

Introduction

GCSE ICT Practical Course Packs 1 and 2 have been written to comply with the AQA Specification A for GCSE ICT. The material has been revised to match the changes made to the specifications in 2005, and is also suitable for the 2007 specifications. With the convergence in theory content under the new specifications, the packs can also be used with other examination boards.

While the *GCSE ICT Practical Course Packs* can be used on their own, they can also be used with *GCSE ICT Theory Packs 1 and 2* and the *Worksheets* to form a complete GCSE ICT course. The three elements have been written to complement each other with the minimum amount of duplication.

These two packs cover the practical elements of the course. The practical tasks are intended to be done in the order that they appear in the packs, with the amount of help provided for analysis, design and evaluation gradually reducing as the student progresses through the work.

The student record sheet (page 56) can be used to monitor individual progress and also to agree and set target dates for the student to complete each task. The week numbers are provided as a guide and, if followed, would mean that this practical course should be completed by the end of March in Year 10. The actual timescale will, of course, depend on the ability of the group and the time given to practical work. The suggested timing is generous and most students should be able to complete the work in a shorter time than that suggested, leaving more time for their examination coursework.

Each task starts with either a letter or some dialogue from which the student must extract the performance criteria. In some instances, students are asked to map some performance criteria back to the letter/dialogue by marking up this text. You may want to produce additional copies of these pages (ie pages 7, 15, 22/23 and 28) for students to do this so that their original copy is left unmarked.

Suggested completion dates appear in the context letter or dialogue at the start of each task. If you use different dates then students should be given these before they complete their performance criteria so that the criteria contain the correct agreed completion date.

The various files needed by the students for each task may be downloaded from <http://www.pearsonpublishing.co.uk/publications/extras/practcourse.html> (see page 42 for additional notes on the files).

Inches are used as the unit of measurement in all desktop publishing and document-based tasks. This is a deliberate choice since the unit of text size (ie the point) is 1/72 inch.

Other titles in the series include:

- *GCSE ICT Theory Pack 1*
- *GCSE ICT Theory Pack 2*
- *GCSE ICT Worksheets*
- *GCSE ICT Practical Course Pack 2*

Steve McWeeney
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Practical 1: The Disco Ticket

The letter below describes a problem that Sally Forthe needs solving. Read it and then complete the analysis of the problem.

West End Youth Club
Westoak
Newtown

10 September

Dear Sir or Madam

I understand that your design company can produce specialised tickets very quickly.

Our Youth Club is running a disco to raise funds for St Francis' Pet Rescue in a few weeks' time. Tickets go on sale on 27 September, seven days before the disco, so we need them by that date at the latest. Our regular printer has let us down and we are hoping that you can do the work for us.

The tickets need to fit into our cash box easily. A size of 4 inches by 1.5 inches works well. Actually the width is not too important, anything reasonably close to 4 inches would do, but the height must be exactly 1.5 inches. The tickets must be numbered consecutively from 1 to 150 with three digits for each number (so that 1 appears as 001, etc). We have a Microsoft[®] Excel spreadsheet file of the numbers from 001 to 150, which I believe can be used to help produce the numbers on the tickets.

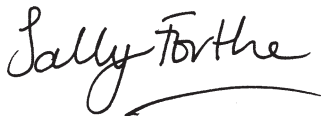
We are on a low budget, so we would like to economise by getting at least 14 tickets printed on a single sheet. It would be useful if you could run off a single test page to check the layout before doing the complete print run.

The tickets are £2.50 each and we would like this in large lettering on the left-hand side. We also want 'West End Youth Club Disco' to be fairly prominent on the ticket.

It would be useful to have a statement saying: 'All proceeds are in aid of St Francis' Pet Rescue', although this need not be too large. And, of course, we should mention the date of the disco on the ticket and that it will take place in the West End Hall.

I hope you will be able to do all of this in time.

Best wishes



Sally Forthe
Youth Leader

Disco ticket analysis

- 1 Write a single sentence to say in your own words what the problem described in the letter is.
- 2 Sally mentions two outputs, although you are going to produce only one of them when you solve the problem. What are the two outputs?
- 3 You will need various inputs to solve this problem (ie the data in the letter and something that is mentioned in the letter). Can you identify all the inputs?

Display analysis

- 1 Write a single sentence to describe the problem that Mr Brown has to solve.
- 2 There is only one output for this problem. What is it?
- 3 List the inputs that you will need to solve the problem.
- 4 There are a number of performance criteria mentioned in the dialogue. The table below gives three of them.

Circle the text on the dialogue that gave rise to performance criterion number 2. Label the circle with a number two. Now do the same for criteria numbers 3 and 6.

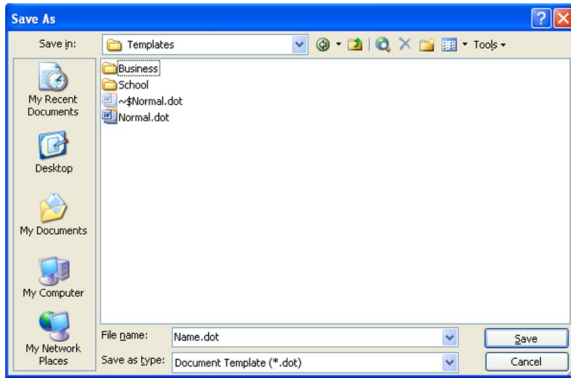
Finally, complete the table below by filling in the missing performance criteria. The hints should help you to spot them. Write your criteria as complete sentences, following the example of the others that are already shown:

Number	Hint	Performance criteria
1	A date.	
2		The poster should be A5 size following the same layout as the example.
3		The poster must be printed on an A4 page in landscape format, so that two posters can be printed side by side on a single sheet.
4	Picture.	
5	Title.	
6		The writing under the picture should be in 14 point Times New Roman font. Set it out in two columns. There should be four paragraphs separated by a 16-point gap.
7	The columns.	
8	What the paragraphs are about.	

