Examiners' Report/
Principal Examiner Feedback

Summer 2015

Pearson International Edexcel GCSE
In ICT (4IT0)
Paper 02 Practical Paper

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Principle Examiner's Report to centres

This report is split into two sections: General Comments and Specific Comments. In the Specific Comments, details about the individual activities and areas for improvement will be discussed.

General comments

This was the fifth series of Edexcel's International GCSE ICT. There were approximately 5000 students sitting this practical paper. Marks ranged from 0 to 97 with the mean mark of 54.3. The large majority of students submitted work for all tasks.

Students continue to lose marks because of failure to pay attention to detail. For example:

- 8 marks were available for entering correct formulae into a spreadsheet. Many students failed to gain these marks because they did not submit a formula view of the spreadsheet. Often other printouts suggested that they may have done correct calculations. A few students lost marks for failing to submit a printout of the data view. In these cases it was not possible to award some of the formatting marks.

- Other marks were lost due to inaccuracies where students were asked to enter data given on the question paper.

- Where screen shot evidence was required, many students lost marks because their screen shot was cropped or resized so that the vital information was not visible or not readable.

- Fewer students failed to enter their student details on their work. However, it should be noted that the nature of this examination requires students to enter their details before printing to avoid suspicions of collusion by students. The instructions are clear in the question paper and in the specification and in the Instructions for the Conduct of the Examination (ICE) document.

Examiners were pleased to note that there was little evidence of students being able to access the internet during the examination. Internet usage during this examination is a breach of the regulations and may result in students being disqualified.

Examiners noted that most students were able to complete all the tasks required, though a small number of students did not complete all activities. It is suggested that students are advised that they should allocate their time so that they spend approximately one and a half minutes per mark. As in previous examination series, guidance was provided about the length of time students should spend on each activity. This practice will be continued in future series.

Data files

Few issues with the data files were reported to Edexcel.

Unfortunately, an early version of the Notes for Centres contained the incorrect table name for the database. This was corrected with a revised version of the Notes before the start of the examination window. The error would only be an issue for centres where it was necessary to recreate the database from the instructions due to using software other than Microsoft Access.

These files are produced in different formats so that centre staff can make sure that the files open using the software available during the examination. It should also be noted that only one version of the files should be available for students. There was some evidence that in some centres students had access to all the different versions of the data files.

Centre staff are reminded that the data files should remain confidential until all sessions of the examinations have been completed. It is a breach of the regulations for staff to discuss the contents of the data files with students. They are made available before the examination in order that a member of staff can check that the files work with the hardware and software available during the examination. After they have been checked, the files should be copied into the students' examination folders. A backup copy in a sub-folder is useful to enable students to re-start tasks should they wish to do so.

Centre staff should note that the data files for the 2016 examination will be available by secure download from the Edexcel website approximately 2 weeks before the examination window.

Labelling and printing

The formatting of the paper is such that when students are given instructions, the separate tasks are identified within the question paper with a title case for the task name (e.g. **Task PS1(b)**). When instructions are given to save or resave documents then upper case is used (e.g. Save the spreadsheet as **TASK SS2**). Occasionally, as in Task PS1(b), students are not required to print out their work until later in the activity. This was less of an issue during this series as in most cases there was a printout for each task or sub-task.

Centre staff should remind students that it is a requirement of this examination that typed student details are expected on all printouts. Experience has shown that where students have been encouraged to label all their documents before printing in the normal classroom environment, then this is rarely an issue during the stresses of examination work.

Some examiners noted that the quality of printout varied considerably. Centres should try to ensure that the printer is capable of producing satisfactory output during the examination window. The poor quality of some printouts is often to the disadvantage of the student when the

examiner cannot read or distinguish what the student has produced. Centre staff should note that there is no extra credit for printing in colour. Where students are asked to follow a colour scheme, such as in the web authoring task in this examination, examiners use their judgement to decide whether the colour scheme has been used and will give the benefit of doubt to students where printouts are in monochrome.

Examiners reported that students at several centres did not collate their work in the correct order. It was also noted that students often did not attach their scripts to the cover sheet in the correct manner. This was often repeated by all students at a centre which suggests that the students had been incorrectly instructed by Centre staff. The cover sheet, when opened, has a punched hole in the top left corner. Students should punch a hole in the top left corner of each printout then attach the printouts to the cover sheet so that when the cover sheet is opened by the examiner the student's work is face up on the left with the marking grid on the right. Students at some centres make it very difficult for the examiner to gain access to the work by the way they submit their work. It would be helpful to examiners if thin cotton were not used as the pages tied in this manner tend to tear easily.

