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ASSESSMENT and
QUALIFICATIONS
ALLIANCE

General Certificate of Secondary Education

Applied Information and Communication Technology (Double Award) 3851
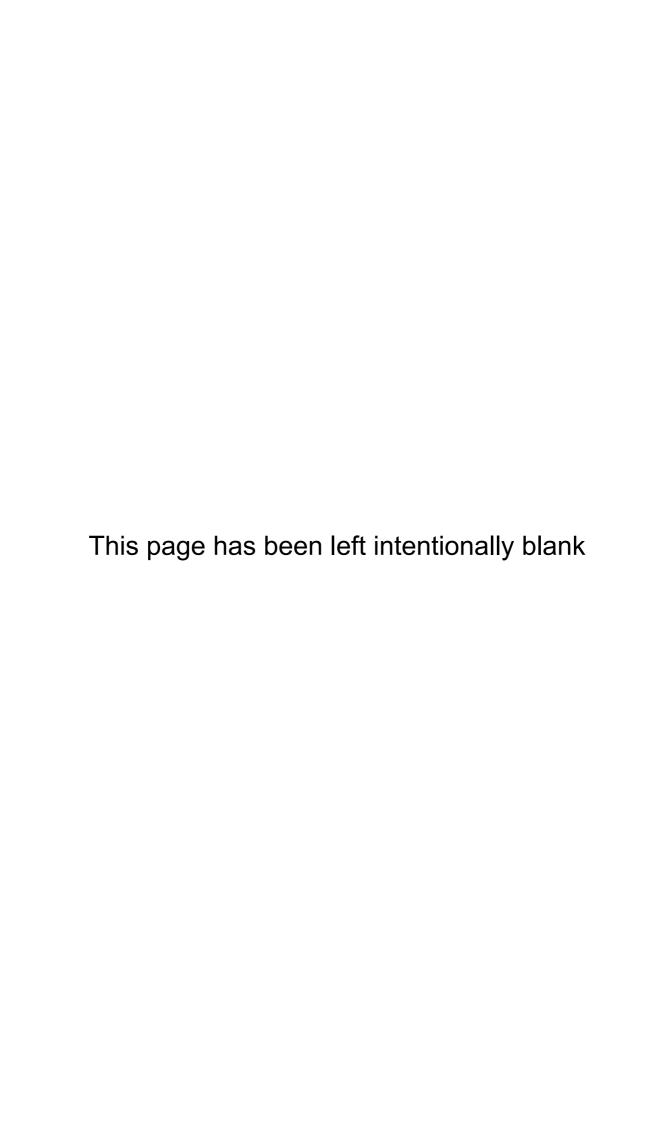
Report on the Examination

2006 examination – January series

- Unit 3   ICT in Society

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Unit 3: ICT in Society

Introduction

Over the past year, AQA has provided a large amount of support to centres following disappointing candidate performance in previous examination series. In the summer term of 2005, a series of meetings was held around the country specifically aimed at centres about to commence delivery of the specification. These meetings gave detailed information on the content of the specification, and advice on its delivery and assessment. The meetings were well received by the centres that attended, with positive feedback on their usefulness. In the autumn term meetings were held which focused exclusively on Unit 3. These meetings ran in parallel with the standardisation meetings for Units 1 and 2. Attendance at the meetings was disappointing, despite all centres being invited. The meetings provided delegates with an insight into candidates' performances in previous examination series. Previous candidates' strengths and weaknesses were identified, and strategies for improving candidates' performances were suggested. A range of exemplar material was issued, with commentaries explaining where marks had been achieved by candidates. Those centres that chose not to attend were again sent materials by post so that their candidates were not disadvantaged. The *Candidate's Booklet* and *Instructions and Guidance for Teachers* clearly described stages which combine together to form each task. Working through these stages allowed candidates to produce tasks which demonstrated the depth and range of knowledge and understanding required by this Double Award specification. Centres are reminded of AQA's expectation that candidates are taught the ICT content for all five focus areas identified in Unit 3 prior to their starting the assessed tasks. Evidence from Teacher Support meetings and questions raised by centres with Portfolio Advisers suggest that a number of centres did not teach the content in sufficient depth or detail to provide their candidates with opportunities to achieve success. This assessed unit represents one-third of a double award GCSE qualification, and the teaching and study allowed should reflect this, both in the amount of time and depth of preparation. It is clearly unreasonable to expect candidates who have been given reduced teaching and study time to achieve similar marks to those who have received the 5-6 hours per week that would normally be allocated to two GCSEs.

