of the use of ICT in six different given areas. It should be noted that this and similar tasks only ask for web pages, rather than a complete website. Some candidates appeared to spend a disproportionate amount of time on advanced website design features that did not gain additional marks, at the expense of tasks that would have gained them higher marks.

Tasks carried out during Investigation Time

Items (a) and (n)
Many candidates scored full marks on these tasks.

Item (b)

The majority of candidates stated clearly who their audience was and summarised the impact of their needs on the web page requirements. However, few students obtained the 3rd mark, with most only showing a full understanding of the needs of the audience on layout but not on their content.

Many candidates had carried out good research that they were able to refer to throughout their assignment. Candidates are reminded that they only need to submit one copy of any questionnaire used, along with a summary of the results. Many candidates had also analysed several local authority websites and this had helped them in deciding on layout features. A minority of candidates talked about the needs of a user, rather than focusing on the target audience, and therefore did not gain the marks available.

Item (c)

A significant number of candidates did not relate the evaluation criteria to the purpose of the web pages and the needs of the audience. Many candidates included generic criteria which did not relate to the specific task, thus gaining only the first mark. Better candidates, who formed the majority, had used their research for item (b) to create appropriate criteria and described how the evaluation criteria were arrived at. These were designed to assess the suitability of the content, design and layout of the web pages in terms of their purpose and audience needs.

Item (d)

The majority of candidates quoted more than one range of sources and followed the instructions in the candidates' booklet thus achieving the maximum three marks. A minority only quoted search engines which are not appropriate and gained no marks.

Item (e)

Many candidates carried out this task well and provided three, well annotated, sketches including notes about suitability for the audience and so gained three marks.

Those designs that showed little apart from the general layout of text areas, links and pictures only gained one mark.

Item (f)

Candidates were expected to test their draft designs by showing them to a sample of their target audience, recording the feedback and then summarising their findings and the implications for the final design. Most candidates provided strong evidence of having done this well, with the better candidates using this information in the annotations of their final design.

Candidates should be discouraged from including large numbers of questionnaires used to test their designs. One completed copy and a summary of results is sufficient.

Item (g)

Some designs submitted were clear, hand drawn and well annotated. However, too few candidates included enough detail to gain good marks. While most candidates showed font properties to be used, few gave measurements or showed design features beyond the basic fonts, image positions and hyperlinks. Annotations were usually weak, with few students explaining all the features in their design. To gain maximum marks candidates needed to explain a range of facilities and layouts to be used, include all measurements, justify them in relation to the audience and purpose and indicate how the set of pages would be implemented.

Where candidates draw designs to scale this should be clearly stated.

Candidates should be discouraged from creating designs with the software that they will use for the final web pages.

Item (h)

Most candidates provided clear screen shots of their files as required.

Tasks carried out under controlled conditions

During the Controlled Conditions sessions candidates should be provided with all their preparation work carried out for items (a) to (g) and (n) as **hard copies,** plu**s** their research text and images in electronic format. Text must only be stored as **basic text files**. Images must be stored as **individual graphics files**. Microsoft Word® and similar formatted files are not allowed. Items (a) to (g) must not be made available in electronic format. Candidates are permitted to add to their research material within the Controlled Conditions period by following the procedures in the Teachers' Notes.

Item (i)

It was pleasing to see many, well explained, screen shots showing a range of facilities used and the reasons for including them in the candidates' pages. A smaller number of candidates were also able to justify their use of software facilities in terms of the target audience and purpose, but this was less well done. A significant minority of candidates did not explain many of the features used and gained few marks.

Item (j)

Many candidates provided extensive records of development and the better candidates clearly showed how they had enhanced the pages. Many also produced detailed evidence showing how all the content of the pages was related to the files of researched material. The best candidates provided this explanation as a separate annotated set of screen shots. Those who did not reference their images, as well as the textual content, did not gain the final available mark.

Item (k)

Much interesting work was seen and most candidates presented clearly readable pages. However it was of concern that a significant number of candidates made no reference to ICT, in spite of this being the main focus of the requirements. Others mistakenly described control systems such as central heating systems, rather than information systems, these did not gain marks.

All candidates must write their descriptions in their own words in investigation time, saving them in their research files. Those who were able to explain the chosen legislation and systems clearly, in a manner fitting the scenario, scored the highest marks. Weaker candidates found it hard to explain the implications of the chosen legislation and systems for the target audience, while others used very poor language or gave over-technical descriptions inappropriate for the target audience.

Candidates who concentrated on one system for each area listed generally scored better marks.

Better candidates gained the marks available for reference to the source of their research by including reference to the source of their images as well as the textual information used. Centres are advised to stress the need for this to be done.

Legislation Most candidates identified the Data Protection Act or another appropriate example and explained it well. However, few placed their example in context and even fewer were able to explain how the subject rights would affect residents whose details were being held. The majority of better descriptions included the potential effects of data held for a 'chip and bin' system although other sensible and relevant examples were seen.

Waste Reduction Candidates provided many examples of how ICT helps to reduce waste. These included the paperless office, use of email, digital photography, computer modelling and simulations. These were generally well described and understood. Other candidates described websites for recycling exchanges and some also included the 'chip and bin' system here.

Refuse Collection Most candidates described the chip and bin system, while others described the use of GPS or rota systems.

Energy Usage Answers that described websites with energy or CO_2 calculators were popular, while surprisingly few suggested the use of spreadsheets to keep track of usage.

Pollution Candidates provided many interesting examples including teleworking, car-sharing websites, video conferencing and projects such as HEAVEN – an Internet based, vehicle pollution monitoring system that produces maps showing levels of polluting gases in certain cities in Europe, in real time.

Conservation Again a wide range of responses was seen, including: GIS for identifying habitats and vegetation; RFID tagging; the Big Garden Birdwatch; electronic media to save paper for conservation of trees; a variety of databases holding data about tree or building preservation, or volunteering records.

Public Transport The use of smart cards such as the Oyster card and GPS with text, email or electronic message boards systems were popular answers and well understood.

Item (l)

The majority of candidates explained how they had met their evaluation criteria (or how they had deviated from them) and easily gained two marks. Those who were able to do this in depth and produce a comprehensive evaluation, clearly demonstrating the suitability of their web pages for both audience and purpose, gained the third mark.

Item (m)

It was pleasing to see how many candidates who used good examples commented on how much they had learned and found interesting. Even those who had described non-ICT systems appeared to have gained a lot of knowledge and enjoyed the assignment.

Many candidates gave a reasonable description of their own performance or described how they had overcome a problem, gaining 1 of the 3 marks available. A significant number also explained how they had overcome problems in sufficient detail to gain the second mark. They did this using screen shots, or referring 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, this would have gained the third mark.

Item (n) – see (a) and (n) above

Item (o)
This task was carried out well by most candidates, who clearly showed which research files they had added or amended. Where the candidate had made no changes to the list of files, this was stated by the majority of those students.

Mark Ranges and Award of Grades

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