



INFORMATION AND COMMUNICATION TECHNOLOGY

SCQF Level 4 40 Hour Unit (F3GC 10)

CORE SKILLS ASSESSMENT SUPPORT PACK

Part 1: Information for tutors

What is involved?

This Unit is about using straightforward information and communication technology (ICT) to access, process, and present information in personal, workplace, social, and educational situations. The focus of the Unit is on transferable ICT skills:

- using computer systems
- using applications software
- finding information from electronic data sources

At this level, learners are expected to be able to work with a computer system to carry out some straightforward processing tasks. They may need some help with technical terminology, but should be able to use the computer effectively with a degree of independence and be able to carry out tasks within a reasonable timescale.

Learner motivation can be maximised by making the ICT activities as relevant as possible to the learner's likely uses for ICT. The activities should be drawn from the learner's personal, workplace, social, or educational situation. In addition, integration of the ICT activities with those of other SQA qualifications being undertaken should be explored. For example, when a learner is undertaking other National Qualifications, motivation for ICT can be increased if the activities are related to these National Qualifications and the learner can see the direct relevance of the ICT. If you do decide to adopt this approach,

separate records of assessment decisions must be kept for this Unit and evidence for this Unit should be clearly accessible.

Assessment and evidence

Assessment is likely to use a combination of observation and learnerproduced supporting evidence (product evidence) such as print outs, screenshots, and files.

You should try to identify naturally occurring opportunities for assessment where possible. For learners who are also working towards vocational or subject-specific Units, opportunities for assessment of ICT skills could arise while completing tasks that provide evidence for both the vocational/subject-specific Unit and this Unit. Some of the exemplars in this pack could be used or contextualised for this purpose.

When you are assessing by observation, it is essential to keep a detailed checklist. When you are assessing by oral questioning, you must keep a copy of the questions asked and the answers given.

All items of evidence should be signed and dated, by you.

Part 3 of this pack supplies exemplar forms that you can use to record successful completion of each of the Unit tasks. You can sign and date these as the learner achieves each task to keep a record of the learner's progress.

Planning

You should work out where opportunities for meeting the standard are likely to arise. Where possible this should be built into the assessment process. You should discuss this assessment process with the learners so that they are quite clear about what is expected from them.

Guidance on the Unit

What learners need to know or be able to do

The Unit states that learners will:

- select and start up applications software that is suitable for the activity they are doing (eg word processing, spreadsheet, database, media packages)
- use straightforward tools (eg file manager, print manager, control panels)
- name and organise folders and subfolders
- enter and, if required, edit data using appropriate applications software
- locate information in different formats (eg text, numbers, graphics, video, audio) from a range of local or remote data sources (eg the internet, CD-ROM, intranet, own computer)
- use appropriate search techniques (eg choice of keywords, phrases within quotes, find tools)
- select information that matches criteria (eg date of information, UK information, media type)
- present information in an appropriate mode (eg display on screen, print out, play an audio file)
- recognise security risks and act accordingly (eg keep own login and password secure; take precautions when online)

At SCQF level 4 learners may need help to ensure that they are familiar with four general areas of ICT. These are detailed overleaf.

(i) ICT operations

Here learners have to show ability in interacting with the operating system. This provides the user interface, allowing application software to be run and files to be manipulated. The learners must be able to carry out the following activities effectively:

- select and start up the appropriate software for a given task
- use straightforward tools (eg file manager, print manager, and control panels)
- set up and maintain an organised folder structure
- present information in appropriate output modes (eg screen display, print, playing of multimedia files).

(ii) Processing information using ICT

This part of the Unit can be based on any applications software, provided that the chosen application allows icon-, button-, or menu-based operation. Learners must be able to:

- use icons, buttons, or menus to choose computer operations
- select the appropriate application for the activity
- enter and, if required, edit/manipulate data in the application
- present the resulting output (display on screen, print out, or play as an audio file).

Learners must produce their tasks within a reasonable timescale, accurately, and with results meeting the desired purpose.

(iii) Accessing information using ICT

At SCQF level 4 learners have to carry out a number of straightforward searches or one sustained search. If you decide to use straightforward searches, it is reasonable to expect learners to show proficiency in carrying out four searches. Even for the straightforward searches, learners are expected to use techniques to filter their search results with appropriate criteria. This is a level above just typing in one search term to generate the results.