Task One: Presentation on Entertainment and Leisure

The requirement was for candidates to focus the content of their presentation exclusively on the effects of ICT relating to Entertainment and Leisure on three identified groups. Examiners were again disappointed to note that a number of candidates had produced generic presentations which did not relate to any particular focus area. Presentations of this type were unable to achieve more than a minimal number of marks, as responses were not sufficiently detailed. A number of candidates mentioned and described groups, but then proceeded to list many different technologies, sometimes including technical detail, but not relating these technologies to the individual groups. This again resulted in only minimal marks.

For a number of centres it was clear that a significant number of presentations were quite similar, for example they related to the same groups or areas of content. Centres are reminded that candidates must produce individual presentations and should be working unaided whilst in the controlled sessions. It is totally inappropriate for the teacher to influence the content of candidates' work in any way.

It is important for candidates to realise that the presentation must be produced for a specified audience, and must focus on the effects of ICT on the three identified groups or individuals. It is not sufficient for candidates to offer generic responses that do not relate to the identified groups. The presentation is essentially an opportunity for candidates to demonstrate that they are able to use ICT knowledge and understanding that they have developed through the teacher's delivery of the content, and apply that knowledge and understanding to a new context.

Candidate describes groups and/or individuals affected by ICT systems (9 marks)

A1   Identify three groups
Most candidates attempted to identify a group or individual. The responses however were varied. The majority of candidates identified groups or individuals that used entertainment and leisure in some way. Teenagers, gamers, gym users and musicians were common. The close relation of groups evident in the 2005 examination series, which inhibited the candidate's ability for development with the advantages and disadvantages section, did not appear to be an issue this year. Some candidates failed to achieve full marks in this section through their identification of inappropriate groups. Examples such as the music industry, the community, and adults are not sufficiently specific to provide meaningful structures.

A2   Description of three groups
Examiners were please to note that many centres had taken on board the advice from previous years and many candidates had attempted to describe the groups mentioned in the above section.

A3   Relate groups to ICT use
This section was often attempted as a list of technologies and therefore did not achieve the marks. Most candidates were able to relate two of their groups to ICT use, but not all three. Some candidates failed to relate the groups to ICT at all by using generalized statements, for example "….the film makers edit film…." with no supporting statements as to the use of ICT.

Candidate considers consequences of lack of access to ICT and benefits available through use of ICT (10 marks)

B1   Consequences of lack of access to ICT
This section continues to be misunderstood by candidates. Candidates generally interpret this as an opposite of a benefit, or make statements that the groups are unable to do certain things, for example 'a gym user would not be able to exercise.' This is clearly inaccurate. This section is intended for the candidates to identify how the groups would be able to continue with their entertainment and leisure activities without the use of ICT. So, a gym user would have to take their own pulse to measure heart rate rather than relying on the machine, for example.

B2   Benefits of use of ICT
Most candidates did not succeed within this section as they talked in great depth about the technical make up of the ICT uses, but did not relate this back to the group and why this was a benefit to them for their entertainment and leisure.

Candidate's work is effective and appropriate to needs of audience, and is produced using fully the software features available (6 marks)

C1   Identify audience
Examiners were disappointed to note that the large majority of candidates did not identify an appropriate audience. Those that did not achieve this mark either did not identify the audience at all, or highlighted unacceptably vague audiences, such as, 'investors', 'adults', 'the general public' and 'everyone'. Audiences such as 'my ICT group', or 'Film makers', or 'teenagers that download music' were quite acceptable.

C2   Format appropriate for audience
Most candidates who identified an audience could also be awarded the mark for appropriateness for audience, which was judged in terms of content, language, appearance, format, etc.

