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Principal Moderator Feedback

June 2011

GCSE Information and Communication Technology Full and Short Course (1185/3185) Paper 01

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GCSE ICT Principal Moderator's Report - June 2011

Introduction

This was the final year of 1185/3185, and after many years of this specification the majority of centres seemed to be slightly better prepared in applying the marking criteria. Furthermore, moderators saw a marginal improvement in the standard of projects being submitted by candidates.

Many centres seemed to produce better focused projects. There appeared to be less centres offering minimal / poor guidance to their candidates. As expected, with candidates who scored highly, it was usual to see all sections and sub-sections of the project reported, with full, and clearly explained, appropriate detail i.e. what data was needed to solve their problem, where this data came from, why this data was needed and how it was to be manipulated to solve their problem.

Again centres and candidates that used the advised Edexcel tick sheet from the website with its suggested sub-headings did produce work that matched the marking criteria and thus scored well. Candidates performed better using the following sub headings with detailed reports. However, a minority of centres still used their own marking scheme.

The higher scoring projects were prepared under the below headings, which gave candidates the opportunities to maximise their marks.

Identify
- Introduction to the problem
- Discussion of the real user
- An alternative solution 1 considered
- An alternative solution 2 considered
- Discussion of why ICT is a more sensible way of solving this problem.
- Clear quantitative objectives

Analyse
- Hardware needed for the solution
- Software needed for the solution
- Input data, what it is, where it is got from, where it is used, why it is used
- Processing with a worked example
- Output needed and consideration of alternative output
- Backup strategy applicable to the solution
- Security strategy for the solution

Design
- Initial Designs
- User Comments on the initial designs
- Final Designs
- Test Plan including examples matching the quantitative objectives
- Subtasks of the solution itemised

Implementation

• Evidence of Error Correction/ development
• Evidence of Testing, usually supporting a full test plan
• Evidence of the Problem Solutions / tests with pupil annotation
(NB not a user guide along the lines of how I did it)

Evaluation

• Full evaluation of objectives
• Real user comments/critique/report preferably on a separate sheet
• Evidence of possible further improvements by the candidate as a result of the real user comments

General Comments

Again this year a number of Centres persisted in submitting projects that included too much hardcopy especially in implementation and the not needed “user guides”. On the plus side it was noticeable that fewer candidates used user guides as their “implementation” section.

Internal Standardisation

In a small number of centres it was clear that internal standardisation had not taken place, despite the centre often supporting with a signed OPTEMS declaration to the contrary. This hindered and slowed down the moderation process. Centres are reminded of the importance to candidates of internal standardisation.

Annotation

On a more positive note it was noticeable more centres than in previous series, gave reasons for marking a project as an extended piece of work. This was either shown on the CCMS or with clearer annotation indicating the reasons in the body of the project, one centre used a “red stamp” stating “extension “which was then easily confirmed by the moderator.
This annotation remains an essential aid for moderators, to concur or not with the teacher marks. This and the fact that many centres made use of the marking grid available on the Edexcel web site meant little else was needed to be added to inform extended features.

Administration

As in previous years, a few centres again did not help their candidates by making moderation more difficult by:

- Not sending the correct sample of work, to include the highest and lowest marked candidates
- Incorrect completion of the OPTEMs. Marks not written on OPTEMs. Marks on OPTEMs not the same as on the candidates CCMS and CCCS. Teachers failing to sign OPTEMs. Addition errors.
- Not indicating whether the project was standard or extended.

Standard and Extended projects

This was still causing some centres problems even after centres were reminded that the evidence for extended work should be present in the Analyse and Design sections and should not suddenly just appear in the Implementation section. A number of centres had extended projects reduced to standard projects for this reason.

Evidence

It was again apparent in a minority of centres this year that candidates had attempted good complex solutions to problems, but then failed to include the necessary evidence to support the award of high marks.

