



**General Certificate of Secondary Education
June 2012**

ICT

45202

(Specification 4520)

Unit 2: The Assignment: Applying ICT

Report on the Examination

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General

The 2012 Unit 2 was based on producing a Year Book.

The work presented showed high standards of attainment, with students indicating their understanding of the requirements of each task, both in terms of the Task itself and also the evidence needed to produce a documented solution to it. Where required, research evidence and acknowledgement of source(s) was exemplary and in general it was used effectively to aid progress.

The Student Booklet initially outlined two tasks that students were to undertake:

- to set up a system to manage the team of students who have volunteered to work on the Year Book
- to set up some pages for the Year Book.

Summary

All schools/colleges which used and submitted the **Assignment Mark Grid** enabled the moderator to comment on any differences between the AQA standard and the school/college's own marking. There were a number of students' Unit 2 folders seen which did not have any teacher annotation to support the marks awarded.

In **Design** and **Implementation** students from some schools/colleges did **not** produce all the items required for Task1: for example, a database table, database input form, a search to find specific volunteers, and a list of these volunteers showing the year group at the top.

In **Testing**, plans from some students lacked the precision to be fully usable (ie the test data was not specific and the expected results were not listed in a form that was going to be 'checkable'). The effect of not having 'checkable' expected results was that these students could not check whether their test worked.

The **Report** should be formal (for example, it should include the name of the recipient, the sender, the date created and its purpose). Students should begin with the issues raised by Mr Kamani's thoughts – three are sufficient for this purpose. After explaining them, students should then proceed to make recommendations about how they may be solved.

The **Evaluation of others' use of ICT** was not always produced appropriately. Although there were good attempts to comment on the work of another student, students didn't follow this through to show how it could help them to self-improve if undertaking a similar task in future.

Analysis

As required in the specification, the Analysis work should be completed and presented as a discrete section at the beginning of the student's Unit 2 work. This was appropriately carried out by the vast majority of students.

It was clear from the evidence presented that, in the main, students had been well prepared for this component of the controlled assessment. In addition, most schools/colleges were annotating the work by including 'ticks' against correctly identified criteria. Where this was included it was straightforward to be able to support the school/college marking.

There are still a very small number of schools/colleges not showing evidence as to how the component marks were arrived at (a requirement of the Code of Practice) and there were some schools/colleges where awards made in the 9-10 mark range did not meet the defined criteria completely.

Following the Analysis stage, schools/colleges must provide each student with Standard Analysis for each Task they are to undertake.

Design

There are two elements to design.

1. Planning
2. Explaining the choices made.

From the Design stage onwards, students should undertake each of the tasks in turn from Design through to Evaluation of others' use of ICT. There is no problem in the tasks being undertaken in a different order to that presented in the Candidate Booklet, although the final assignment **must** be presented for moderation in the order given in the Booklet. Evidence from the work presented indicated that most students had been correctly provided with the Standard Analysis to use.

The work presented showed varying levels of addressing the two elements required for each task: planning how the Task is to be solved using either 'hand drawn' plans or 'computer drawn' plans and explaining why the choices were made. Additionally, a copy of the test plan should be included in this section, which will eventually be credited in the Testing section.

In general, students designed the requirements that were to be implemented, namely:

- Task 1: a table to contain the data file (Student volunteers), a database input form to efficiently collect future information about students, a search of student volunteers in a specific year group with a certain role and a report to display those students
- Task 2: 4 pages from the pilot version of the Year Book.

To achieve a mark in the higher ranges, a student should have provided sufficient detail for a third party to carry out the implementation from the plan.

There were a number of cases where the mark awarded did not reflect the work presented. For assessment purposes, the Planning and Design choices should be marked separately and then added together for each task. The electronic mark grid (if used) will average the totals for both tasks and record the result in the summary section of the grid. It is perfectly acceptable to print this grid and attach it to a student's work.

Plans: were submitted as indicated above. When using 'computer drawn' formats it must be clear to the moderator that the plan does **not** include evidence of implemented work (which would be credited there).

Task1: students should include planned evidence of the structure of the table to be created. A plan for an efficient method of entering new details is likely to be a database input form. The form should link to the table and should specify the field names to be used and the data space needed to allow for the different 'sizes' of data expected. Formatting should be included as well. The search required to find the volunteers must be planned, as should the report to which it links. The search should indicate the source of the data (the table(s) used) and the fields needed. Specifically, the search must include the criteria to select the records required. This could be a wild card parameter search to locate any volunteers whose role contains 'Editor' and a parameter search for those in a certain year. The search should be named.