C3   Use of software features

Virtually all candidates achieved at least half of the marks available for use of software features, with the majority earning full marks. Some candidates may have included a background, which could have been awarded a mark, but did not achieve that mark as their printouts were produced in black and white. There is no requirement for colour printing in this section, but backgrounds often 'disappear' when printed in monochrome due to the design of the software. A simple annotation by the candidate indicating that a background has been used is sufficient for the background mark to be awarded.

Very few candidates provided evidence of slide transitions or build effects, both of which would have earned marks. Again, a simple annotation or screen print of the transition setup window is sufficient for the mark to be awarded.

Candidate work includes evidence of use of ICT to search for and organise information (6 marks)

D1   Use of ICT to search for information

Most candidates achieved at least 1 mark for providing evidence that they had used ICT to search for information. The most common approach to this criterion was the use of an Internet search engine, with appropriate search criteria included, which is quite acceptable. Examiners were pleased to note that the majority of candidates who provided evidence for this section had used appropriate search criteria.

Higher-level candidates achieved more marks through appropriate selection of some of the hyperlinks generated by the search and relating that to the content of the presentation. Weaker candidates who included a screen shot of a search engine without any search criteria did not achieve marks.

It was disappointing to note that many candidates did not attempt this section.

D2   Use of ICT to organise information

Most candidates achieved at least two marks for use of ICT to organise information through their use of bulleted items and a flow/spider diagram within the presentation. Examiners are pleased to note that this has improved from previous sessions. Candidates who had pasted graphs from other sources into their presentation could not be awarded D2 organisation marks, but were often rewarded with C3 use of software marks, for demonstrating the skill of insertion of an object. Some candidates used organisation methods on the speaker's note, which did not achieve marks.

Candidate demonstrates depth of knowledge of effects of ICT developments on the chosen groups and/or individuals (5 marks)

E1   Depth of knowledge

This criterion is intended primarily to identify higher-level candidates and to provide them with an opportunity to demonstrate their extensive knowledge of the subject. Examiners were disappointed to note that marks were awarded to very few candidates for this criterion. A number of candidates simply inserted large sections copied verbatim from websites or other published sources, which could not be awarded marks as it was not the candidate's own work. Many candidates provided depth of knowledge of the technical aspects of some ICT developments, for example extensive technical descriptions of on-line gaming was common. The language used often suggested that these were copied verbatim from published sources and that the candidate did not understand what had been written. Usually technical details such as this did not relate to the effects of the developments on the identified groups, and so could not be awarded marks.

Candidate makes informed suggestions how ICT developments will affect chosen groups and/or individuals, based on knowledge of effects of ICT developments (7 marks)

F1   Basic details of future effects on each of the three groups
This criterion is aimed primarily at more able candidates as it requires them to interpret the information they have already researched and project that into the future to make realistic predictions. This is a high-level skill and weaker candidates will find it extremely challenging. Candidates who do not have sufficient knowledge of the effects of ICT developments on their groups will have great difficulty in meeting this criterion. A large number of candidates were unable to achieve marks within this section as they did not relate the future effect to the group. Most candidates made superficial statements regarding technologies being 'better' and 'faster', which is not sufficient for this section.

F2   Detailed/contextualised/justified details of future effects
This section requires candidates to develop the discussion started in F1. Few candidates succeeded in demonstrating an understanding of the future effects on the groups they were reviewing.

Candidate evaluates own work and details validated sources of information. Candidate recognises and explores ethical and moral implications of access, or lack of access, to ICT (9 marks)

G1   Evaluation of work
Examiners were pleased to note that the majority of candidates attempted to evaluate their work. Evaluation of one's own work is a skill which most candidates, even those working at a higher level, find particularly challenging. This was evident here. Most candidates described what they did to create their presentation rather than outline and explain a strength, a weakness and an improvement.

G2   Sources of information
Most candidates identified some sources of information which could be awarded marks. A few candidates still included sources such as 'the Internet' or 'the ICT text book', which could not be credited as full names and details of books, and addresses of specific websites are required. Some candidates simply listed a vast number of websites that appeared to be the output from a search engine, and in many cases it was clear that these sources had not been used, or even considered. Candidates commonly named Internet search engines as sources. Centres are reminded that such websites are content free, and are merely tools to identify other sites, and so cannot be considered as sources.