Examiners also noted that the work from some centres was not sorted into the same order as the attendance lists.

Resources

There are now two sets of Sample Assessment Materials available on the Edexcel website. Copies of the 2011, 2012, 2013, 2014 and 2015 question papers, data files and mark schemes and examiners reports are also available for use in preparing future students.

In addition, centre staff are reminded that Edexcel offers the "Ask the Expert" facility on its website where Senior Examiners can answer questions from staff about the specification and examinations.

Specific Comments

The examination consisted of five activities based on the theme of Ducansvilla Hotel Group who own hotels in London, Hong Kong and Chennai.

Activity 1 – Using Art / Imaging and Graphics Software

In Activity 1, students were asked to create a logo using an image from the data files and adding text identified in the question paper. They were then asked to edit an image for use on a web page.

Most students chose a suitable image from the data files. Only a small number chose a photograph. Most also added the correct text. A large number of students managed to achieve an appropriate balance between the size of the text and the image. Whilst many students were able to

identify that the image in a logo needs to be simple, few commented on the need for a vector graphic rather than a bitmap image.

Cropping of the given image in Part (b) was reasonably well done but several students failed to crop close enough to the temple. Removing the tourist in the entrance of the temple effectively was not completed as well. Answers about the benefits of reducing the size of the image too often mentioned taking up less space on the page rather than referring to the context of using the image on a web page where smaller file size and speed of upload / download are relevant.

Key areas for improvement:

- accuracy in copying text from the question paper;
- understanding the requirements of an image used in a logo;
- achieving an appropriate balance in producing a logo which combines text and image;
- understanding the differences between a bitmap and vector graphic image;
- being able to crop images effectively;
- being able to amend images effectively; and,
- understanding the importance of file size for uploading/downloading images for a website.

Activity 2 – Using Spreadsheet Software

Students were provided with a spreadsheet containing one worksheet which held data payments made by members of staff towards a trip to Hong Kong. As usual they were asked to enter data, sort, enter formulae, add titles, format and produce a graph to analyse the data.

In task SS1, they were asked to enter values for another member of staff then sort the table of data. This was a relatively simple task which the majority of students managed successfully. However, some students lost marks because they did not take care when entering the data and did not maintain the integrity of the data and sorted only the single column rather than doing the primary and secondary sort. In formatting some lost marks because they did not follow the instruction to use a currency symbol with no decimal places.

In Task SS2, students were required to enter relatively simple formulae to add five cells to create a total then subtract this total from a fixed value. They were then asked to add column labels and replicate the formulae for the other staff. Finally the students were asked to enter a formula to display the text "Reminder" if the balance was £100 or more. A significant but not large number of students lost several marks on this task because they did not print out a formula view of the spreadsheet.

Most students scored well on this task but marks were sometimes lost by inefficient use of the SUM function with several students using formulae such as = D6+E6+F6+G6+H6 and =SUM(B3-I6). It was expected that students would use an absolute cell reference for the total cost of the trip

(stored in cell B3). The IF statement seemed to be more difficult for some students; often the value of 0 was used rather than 100 or incorrect text was displayed.

In Task SS3, the students were asked to produce a relatively straightforward graph showing the balance to be paid by members of staff less than 30 years old. Students often failed to produce a chart which is fit for purpose.

A good chart will:

- be a suitable chart type;
- have the correct data;
- have appropriate titles;
- have axis labels; and,
- have a legend only if it necessary to identify the different data series.

Many students fail to score as well as they could because they do not include the appropriate items.

For Task SS4, students were asked to explain how they ensured that their chart was fit for purpose and a reason for using absolute cell references in a spreadsheet formula. Answers for this type of question are often too vague for credit to be given. Examiners reported that many students were unable to clearly identify why their charts were fit for purpose and often just described what their chart showed. The question of using absolute cell references was answered slightly better with many commenting about the efficiency in replicating formulae containing references to a constant value.

Key areas for improvement:

- accuracy in copying data into a spreadsheet;
- sorting a table of data in a spreadsheet whilst ensuring data integrity;
- primary and secondary sorting of spreadsheet data;
- formatting of text in a spreadsheet – for example:
    o merging cells
    o bold
    o italics
    o centring
    o left and right alignment
    o font size;
- formatting of numerical data including currency;
- using appropriate borders and shading;
- entering simple formulae using the arithmetic operators (*, /, + and -);
- entering formulae using simple functions (e.g. SUM);
- knowing when it is appropriate to use a function like SUM
- replication of formulae;
- use of logical operators (>, <, and =; as well as combinations of these);
- printing formula view or data view of a spreadsheet;

- printing selected columns in a spreadsheet;
- printing without truncation;
- producing suitable charts from data;
- producing appropriate titles and axis labels for a chart;
- understanding when a legend is required for a chart;
- understanding fitness for purpose and the features of a chart which is fit for purpose; and.
- being able to explain spreadsheet terms.