For example, when using search engines, learners might use quotation marks to search for exact phrases or include additional keywords to narrow the search. There must also be an element of inspecting the results, and only appropriate ones should be chosen by the learners. As an example, it may be necessary to choose results applying only to the UK (vital in searches on policy or with legal implications). Although the search terms might include 'UK', learners still need to inspect the results carefully.

If learners carry out four straightforward searches, they should be from different sources or use different search criteria. The searches could all involve using a search engine but not more than one should be a search to find a postal address. The searches do not need to be related in any way. A sustained search, while still showing some variety in criteria or sources, will consist of searches that are combined to give a result. Learners will see all the searches as part of a single task.

Searching need not be limited to the internet. It can be related to information held on the learner's own machine, a CD ROM, or on a local database. The information sought need not be text based and could be graphical or multimedia based.

The resulting information should be presented by learners in the appropriate manner, eg displayed on screen, as a print out, or the playing of an audio file.

(iv) Keeping information safe

Learners must demonstrate safe practice with the information that they handle. The most important point is likely to be password security. This can prevent personal identity theft for learners and keep confidential information safe by preventing unauthorised access to files on the systems they are using. The online world brings additional problems for keeping information safe. Learners should demonstrate safe practice, such as looking for the secure padlock on shopping sites and recognising potentially dangerous e-mail attachments.

In some cases learners will be automatically restricted in the types of information they can access. It is important that they understand what they are allowed to access and what they are permitted to do with the information. For example, they may be allowed to view but not alter, certain files. They may only be allowed to use a limited range of software out of what is actually available on the computers. If they perceive a need to step outside these constraints, they must ask permission before proceeding.

Gathering evidence

It may be appropriate for you to gather written evidence produced by the learner while carrying out the practical activities. However, written evidence is not essential for this Unit and is inappropriate if it disadvantages the learner.

You may wish instead to use oral questioning. This requires you to create and complete record sheets comprising a checklist, questions asked, and learner responses.

From the learner's point of view, it is useful to have the means of keeping all the work of this Unit together. You can help here by creating and providing a workbook that includes all the evidence-gathering items. An alternative would be to provide worksheets that can be made into a paper based or e-portfolio.

If you have chosen to integrate the ICT work with that of other Units being undertaken by the learner, it may be possible to assess the ICT as part of a larger single activity. In this case you must keep separate records for this Unit.

The Unit requires learners to carry out ICT tasks that involve accessing and processing information. This may be achieved in many ways. Some typical activities might be:

- producing a short report with graphics using word processing software and e-mailing this to a friend/colleague as an attachment
- using search engines to find information on the Internet to plan a community group trip and printing this off as hard copy
- calculating the cost of a children's party using spreadsheet software
- setting up folders and sub-folders to store course assessments
- customising a PC desktop to suit needs at home or at work

It may be possible to create a single activity that would provide evidence for the whole Unit. However, this may not be appropriate for your learners. An alternative approach might be, for example, to use four tasks. Each task could cover one of the areas discussed in the previous section.

These are:

- ICT operations
- Processing information using ICT
- Accessing information using ICT
- Keeping information safe

Disabled learners and/or those with additional support needs

The additional support needs of individual learners should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements.

Part 2: Assessment guidance

You can use the exemplar assessments given in this section in several ways:

- to help identify the type and the amount of evidence that the learner needs to produce
- to help identify the level of complexity in evidence required for the Core Skill at this level
- to help you create an assessment task related to the learner's own situation

You can use the following information to create task sheets to be used with the learners in assessment sessions. The task sheet will contain the assessment items and you can leave appropriate space for the learners to insert their responses.

Learners must complete all four tasks.

Task 1 is designed to cover ICT operations.

Task 2 is designed to cover processing information using ICT.

Task 3 is designed to cover accessing information using ICT.

Task 4 is designed to cover keeping information safe.

For each of the tasks, successful completion should be noted on a checklist.