Sections in General

Identify

Overwhelmingly, most candidates stated a problem and identified a “real user”. Responses to consideration of possible alternative solutions 1 and 2 was too often disappointing. Instances of clearly expressed quantitative objects seemed more prevalent, but there was still a high incidence of general statements such as: “The user will need to be able to search the database” when an objective such as “The user will need to produce a report of clients holidaying in France” gives the candidate an objective that can be used in all the other sections of the solution.

Analysis

Weaker candidates again often made too generalised statements that lacked the required detail. Candidates tackling extended projects needed to include evidence of the extended features in the analysis this was rare. Most of the evidence in the Input, Process and Output sections should be with worked examples.

- Hardware & Software

On a positive note more candidates did concentrate on the hardware and software that is important to the solution of the problem, rather than simply listing general hardware and software.

- Input

A large minority of candidates included examples of actual data, stating how it will be collected and used.

- Processing

Candidates still found this section difficult, most ended up giving a general sketchily written report on how they were going to create the solution, usually lacking the detail required to gain high marks. Candidates

would have scored higher if they had used each of their quantitative objectives and explained how they are going to achieve them. E.g. quantitative objective 1 - Produce a weekly profit total. Process – Subtract weekly expenditure from weekly income.

- Output

This section remained weak, usually with little or no detail included. This should include output alternatives, then a justification of the chosen method with its details required. This was lacking in too many.

- Backup

This should relate to the solutions backup and not the backup strategy of the candidate as the candidate progresses through his solution. There was an improvement here. There were more instances of candidates treating this as instructions to their users regarding “real” file size, frequency of the backup and the media used.

- Security

Some candidates had elaborate security arrangements, while others were short and limited in detail.

Design

Most scored marks, but again not enough centres treated the design section as a working document with crossings out / changes perfectly acceptable, as long as they remain legible. Designs with higher marks showed evidence of progression to a final design.

Still a number of centres were marking implementation as design. Also, as centres know as soon as a candidate starts to use the target software in the design process, then design has stopped and implementation began. There were too many instances of this. Furthermore when manipulating images, the original image should have been printed out, then some narrative on how the image is going to be changed by the candidate was needed. This was too often not produced. These changes being made also needed to be in the graphics package to be awarded extended marks. This was not always the case.

Testing

Most candidates produced test plans of varying quality. Candidates gaining the higher marks had test plans including actual data to test that their solution worked.

1 CMS TEST Profit/loss formulae
(Income) =£500 (Expenditure) = £300 Profit = £200

2 DTP TEST Each page should have company logo
Check Logo printed on each page

3 CMD TEST Search for non payments
Report with “x” records = 0

Teacher signatures were rarely seen for slide transitions on slide loading / animations / sound.

Implementation

There were still a small number of candidates with no real design; getting only the permitted maximum of 2 marks in implementation. Many candidates’ implementation was in the form of an annotated hardcopy, with (full, some or no) error correction evidence. Annotated printouts showing the work at different stages and evidence of the implementation of the test plan was of variable quality.

With extended work, hardcopy printouts / screen shots were seen including formulae printouts, screen shot of queries in design view, screen shot of the validation routines running, screen shot of text flow.

Evaluation

There were still lots of instances of candidates evaluating their own progress and not basing it on the solution of the original problem. Most candidates made attempts to evaluate their original objectives, but often failed to include “real user” critique via a letter /report. A number used the results of a questionnaire. A small majority did conclude by discussing how to make improvements regarding the users’ comments – with variable accuracy.

Common Free Choice Types

DTP Projects

Identify

Quantitative objectives were prevalent, but some candidates fell into the trap of thinking that trying to make the project “look good” for the user was more important. Candidates would have benefited more by using a simpler objective, with a layout such as a front page with a full colour picture in the background, words laid out in columns, all the headings to be in the same style and size of font, page numbers at the top of each page aligned alternatively left and right.

Analyse

The candidate rarely discussed in detail the extra equipment they needed such as scanners, digital camera and printers. The divisions between the input, process and output sections were not distinct. The input section should concentrate on where the individual data items will come from in terms of the problem i.e. building up a resources store. Most candidates stated that the data was downloaded from the internet, when reality they should have collected it from the real user to address his needs. Format discussion was minimal.