The database report created was sometimes insufficiently well laid out, but often included some necessary details in the header (such as the school details and the year group) to avoid repetition of data. The database report should be linked to the search created (eg by name or reference). It is expected that these plans would be judged separately and combined to produce an overall planning mark.

Task 2: students should show the plans for the Year Book: Cover, Contents page, the Volunteers page and the year 11 students' template page.

Design choices: many students used the desired outcomes and performance criteria to assist them. Their explanation of **why** these will meet the users' needs is an important aspect of making choices. This should explain why the student has chosen a specific way of presenting, say, something on the plan. It does not need to be in a separate section. The points below arose on some work submitted:

- high marks were being awarded without the necessary explanation of choices made
- whilst some credit can be made for students indicating their own design choices, awards in higher mark ranges must relate to the correct criteria
- where students only give a reason for their own choice it is worth up to 4 marks
- some students were being awarded a mark of zero on this component when there was evidence of a choice being made on the plan. A minimum choice should be awarded at least 1 mark

- a simple choice may take the form of, ‘... because I have been told to do this by Mr Kamani
- not all the choices can be ‘explained’ and this should be taken in to account when allocating a mark.

Implementation

There are three elements to implementation.

1. Show skills, understanding and efficiency in building the solution for both tasks.
2. Show evidence of the solution to meet the criteria set for both tasks and the model of the costs of producing the Year Book.
3. Annotate how the solution was built or what the solution shows for each task.

Students were required to implement these requirements:

- Task 1: a table to contain the data file (Student volunteers), a database input form to efficiently collect future information about students, a search of student volunteers in a specific year group with a certain role and a database report to display those students.
- Task 2: 4 pages from the pilot version of the Year Book.

Work presented for ‘Skills, understanding and efficiency’ was variable but, in the case of higher ability students, often of a good standard. There are students who had **not** shown evidence of some key stages (the building blocks in creating the solution) but were awarded a higher mark range for this element. This will also count as ‘earlier stages of creation’ in the next element.

The Evidence of the solution can only be achieved by comparing what the student has produced against the criteria set.

Similarly, annotation can be awarded high marks where students have explained/described/stated how they produced the solution, whereas when they show ‘what’ they have done rather than ‘how’ it limits their mark to 4 or fewer.

Task1: students needed to import the data file provided. The file import should, show decision making in terms of data types, field names and any data restrictions (validation rules, drop down lists) that applied. The creation of the database input form, the table it links to, the fields chosen and the formats should be clear. Students may add buttons to the form to make it more functional. Students should show the creation of the search to select volunteers with a certain role and in a certain year group.

The Task required students to produce a search to enable any volunteer to be selected. A database report, which is linked to the search, should display the volunteers’ details in a way which is fit for purpose. Sometimes database reports were produced which didn’t link to the search and didn’t display all the data needed.

Task 2: this Task required the production of some Year Book pages. Generally this was done well by students producing effective stages towards the final solution. Many students produced good evidence of parts of the solution. However, electronically linking the database to a page in the Year Book was demanding for some. Efficiency was evidenced by higher ability students showing the use of a standard template, using a ‘mail’ merge and using features such as copy and paste etc. Most students appreciated that evidence of ‘repeated’ skills is not required. This concept applies to all of the tasks, but is particularly relevant to this one; it is recommended that students annotate their work to indicate this feature. The final Year Book pages produced should be displayed.

Work produced on modelling the Year Book costs was generally good. Where errors existed they tended to be for **not** rounding the number of pages required or **not** calculating the Charge for printing student pages correctly.

Testing

There are two elements to testing.

1. Creating the testing plan.
2. Showing the evidence that the test has been carried out and checked against the plan.

The testing plan was usually included here. The plan should identify the purpose of the test, the test data and expected results.

Testing evidence should show clearly labelled results of testing, which are cross referenced to the testing plan. For the award of the highest mark ranges it should be evident (eg using '✓'s, comments or marks on the printout) that the student has actually checked that the results are the same as expected. Students could consider that they are describing to another person how they checked this. However, evidence can only be checked if there is a set of expected results to check it against and this will affect marks.