G3   One source validated
The majority of candidates did not attempt to check whether a source of information they had used was accurate. Those who did attempt this section often did not provide sufficient detail. Many candidates made claims such as 'I checked the information with other websites and it was the same', without identifying the information or the other sites, and so could not be awarded marks. Similarly, candidates who claimed 'I checked everything with my teacher and he said it was OK' could not be awarded marks. It was clear in the vast majority of scripts, however, that candidates had little idea of what was required to validate sources, and centres are encouraged to develop this area, which is also a feature of Task Two and Task Three, as part of their delivery of the specification.

G4   Ethical and moral implications
The candidates that were successful within this area were able to demonstrate an understanding of how ICT has provided some moral dilemmas within entertainment and leisure. Violence being linked to more 'realistic' computer game play was a popular area for discussion. Examiners were disappointed to see that many candidates' responses were of the 'it is wrong that people in Africa are poor….' type.   This discussion was not linked to ICT and entertainment and leisure and therefore not awarded any marks.

Task Two: Report on Personal Communications

Whereas the presentation focuses on the effects of ICT on identified types of groups or individuals, the report is concerned primarily with the available technology. The requirement is for candidates to focus exclusively on Personal Communications, and to relate the content of their report to that area. Many candidates produced generic reports that were not sufficiently focused on the prescribed area, and so they were unable to achieve the full range of marks. Higher-level marks for development and predictions were still only achieved by a minority of the more able candidates. Some candidates appeared to be adopting a 'minimalist' approach, sticking rigidly to the mark scheme wording, often trying to respond in a single sentence. Candidates who simply wrote unrelated sentences in response to each mark criterion, rather than expanding on the task list of requirements, missed out on achieving many of the marks for detail. Candidates who used the marking criteria as side headings in their report often produced more structured evidence that included much more detail.

Candidate produces a basic description of three technologies available to access and exchange information and carry out transactions (8 marks)

H1   Identify three technologies
The vast majority of candidates identified three technologies, with mobile phones, e-mail and instant messaging being amongst the most popular technologies listed. Some candidates lost marks by including technologies that were not relevant to Personal Communications, often using those technologies that had been identified for Task One or those relating to the focus area from the previous year's examination.

H2   Basic description of three technologies
The majority of candidates were able to describe at least one of their technologies. When candidates were not awarded marks for their descriptions this was mainly due to their responses not demonstrating any significant degree of technical knowledge or understanding. Examples of this were a candidate who discussed instant messaging, but did not mention the requirement for computers, or a candidate who discussed e-mail, but did not include reference to a correspondence between two computers by way of the Internet. Again, as in the descriptions of the groups or individuals for the presentation, it appears that candidates assumed that such items were commonplace and did not require a description.

H3   More details on one or more of the technologies
Unlike last year, this section was poorly answered. Candidates tended to discuss technology uses rather than providing any technical details.

More detailed description, including main purposes of technologies available, giving advantages and disadvantages, using ICT to search, select and organise information (8 marks)

I1   Purposes of two technologies
The majority of candidates were unable to identify the purpose of the technology being discussed, rather a list of its uses were outlined. Many candidates referred to 'the main purpose is to communicate…'. As the focus area was related to personal communications this terminology was not accepted. Candidates who were successful within this section identified the type of communication, for example 'the main purpose of a mobile phone is so you can talk to other people while you are out and about…'.

I2   Advantages of two technologies
These responses were often generic and were often bulleted lists. The main criterion asks for a detailed description, which appeared to have been over-looked by many candidates. The advantages and the disadvantages section produced minimalist responses from many candidates.

I3   Disadvantages of two technologies
The disadvantages highlighted by candidates were often related to business and organisations (the focus area in 2005), rather than personal communications. Again, many candidates produced a simplistic list with no explanation or reasoning.

I4   Use of ICT to search or select information
Candidates were again required to search for, select and organise information, as in the presentation. The single mark available for searching for or selecting information was achieved by most candidates mainly through evidence of searching rather than selecting. The comments made in this section in Task One (the presentation) are also relevant here.