ACTIVITY 3 – Using Web Authoring Software

Students were asked to use resources that were provided to create a web page to a given page layout design. The creation of the pages could have been done in any suitable software and many students chose to use Microsoft Publisher or Microsoft Word. Although Microsoft Publisher is able to produce web pages, these tend to be produced as images of the page content. The source code for these tends to be less adaptable. There was some evidence that a number of students did not produce web pages but a Microsoft PowerPoint presentation.

Most students scored well on the insertion of items but then several lost marks because they did not use the layout in the question paper and their final pages were not fit for purpose due to inconsistencies in the formatting.

At the end of the Activity, students were asked to identify and explain one formatting technique they had used in creating the web page. There is some evidence that students are unsure of what a formatting technique is with some responses identifying the insertion of text and / or images.

Finally students were asked to display the source code for one of the pages they had created and identify the code used for the hyperlink to one of the other pages. This was poorly done and many students only typed out the file location for the page. There was often little evidence of the source code being displayed.

Key areas for improvement:

- integrating text and images for a web page;
- using appropriate fonts for a web page;
- applying a design layout provided consistently;
- identifying and explaining the purpose of formatting techniques;
- displaying the source code for a web page; and,
- identifying key elements of web page source code.

ACTIVITY 4 – Using Database Software

Students were provided with a database file with one table of data about guests in the hotel. As mentioned previously, there was an error in the name of the table in an early published version of the Notes for Centres. This was corrected before the examination window and would affect those centres who recreated the data base file because they do not use Microsoft Access.

Students were asked to enter a new record, sort and search the data.

In Task DB1, students were asked to enter a new record. Examiners noted that, as in previous examination series, many students lost marks because they did not check the data that they entered was correct and consistently formatted with data already present in the table. Some also lost marks because they did not carry out a correct primary and secondary sort on the data.

At the end of the task they were asked to explain why 'Date of Birth' was used rather than 'Age' in a database. Answers relating to accuracy and duplication of ages were not considered creditworthy. They were also asked to explain why mobile phone numbers were given the 'Text' data type. This question was answered well by the majority of students.

In DB2, students were asked to carry out two searches of the data. Most students achieved good marks on this task. Those that did not do well lost marks for incorrect search criteria or incorrect fields displayed.

In Task DB3(a), students were asked to identify the data types and field lengths for a table to be added to the database. They were also asked to justify the reasons for the choice of two of the data types and then identify and explain which of the fields would be most appropriate as a primary key. For Part (b) they were asked to create the table in the database software and display the design view of the table. For Part (c) they were asked to create a suitable data entry form and enter the data for one of the hotels.

Most students correctly identified the data types for the fields listed. Many of these also gave appropriate values for the field lengths. Few students gave appropriate explanations for the data types with many offering reasons for the field lengths instead. The hotel name proved a distracter for many in identifying the appropriate primary key.

Most students scored well on Tasks DB3(b) and DB3(c) though a significant number presented the incorrect record for the latter part of DB3(c).

Key areas for improvement:

- entering data accurately and consistently formatted;
- primary and secondary sorting in ascending and descending order;
- understanding of the use of constant values in a database;
- understanding the use of text rather than number field data types;
- simple searches;
- searches using multiple criteria;
- displaying all / selected fields in output in requested order;
- identifying appropriate field data types and field lengths;
- identifying appropriate primary key fields;
- creating new tables in database software;
- creating appropriate data entry forms; and,
- entering correct data into database table.

ACTIVITY 5 – Using Word Processing Software

In Task WP1, students were asked to prepare a report integrating the text from three files with extracts from the other activities in the examination. Most students who attempted this task managed to include all the required items. However, they tended to lose marks for using poor layout and formatting.

In Task WP2, the students were asked to prepare a memo from the Managing Director to one of the hotel managers about the July meeting in her hotel. Students often seemed to be unsure of the appropriate layout and the standard components of a memo and lost marks because often their submission was more like a letter than a memo.

Key areas for improvement:

- careful copying of text from the question paper;
- understanding and use of layout conventions for common document types such as reports and memos;
- integrating a text document and images (including charts, database tables and screen shots);
- consistent formatting of text and images;
- cropping of unnecessary details from screen shots; and,
- using software tools to check spelling and grammar.

Grade Boundaries

Grade boundaries for this, and all other papers, can be found on the website on this link:
http://www.edexcel.com/iwantto/Pages/grade-boundaries.aspx