There were concerns about mark awards from a few schools/colleges where students were not producing 'usable' testing plans or the evidence was not checked against them.

Task 1: there was a test to select the volunteers in year 10 with an editorial role. The test data should make it clear which datum should be entered where. The expected results, which should be found by the student using the hard copy of the data file, must show the exact three records expected (displaying these fields: student's name, tutor group, e-mail address and role). It is not satisfactory to show the actual results in the test plan as it gains no credit here. Without the expected results the test cannot be verified. Hence this affects the testing plan and the testing evidence. For the award of the highest marks for test evidence, the test should be shown being run (ie test data shown being entered) and the actual results should be shown to be checked against the testing plan. Lack of expected results will restrict the test evidence to a maximum of 3 marks.

Task 2: the testing plan was not well done for this task; students identified the test data, but not the expected results. The test evidence was not always correct –sometimes it did not fit on a page or include all 10 volunteers in role order (so that those with the same role were adjacent).

Self evaluation

Some schools/colleges overvalued this section. Marks are only awarded for a comment on how the desired outcomes/performance criteria have been met by the solution produced. There are no marks for any other type of evaluation.

Many students were provided with and used the desired outcomes and performance criteria from the Standard Analysis. This offered them the opportunity to comment on their own solutions. For discussion or description of the effectiveness of their solutions students should focus on at least three of the desired outcomes. There were cases where full marks had been awarded when the mark for 'describing the effectiveness of their solution' hadn't been achieved and no considered comparison with an alternative effective solution had taken place. In these cases, a very brief, inconsequential alternative was being offered. This was insufficient to meet the 'discussion' criteria.

Report

Some students achieved much in this section. Students who were successful began with the issues involved and progressed to making recommendations to 'solve' them. This should be done by considering a few aspects of the problem (three is sufficient) and incorporating research where needed. Several students tried to include too many issues in a cursory way, or simply made recommendations without explaining the issues involved. It is very important that students do tackle the development needed by the organiser rather than invent their own.

This criterion is one where students could develop their ideas further.

Evaluation of others' use of ICT

This is another section which was variably treated by students. In almost all cases, students appeared to have used an appropriate solution from another student. In general, their comments found aspects of the others' work which was done differently from their own solution. Not all students had chosen three desired outcomes/performance criteria against which to make their judgments. The part which many students did not tackle effectively was that of using their comments on the others' work to propose how it could impact on their own future working. Several students suggested how the other person could improve which is **not** what this evaluation section is about. This criterion is one where students should reflect on how what they have seen could help them in future.

Administration

- Internal standardisation has a significant effect on students' awards. Schools/Colleges must standardise their marking across different teachers to ensure consistency.
- Teacher annotation: it is a requirement of the Regulator's Code of Practice that controlled assessment is annotated by the teacher to indicate how marks are awarded. It is evident that schools/colleges which did annotate students' work were more likely to have their marking agreed. It is perfectly acceptable for annotation to indicate simply where in the students' work a particular criterion has been met.
- A positive aspect was that most schools/colleges did submit the mark grid with the students' work and this was particularly helpful in being able to confirm the accuracy of school/college marking. A few schools/colleges using the paper-based mark grid did make arithmetic errors and there were some cases of average marks not being rounded up.
- As the majority of schools/colleges had used the electronic mark grid, there were few arithmetical errors on:
 - the Candidate Record Form
 - the transfer between the above and the Centre Mark Form
- All appropriate paperwork needs to be fully completed and signed - including the Candidate Record Form and the Centre Declaration Sheet. There were some assignments without a Candidate Number and without the necessary Candidate Record Form. Failure to comply with these requirements can cause delays in carrying out the moderation.
- All necessary up-to-date paperwork can be located and downloaded from the [AQA website](#).
- The Centre Mark Form, on which overall students' marks were entered for this component, is a three part carbonated form. Schools/Colleges should ensure that:
 - the marks are clear on all three parts
 - alterations clearly show the correct final mark
 - both the second (pink) and third (yellow) copies go to the moderator (or 2 copies of the EDI forms).
- The vast majority of schools/colleges are to be congratulated in sending the work of their students for moderation in a well organised fashion that was securely fastened together using treasury tags.

Statistical data and information on grade boundary ranges www.aqa.org.uk/over/stat.html

UMS conversion calculator www.aqa.org.uk/umsconversion