Guidance on information and communication technology, level 2, Part A

Part A

YOU NEED TO KNOW HOW TO:

- identify errors *(eg in hardware and software you are using)* and their causes
- observe copyright and/or confidentiality when it is necessary
- how to minimise health risks
- how to minimise risks from viruses
- send and receive email

Find and select information

- identify suitable sources of information *(eg written documents, material to be scanned, files, CD ROMs, the Internet)*
- search for information using multiple search criteria *(eg using AND or '<' and '>', or tools such as search engines)*
- interpret information and select what you need for different purposes *(eg to respond to an enquiry, write a project report, design or make something).*

Develop information

- enter and combine information *(eg copy and paste or insert text, images and number)*, using formats that help development *(eg using table structures, text boxes or text wrap to position information)*
- develop information in the form of text, images and numbers *(eg organise information under headings, structure tables, generate charts and graphs from data, use queries to select records)*
- derive new information *(eg compare information from different sources to reach a conclusion, use formulas to calculate information such as a total or average).*

Present information

- select and use layouts and techniques to suit different tasks *(eg document structures such as indents, columns and headings, borders for images and text, tables, highlight information to improve its impact, make sure it suits the needs of the audience)*
- develop the presentation to suit your purpose and audience and the types of information used ie. text, images and numbers *(eg format information to improve its impact, refine layout making sure it suits the needs of your audience)*
- present information in a consistent way *(eg paragraph layouts, sizes and styles of text, alignment, fonts).*
- ensure your work is accurate and clear.

Information and communication technology: level 2

General guidance on use of ICT

Time should be spent with candidates discussing the pros and cons of using information and communication technology for various tasks and operations, and health and safety issues. When using software applications, candidates should be encouraged to try out various techniques and alternative approaches. When using hardware, candidates should be aware of, and observe, safety requirements of the equipment they are working with. This includes safe working periods with monitors, using equipment for an appropriate purpose, and correct procedures when closing

down programs (where they exist). At this level, candidates are not expected to deal with equipment failures or significant errors, but should know where to turn for help and understand the importance of reporting problems immediately. Candidates should know how to use help facilities such as help screens and wizard facilities, to learn new things and overcome difficulties. They should also know how to send and receive emails.

Candidates should know how to save their work in ways that make it easy to retrieve later. This requires use of suitable file names (eg those which give an idea of content, ownership, sequence and placing information in, and retrieving information from, appropriate folders/directories.

You need to know how to – *find and select information*

- ***Information sources*** Candidates should be able to think ahead about the information they need for a specific purpose, eg to respond to an enquiry, tackle a problem or get ideas for a design, and identify where they might obtain this information.
- ***Search*** Candidates should know how to conduct appropriate searches, depending on the type and location of the information. They should be capable of using multiple criteria. For example, when interrogating a database, they should know how to refine a search using two or more criteria (eg all males over the age of 65).
- ***Interpret*** Candidates should know how to read and understand different types of information (numerical data, images such as graphs and charts, text, such as letters, reports), so they can spot possible error or bias, and check facts, in making judgements on whether information suits their purpose.

You need to know how to – *develop information*

- ***Enter and combine*** Candidates should know how to combine different forms of information (eg text with images). They should be able to enter information in a form that suits the software and future development.
- ***Formats*** Candidates should know how to use formats that are helpful in handling information that has been entered, or imported from other sources. For example, they should know how to lay out text using tabulation, justification, spacing and supplied styles, incorporate images into frames and put data into tables or columns, so as to make future editing of information as straightforward as possible.
- ***Develop/derive new information*** Candidates should know how to use appropriate software features for editing and changing the way information is organised. The processing of data will generate new information, such as totals, page references and indexes. Candidates should be able to further their purpose, eg use formulae for making calculations, draw their own conclusions.

You need to know how to – *present information*

- ***Layouts*** Candidates should know how to select and use layouts that are suitable for presenting combined information, including the basic conventions applied to commonly used documents (eg letters, spreadsheets, tables). They should know how to use headings, margins, columns, tables and borders for presenting text and images, and formatted spreadsheets for presenting numerical data.

- ***Presentation*** Candidates should know the importance of checking that their work is presented in a consistent way and both accurate and clear. In developing their presentation, they should be familiar with techniques that improve the look of material, such as highlighting. They should know how to save their work in ways that make it easy to retrieve, eg by using suitable filenames (so as to give an idea of content, ownership or sequence) and appropriate folders or directories.