Task 1: ICT operations

This task covers the Unit requirements to:

- select and start up applications software (eg word processing, spreadsheet, database, media packages) that is suitable for the task
- use straightforward tools (eg file manager, print manager, control panels)
- name and organise folders and sub-folders
- present information in an appropriate mode (eg display on screen, print out, play an audio file)

You should be able to assess the learners for this task by observation. The activities for the other tasks will normally require the learners to carry out these points. You can create a learner task sheet to remind the learners what is to be assessed. As an example you could use the following as a basis:

Over the next weeks, your tutor will observe your performance in ICT operations. You may be asked questions about what you are doing and your tutor will ask to see the folders you keep on your computer.

Your tutor will want to make sure that you:

- can select and start up the correct software for the tasks you carry out
- can use straightforward tools correctly (eg file manager, print manager, control panels)
- have a well-organised folder system with appropriate names used throughout
- are able to present information in the appropriate way, eg printed or displayed on screen, and use multimedia files correctly

Your tutor will make it clear to you the time period over which this assessment is to take place.

You should certainly give warning that you are going to be assessing the four points. For example, you can let learners know that you will be inspecting their personal folder structure during the next week. If any of the points are not observed by you as the learners are carrying out their activities, you can make a point of asking them to demonstrate the point to you, for instance to use the print manager.

Task 2: Processing information using ICT

This task covers the Unit requirements to:

enter and edit data using appropriate applications software

Learners should be familiar with at least one software application with which they must carry out a processing exercise. In some cases the choice of application will arise naturally from the learners' personal, workplace, social, or educational situations.

For each context below, three examples are given. Learners need complete successfully only one of the examples for this task.

Personal/social context

- 1 Use spreadsheet software to record household costs on a weekly basis for one month. This is to be printed out.
- 2 Use image manipulation software to process a photograph taken with a digital camera. The picture has come out too light. The result is to be displayed on a computer monitor.
- 3 Use desktop publishing software to create an A4 poster. Copies of the poster have to be printed out as they are to be placed in local shop windows to publicise a fundraising event.

Educational context

- 1 Use word processing software to create a report for a history investigation. The report is to be printed out.
- 2 Use spreadsheet software to create a table of results from readings taken during a physics experiment. Five sets of six pressures have to be recorded and averaged. The completed table is to be printed out.
- 3 Use presentation software to create a set of slides to be used in a final presentation for a group project. The result will be displayed on a screen using a projector.

Workplace context

- 1 Use desktop publishing software to create an A3 poster. This is to be used in an advertising campaign publicising safety in the workplace. The poster will be printed out.
- 2 Use spreadsheet software to record the unit cost, number used, and line cost of six giveaway items used in an advertising campaign to promote a new product. The result should be displayed on a computer monitor.

Use word processing software to type a letter informing a client that one of the items ordered is no longer produced and that your company is able to offer a similar alternative that is 10% more expensive. The letter, which will use the company template, is to be printed out.

Here are some suggestions on the complexity and quantity of information to be processed:

- Word processed documents should be of a minimum length of half an A4 page and consist of more than one paragraph. Workplace documents should be to the standard of the particular workplace.
- Spreadsheets should consist of at least two columns and three rows of data. The use of at least one formula should be evident.
- Presentation software should consist of a minimum of three slides. Varying text sizes should be used.
- Desktop publishing of posters should include formatted text with some graphical content.

You can create a learner task sheet using the above information to give to the learners and then observe their performance.

Task 3: Accessing information using ICT

This task covers the Unit requirements to:

- locate information in different formats (eg text, numbers, graphics, video, audio) from a range of local or remote data sources (eg the internet, CD-ROM, intranet, own computer)
- use appropriate search techniques (eg choice of keywords, phrases within quotes, find tools)
- select information that matches criteria (eg date of information, UK information, media type)

This area of the Unit can be covered in many different ways, ranging from a purely search engine information task to the use of a workplace database. There can either be four straightforward searches or one sustained search.