I5   Use of ICT to organise information
The examiners were pleased to note that the majority of candidates could be credited with the organisation mark this year. The main organisational feature used was a table, often as part of the advantages and disadvantages section. Candidates who included a table as part of the sources were not awarded marks here, nor were marks awarded for graphs or charts that had been pasted in from a published source.

Candidate identifies trends over time based on detailed descriptions of purposes, advantages and disadvantages (6 marks)

J1   Identify three trends
This criterion is an extension of the previous section, and is intended to provide candidates with the opportunity to demonstrate a higher level of understanding by identifying trends through the past, present and future based on the evidence they have accumulated in their research. Most candidates were able to identify at least one trend and describe it in simplistic terms, although responses were very often bullet-pointed sentences rather than in-depth discussions. Candidates often talked about mobile phones reducing in size over the years, but did not offer any explanation as to why, or details of the consequences or benefits of that trend. Responses often appeared to be guesswork rather than developments of information researched. In many cases, responses were simply a repeat of information previously included.

J2   More detail of trends
Due to the previous section being poorly answered, few marks were able to be awarded for this section.

Candidate produces well-structured description, including List of Sources of information, with each source evaluated and validated (8 marks)

K1   Well-structured report
Most candidates were able to achieve at least two of the three marks available for the structure of the report through the use of sub-headings, appropriate paragraphs, bullet points, numbering, etc. Candidates who did not achieve all three marks often wrote an introduction, but failed to produce a concluding paragraph.

K2   List of range of sources
The majority of candidates where able to list some suitable sources and reference them correctly.

K3   Sources specifically related to content of report
Many candidates made an attempt to relate the sources used to the content of the report. Some candidates, however, gave information that was too vague, such as, 'I used this book to find out about mobile phones,' rather than a more precise description.

K4   Validation of one source
Although the validation criterion was poorly attempted in the first task, most candidates succeeded within this task. This appeared to be due to the use of the proforma supplied for use by the candidates. Candidates should be encouraged to use this format for all sections in order that elements are not inadvertently omitted.

K5   Evaluation of at least one source
Examiners were pleased to note the improvement within this section on last year. The majority of candidates evaluated at least one source, discussing ease of use in finding the information required for the task. Marks were awarded for evaluations beyond the 'it was helpful', or 'it was clear' type of statements.

Task Three: Newsletter or Brochure on Legislation

This task is constant each examination series in that it always focuses on ICT legislation as detailed in the specification. Candidates are required to produce a DTP document, this year for employees of a large organisation, discussing the purposes and effects of legislation related to ICT. Marks are awarded predominantly for content rather than DTP skills, as this is assessed explicitly in Unit 1.

Examiners were disappointed to note that this task was often poorly completed by candidates. A number of candidates appeared to have started but failed to complete the brochure, possibly due to a lack of effective time management on their part. Some candidates simply produced essays on the various acts, rather than structuring them as a newsletter or brochure as required.

Many candidates did not know the correct names of the Acts and some candidates discussed irrelevant issues, such as the rules of ICT rooms in their own school or college. The important Acts are listed in the specification, although candidates may wish to include other pieces of legislation. Those candidates that did do this task well, however, produced some very impressive documents that demonstrated detailed knowledge and understanding.

Candidate produces a description of the main purposes of legislation covering working with, and using, ICT (4 marks)

L1   Simple descriptions of main purposes of four pieces of legislation
This initial section required candidates to identify and describe the purposes of the various Acts. It does not require detailed working knowledge of the contents of the Acts. Most candidates were able to describe the purpose of two or three Acts adequately, but few scored full marks.

Many candidates thought that the main purposes of the Acts were to make something 'illegal', without identifying the precise purpose. Examiners were pleased to note that when referring to the Health and Safety at Work Act, candidates primarily concentrated on the ICT issues, such as trailing wires and time spent looking at monitors, which achieved the marks. Candidates who discussed the purpose of an Internet code of practice did not achieve gain marks, as this is not legislation.

Candidate produces a more detailed description, which includes an explanation of implications for users of implementing the legislation (7 marks)

M1   More detailed descriptions of main purposes of the legislation
This criterion is an extension of L1 and requires candidates to identify the implications for users, at any level, of the Acts they are considering. These implications could be related to working practices, efficiency, costs, etc. and may be different for different types of users.