Display design

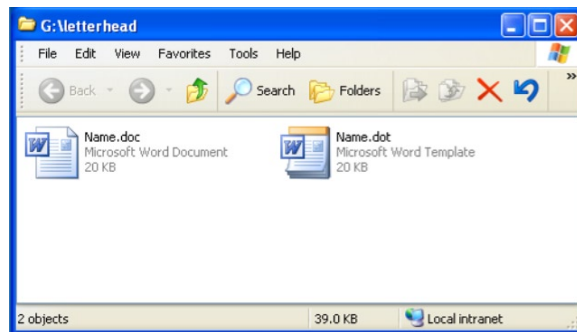
Before beginning your design, answer the following questions:

- 1 What two items of hardware could you use to input the picture needed to solve this problem?
- 2 If this hardware were not available, how else could you insert a picture into the poster?



- 1 Load the document you saved in the previous exercise and select File/Save As. Use the Save as type list to change the file type from Word Document to Document Template. **Be careful.** Word will assume that you want to save the template file to the templates folder on the hard drive. Change the Save to entry at the top of the dialogue box to your network drive.

- 2 Open up a window showing your network directory space where you saved the template. You should see that you have an ordinary Microsoft® Word document (Name.doc) and the document template that you have just saved (Name.dot). If you double-click Name.doc, you can change the contents and save the altered document again. If you double-click Name.dot, Word will create a new copy of the document so that, when you save any changes, the original template is unchanged.



- 3 Test this out by double-clicking Name.dot. See that you end up with a new document and that if you change the document, the original Name.dot is unaffected.

If you need to change the template document then open it using the right-hand mouse button. Select Open from the list of options you get. This opens the template file for editing. Which performance criteria will document templates help you achieve?

Letterhead technique 3: Pictures in Microsoft® Word

The main purpose of a word processor is to allow you to prepare documents. If you have to mix text and pictures in a complex way, or if you need to produce a document with a complex page layout, it might be better to use desktop publishing software.

However, if you need to include a few pictures in a document then there are various tools in Microsoft® Word that will help you:



- 1 Double-click on your template file to open a new document based on it. Choose Insert/Picture/From File and insert the picture of the church, StJohns.jpg, into the document. You will find that you cannot move the picture about on the page.

There are two ways round this problem. You could put the picture inside a text box and then move the text box.

The other method is to use the Format menu. Instructions for this are shown in Step 2.

Cash flow forecast design (page 23)

The spreadsheet displays a cash flow forecast from September to August. It includes sections for Income and Expenditure, with a final Total row. Several formulas are highlighted with arrows:

- `=SUM(B5:B7)` points to the Total income cell (B8).
- `=B17` points to the Total expenditure cell (B16).
- `=SUM(B5:M5)` points to the Total cell in column N (N5).
- `=SUM(B10:B15)` points to the Total expenditure cell (B16).
- `=B3+B8-B16` points to the Balance c/f cell (B17).

	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
Balance b/f	540.00	130.00	(10.00)	(200.00)	60.00	(280.00)	(420.00)	(180.00)	(450.00)	910.00	1,120.00	630.00	
Income													
Membership subscriptions	300.00				300.00			300.00					900.00
Ticket sales				400.00			400.00			400.00			1,200.00
Grant								1,500.00					1,500.00
Total income	300.00	0.00	0.00	400.00	300.00	0.00	400.00	300.00	1,500.00	400.00	0.00	0.00	3,600.00
Expenditure													
Admin	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	480.00
Rehearsal costs	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00			1,000.00
Concert hall hire					450.00			450.00					1,350.00
Printing tickets and posters			50.00		50.00					50.00			150.00
Insurance	70.00												70.00
Music	500.00												500.00
Total expenditure	710.00	140.00	190.00	140.00	640.00	140.00	140.00	590.00	140.00	190.00	490.00	40.00	3,560.00
Balance c/f	130.00	(10.00)	(200.00)	60.00	(280.00)	(420.00)	(180.00)	(450.00)	910.00	1,120.00	630.00	590.00	

Cash flow forecast evaluation (page 26)

- 1 a The spreadsheet produces perfectly accurate results for all calculated values.
 - b I know that the results are accurate because I compared the values produced by the formulae (shown on the sheet headed 'Testing') with the original values that Brian had calculated. Since the two sets of results were the same, I can assume that the spreadsheet is producing accurate answers.
- 2 a The formulae used on rows 3, 8, 16 and 17 and in column N ensure that, as the data entered in the spreadsheet changes, results are automatically updated.
 - b The printout headed 'Formulae' shows the formulae that have been used to update results automatically and the printout headed 'Insurance' shows that when the insurance amount is changed the spreadsheet automatically updates all dependent values.
- 3 a The spreadsheet was completed on the 16 November. This was too late for the meeting but, now that the spreadsheet has been set up, it will be possible to use it in future years. Only the data will need to be changed each year.
 - b My teacher signed the work on this date.
- 4 a The spreadsheet easily allowed the effect of moving the music payment from September to April to be investigated. The value entered for September was deleted and re-entered in the April column. All the values affected by this change automatically updated so that the result of the change could be seen immediately.
 - b The printout headed 'Music' shows the effects of the change. It can be seen from this that delaying the purchase of music until April produces a positive cash flow for every month except April.