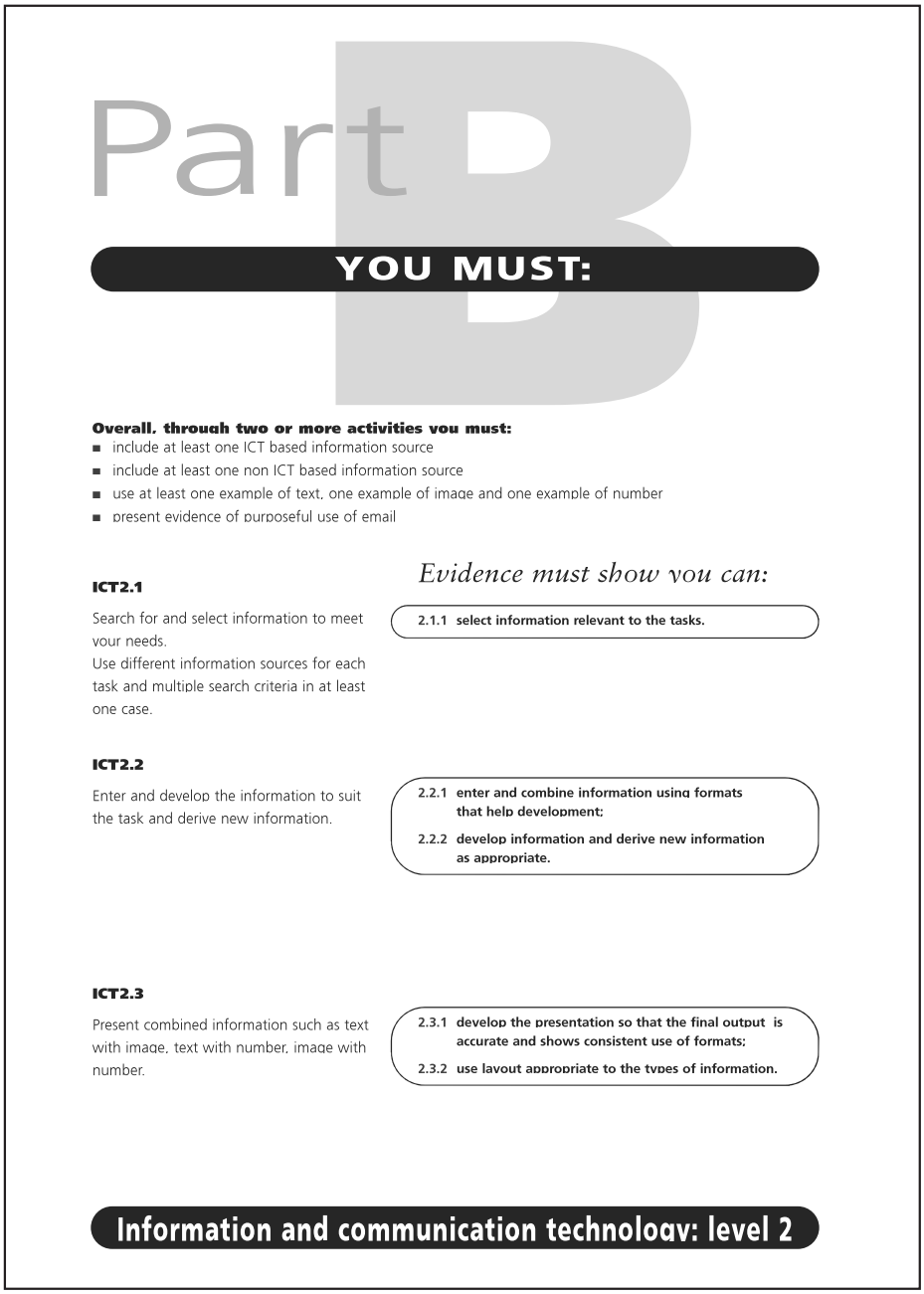
Guidance on internal assessment for information and communication technology, level 2, Part B

Examples

ICT2.1:
conducting searches using a CD-ROM database or website(s) on the internet to find information to inform purchases or travel plans, locate relevant information for a task, debate or assignment, eg on local and national use of NHS resources.

ICT2.2:
investigating travel arrangements and producing a table showing modes of transport and costs; drafting a multi-page essay; exploring sales data over a period of time to produce a graph; entering data readings in a suitably formatted spreadsheet, and manipulating this data to calculate totals or averages.

ICT2.3:
a memo or e-mail with a table attached on travel arrangements; an essay including statistical information to support an argument; a report with a graph showing findings from an investigation; an illustrated information leaflet; an invoice with a covering letter; a workplace notice, with graphics; a screen display showing a design for a product or a working model.



At level 2, subject matter and materials should be those that are commonly met in the context in which candidates are working or studying, and tasks should be of a straightforward nature. Evidence is required that shows the processes the candidate has used in selecting, entering and developing information, not just the final products. Where the development process involves revising, correcting, redrafting or reformatting work, evidence might be in the form of: draft or rough work; notes; annotations; highlighting; or alterations. Alternatively the evidence might be a signed statement from the person who has witnessed the process providing sufficient detail

(as outlined in the guidance). Where witness statements are used, there should normally be supporting evidence in the form of notes or plans, or the final work itself, or evidence that the assessor has been able to discuss the detail of the process with the candidate.

In building on skills at level 1, candidates should be able to derive new information from these processes, as well as use multiple criteria in searching for information, and present combined information in a consistent way. The portfolio must contain evidence of purposeful use of email as part of at least one of the tasks.

In common with all key skills, candidates should demonstrate their information and communication technology skills in relevant contexts through purposeful activities. The candidate is required to use ICT for at least two different tasks. Demonstrating the ICT key skill in itself is not sufficient as a purpose. The assignment brief or task, or the evidence itself, should indicate what the candidate set out to do, the purpose and the outcome expected. Portfolios must contain at least one ICT based information source and one non-ICT based information source. Whilst relating the three components in a single task is often more meaningful, they do not have to be related to the same task, but work must be set in context and not be stand-alone exercises. For each component the two tasks must differ in significant aspects.

ICT2.1 The candidate must identify suitable sources of information and show that she or he can search for and select relevant information. Assessors should look for evidence (either through observing the candidate or by looking at search records) that the candidate can use multiple criteria for making searches. The relationship between the information selected and purpose should be clear. The sources used should be noted, along with the scope and nature of the searches, and their outcomes.

ICT2.2 The candidate must show that she or he can enter and combine information, develop information, and derive new information. In particular, assessors should look for evidence (eg annotated drafts, answers to questions) that the candidate has entered text and numbers consistently and used formats such as styles that have assisted the subsequent development of information, and has added some new information of her or his own to that obtained from other sources.

ICT2.3 The candidate must show she or he can select and use an appropriate layout for presenting combined information in an integral way, such as text with images or numbers, images and numbers, or all three types together. Assessors should look for evidence of how the candidate has developed the presentation and its suitability for the purpose and the types of information used. The final work must be accurate, clear and saved appropriately.