Very few candidates achieved significant marks in this criterion, largely due to their lack of detailed responses. Candidates tended to provide the most comprehensive information about the Data Protection Act, but often this was simply a list of the principles of the Act, rather than a discussion of what the implications of it are in practice.

M2   Implications for users explained
Candidates performed slightly better within this section demonstrating that they understood the implications for ICT users of the Acts. Candidates generally achieved these marks within the discussion of the Health and Safety at work Act and the Data Protection Act.

Candidate produces a detailed and well-structured description which includes details of the sources of information, and validates those as part of a detailed evaluation of the work (7 marks)

N1   Well-structured description
A number of candidates produced word processed 'essays' rather than the required newsletter or brochure, and so could not be awarded the marks for structure. Some candidates had used software templates or 'wizards', which is quite acceptable, but had selected a template which did not provide space for sufficient detail, and so marks were lost. The majority of candidates, however, were able to structure their newsletter/brochure appropriately, gaining at least one mark. Many candidates achieved the additional mark for the appropriate inclusion of a structure feature, primarily for the use of bullet points.

N2   Details of sources
Many candidates where able to list some suitable sources and reference them correctly, however this was not as well attempted as in the previous tasks. Centres are advised to encourage candidates to use the proforma supplied for the criterion relating to sources of information.

N3   One source validated
Many candidates were able to validate at least one of their sources. Other issues have been discussed within the other tasks.

N4   Detailed evaluation of work
Most candidates attempted an evaluation, though many were brief and descriptive with little substance, rather than evaluative. Candidates found it difficult to justify why a particular feature was a strength or a weakness. Successful evaluations usually consisted of details of identified strengths and weaknesses, appropriateness of format, content and language to the intended user, and suggestions for possible future improvements which were justified.

Conclusion

It appears that centres have taken on board some of the advice offered by AQA at Teacher Support meetings and that given by Portfolio Advisers. Candidates appear to have grasped how to structure their assignment in order to attain marks for simplistic level skills, which is encouraging. It is disappointing, however, to note that the content level and the ability to apply their knowledge to a focus area has not shown any improvement.

Centres are strongly encouraged to take note of the comments within this report when preparing candidates for Unit 3 in future examination series.

Centres should always be prepared to seek advice or clarification from the Portfolio Adviser (aqagcseappictpa@aqa.org.uk), or from ICT Subject Support at AQA (ict-subjects@aqa.org.uk).

Mark Range and Award of Grades

Unit	Maximum Mark (Raw)	Maximum Mark (Scaled)	Mean Mark (Scaled)	Standard Deviation (Scaled)
Unit 3: ICT in Society (3850/3)	100	100	24.1	11.2

For units which contain only one component, scaled marks are the same as raw marks.

Unit 3 (3113 candidates)

	Max. mark	A*	A	B	C	D	E	F	G
Scaled Boundary Mark	100	53	47	41	36	29	23	17	11
Uniform Boundary Mark	100	90	80	70	60	50	40	30	20

Definitions

Boundary Mark: the minimum (scaled) mark required by a candidate to qualify for a given grade.

Mean Mark: is the sum of all candidates' marks divided by the number of candidates. In order to compare mean marks for different components, the mean mark (scaled) should be expressed as a percentage of the maximum mark (scaled).

Standard Deviation: a measure of the spread of candidates' marks. In most components, approximately two-thirds of all candidates lie in a range of plus or minus one standard deviation from the mean, and approximately 95% of all candidate lie in range of plus or minus two standard deviations from the mean. In order to compare the standard deviations for different components, the standard deviation (scaled) should be expressed as a percentage of the maximum mark (scaled).

Uniform Mark: a score on a standard scale which indicates a candidate's performance. The lowest uniform mark for grade A* is always 90% of the maximum uniform mark for the unit, similarly grade A is 80%, grade B is 70%, grade C is 60%, grade D is 50%, grade E is 40%, grade F is 30% and grade G is 20%. A candidate's total scaled mark for each unit is converted to a uniform mark and the uniform marks for the units will be added in order to determine the candidate's overall grade.