The output section rarely discussed paper size, layout and printing.
Once again a number of candidates often gave their own backup solution, rarely considering the user. File size was often overlooked.

Design

Initial designs were present in the form of blocks. Final details regarding the fonts /sizes /colour choice were often present, but not so often seen were the number of words, columns and text flow. Image manipulation of the original graphic with annotation to the changes was sparse.
Simple manipulation such as resizing and cropping are not extended tasks.
A full test plan would test every objective, plus any features which had been added, but this was not the norm.

Implementation

Annotated printouts showing the solution at different stages plus the final solution were the norm. Teacher annotation of the candidate’s work where it was difficult to produce hardcopy evidence of extended features was rarely seen.

Evaluation

Often seen was a copy and paste of the objectives in Identify with a simple statement along the lines of “I achieved this objective . . . . .” with no cross reference to page number. User critique was not always on a separate sheet/report but summarised by the user.

Multimedia Solutions (See notes for DTP)
A number of candidates solved superficial problems. Candidates attempting a more demanding problem such as a kiosk type solution usually scored very well. This allowed them the opportunity to include a menu system, sound, graphics and video. Teachers rarely certified that features which can not be printed had been used.

Web Page Solutions (See notes for DTP/Multimedia)
A number of lower scoring candidates just made web pages by cutting and pasting from other sites and were not really solving a problem. On the other hand there were some very good efforts which scored high showing consistent designs on all pages, rollovers etc Hyperlinks are not extended tasks when used in web pages.

Word Processing Solutions (See notes for DTP/Multimedia)
There were fewer choosing WP this year but most who did chose a Word Processing problem based on a mail merge.

Compulsory Projects

Spreadsheet Solutions

Identify

Quantitative objectives were often prevalent, but candidates would still have benefited more by using simpler objectives e.g.:
To calculate a total for income each week; to calculate a total for expenditure each week; to calculate the profit each week; to be able to have a graph of income, expenditure and profit for a period.

Analyse

Responses were variable. There was limited evidence given about where the data came from, what data was needed and why it was needed, or how the data was to be used. Usually those who used a table with the appropriate column headings fared better. Validation techniques were in the minority. A minority showed worked examples of data use.

Design

Initial designs did give the user an idea of what the finished solution would look like. Not all candidates had final designs showing the detail regarding formulas, look up tables and functions being used, required for extended marks.

Full test plans for each objective, other elements and validation checks were rarely seen and in a minority.

Implementation

Spreadsheet in formulae printout should always be included, too often this was not the case.

Evaluation

Often seen was a copy and paste of the objectives in Identify with a simple statement along the lines of “I achieved this objective . . . . .” with no cross reference to page number. The user critique was not always on a separate sheet/report but summarised by the user.

Database Solutions

Identify

Quantitative objectives were often prevalent, but candidates would still have benefited more by using simpler objectives e.g.:
To produce a list of cars sold that week; to be able to search the database by price; to be able to search the database by manufacturer; to be able to search the database by engine size; to print out a list of cars in price order each week for his advert in the local paper.

Analyse

Responses were variable. There was limited evidence given about where the data came from, what data was needed and why it was needed, or how the data was to be used. Usually, those who used a table with the appropriate column headings fared better. Validation techniques and masking were in the minority. In the processing section most discussed the need for the queries and reports required with varying success.

Design

Few initial designs discussed the entities needed, but usually the screen forms and reports. Not enough final designs described the data structure fully, field name data type, data length, validation rule etc., detail about colour, font types/sizes fared better, relationship diagrams were in a small minority, little evidence of simple/complex search design was seen. Again several candidates had relationships, but failed to do searches. Full test plans were not the norm, but testing did take place; less often seen were sorts.

Implementation

A user guide through of the creation process was seen a number of times as well as searches and reports.

Evaluation

Often seen was a copy and paste of the objectives in Identify with a simple statement along the lines of “I achieved this objective . . . . .” with no cross reference to page number. User critique was not always on a separate sheet/report but summarised by the user.

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