Here are some examples:

Personal/social context

In planning a trip for disadvantaged children, four aspects have to be researched. Use the internet to find:

- a local coach operator to transport the children to the chosen location
- a supplier who can provide a picnic at the chosen location for the number of children involved
- a website that gives a weather forecast for the chosen location
- outdoor games suitable for a group of children of the appropriate age

Educational context

Use the internet to find:

- a description of a historical figure, eg King James I of Scotland
- the volume in litres of a US gallon
- the molecular structure of a hydrocarbon, eg toluene
- a sound file to play a given tune, eg the Russian national anthem

Workplace context

Here a local database could be used to select particular types of clients in order to target them more effectively with advertising literature. In a pilot study, the learners might use the client database to select 10 clients from groups such as:

- clients based in the local town
- long-standing clients who placed orders in 1990
- distant clients outwith the UK
- clients who have ordered during last month

You can create a learner task sheet using the above information to give to the learners and then observe their performance.

Task 4: Keeping information safe

This task covers the Unit requirements to:

 recognise security risks and act accordingly (eg keeping own login and password secure; taking precautions when online)

This area of the Unit can be assessed by discussion with the learner or by the learner answering questions under test conditions. You are looking for suitable responses to questions about login security and online precautions.

Here are two suitable types of question:

- 1 What should you look out for which may make you suspicious about received e-mail?
- What sort of precautions should you be taking if you use the internet for commercial transactions?

In the first question you are looking for answers referring to:

- unknown correspondents
- unexpected e-mail from known persons
- attachments, especially executables

In the second question you are looking for answers referring to:

- choosing user IDs and passwords to include some complexity, eg using upper case letters and digits
- checking for a padlock sign showing a secure connection

You can create a learner task sheet using the above information. If you choose to have a discussion with the learner, introduce each of the topics and make a note of the responses on the sheet.

Part 3: Exemplar recording documentation

This section provides sample forms that can be used by learners and tutors to gather evidence and record assessment decisions.

If you have created task sheets, as described in Part 2, they can be used as an assessment record sheet to be completed by the learner directly or used by you to note the result of the discussions with the learner.

There is an assessment checklist for each of the tasks to be completed, signed, and dated by you.

The final form is a summary checklist recording Unit progress to be completed, signed, and dated by you.

Assessment checklists

Learner:

Task 1: ICT operations

- Select and start up applications software (eg word processing, spreadsheet, database, media packages) that is suitable for the task
- Use straightforward tools (eg file manager, print manager, control panels)
- Name and organise folders and sub-folders
- Present information in an appropriate mode (eg display on screen, print out, play an audio file)

out, play an audio file)			
Activity		Achieved (tick)	Tutor initials and date
1 Selects and starts up the correct so	ftware		
Comments			
2 Uses straightforward tools correctly			
Comments			
3 Organises folder system with appronames	priate		
Comments			
4 Presents information in the appropriate way			
Comments			
Date of completion:	Tutor signa	ature:	

Learner:			
Task 2: Processing information using ICT			
Enter and, if required, edit data using appropriate applications software			
Activity		Achieved (tick)	Tutor initials and date
1 Enter/edit data			
Comments			
Date of completion:	Tutor signature:		

Learner:

Task 3: Accessing information using ICT

- Locate information (eg text, numbers, graphics, video, audio) from a range of local or remote data sources (eg the internet, CD-ROM, intranet, own computer)
- use appropriate search techniques (eg choice of keywords, phrases within quotes, find tools)
- select relevant information that matches criteria (eg date of information, UK information, media type)

Activity		Achieved (tick)	Tutor initials and date
1 Four straightforward searches or or sustained search completed success appropriate techniques			
Comments			
2 Relevant information selected that matches the criteria			
Comments			
Date of completion:	Tutor signature:		

Learner:			
Task 4: Keeping information safe			
 Recognise security risks and act accordingly (eg keeping own login and password secure; taking precautions when online) 			
Activity	Achieved (tick)	Tutor initials and date	
1 E-mail security risks recognised and appropriate actions identified	t		
Comments	·		
2 Online security risks recognised and appropriate actions identified	d		
Comments	·		
Date of completion:	Tutor signature:		

Summary checklist

Learner:		
Learner number:		
Centre:		
Task	Date achieved	Tutor signature
1: ICT operations		
2: Processing information using ICT		
3: Accessing information using ICT		
4: Keeping information safe		

ADMINISTRATIVE INFORMATION

Credit value

6 SCQF credit points (1 SQA credit) at SCQF level 4



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