National Unit Specification: general information

UNIT Information Literacy Skills (SCQF level 5)

CODE F1P3 11

SUMMARY

This Unit is designed to develop skills and expertise in handling information for personal, vocational or study purposes. It develops familiarity and user confidence in accessing a range of sources of information and provides an opportunity to develop practical skills and techniques, including critical evaluation that may be applied to any information related task.

This Unit is suitable for candidates with little previous experience of information literacy skills. It is suitable for candidates who are undertaking an information task as part of a study programme in any discipline.

OUTCOMES

1 Plan an information task.
2 Identify and search a range of information sources for use in the chosen information task.
3 Evaluate the information found.
4 Review the effectiveness of the information searching process and suggest possible improvements.

RECOMMENDED ENTRY

Entry is at the discretion of the centre. However, it would be beneficial if candidates had basic computing and IT skills and oral/written communication skills.
National Unit Specification: general information (cont)

UNIT Information Literacy Skills (SCQF level 5)

CREDIT VALUE

1 credit at Intermediate 2 (6 SCQF credit points at SCQF level 5*)

*SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.

CORE SKILLS

There is no automatic certification of Core Skills in this Unit.

The Unit provides opportunities for candidates to develop aspects of the following Core Skills:

- Information Technology (SCQF level 5)
- Communication (SCQF level 5)
- Problem Solving (SCQF level 5)

These opportunities are highlighted in the Support Notes of this Unit Specification.
National Unit Specification: statement of standards

UNIT Information Literacy Skills (SCQF level 5)

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit Specification. All sections of the statement of standards are mandatory and cannot be altered without reference to the Scottish Qualifications Authority.

OUTCOME 1

Plan an information task.

Performance Criteria

(a) Scope and clearly define the topic for the given information task.
(b) Adopted a suitable strategy to identify appropriate keywords for the topic.
(c) Prepare an appropriate action plan for the given information task.
(d) Apply the stages of the planning process to the given information task.

OUTCOME 2

Identify and search a range of information sources for use in the given information task

Performance Criteria

(a) Identify a range of different sources to be used with the given task.
(b) Perform searches to find relevant information using the identified sources.

OUTCOME 3

Evaluate the information found

Performance Criteria

(a) Identify evaluation criteria which are appropriate to the nature of the given information task.
(b) Evaluate the information found using the identified criteria.

OUTCOME 4

Review the effectiveness of the information searching process and identify possible improvements

Performance Criteria

(a) Review the action plan and selected keywords in relation to the evaluation of the information found.
(b) Review the information sources and search methods used in relation to the results produced.
(c) Identify improvements in the information searching process for a similar future task.
EVIDENCE REQUIREMENTS FOR THIS UNIT

Evidence is required that candidates have achieved all Outcomes and Performance Criteria.

Candidates are encouraged to use the Internet for research and obtaining information. However, the evidence that is produced must be in the candidate’s own words in line with the centre’s plagiarism policy.

Written and/or oral recorded evidence is required which demonstrates that the candidate has achieved the requirements of all of the Outcomes and Performance Criteria to show that the candidate has appropriate knowledge and understanding of the content of this Unit.

A candidate activity log will show that the candidate has completed all of the tasks. An assessor must endorse each candidate activity log with the candidate’s name, their name, signature and the relevant date(s).

The candidate activity log will document all the activities related to an information task requiring the searching of at least six information sources. These six sources will be taken from at least two of the three types; paper, people and electronic. This evidence will be gathered under supervised open-book conditions. The evidence may be produced over an extended period of time.

The candidate activity log will demonstrate that the candidate can:

- Scope a given information task applying the different stages of the problem solving process. The planning of the task will involve the following:
  - Clearly defining the topic for the information task
  - Identify at least three appropriate keywords for the topic
  - Preparing an action plan to be used for the information task.

- Identify a minimum of six suitable information sources which must include at least two different sources from each of the following:
  - Paper
  - People
  - Electronic.

- Perform searches on the selected sources to find relevant information on the chosen topic
- Identify at least two evaluation criteria appropriate to the nature of the information task.
- Carry out two evaluations taken from different information types (ie paper, people and electronic).
National Unit Specification: statement of standards (cont)

UNIT Information Literacy Skills (SCQF level 5)

♦ Review the effectiveness of the information searching process in relation to the results produced and suggest at least one possible improvement in relation to at least two of the following:

— The action plan
— Selected keywords
— Information sources
— Search methods used
National Unit Specification: support notes

UNIT Information Literacy Skills (SCQF level 5)

This part of the Unit Specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT

This Unit is designed to develop skills in the accessing and evaluation of information from different categories of information source: paper, people and electronic. The information task can be based on any investigation relevant to the candidate’s work, leisure or study activities. However, the preferred approach is for the learning to be achieved in relation to an information task being studied by the candidate. The assessor should provide a candidate with the relevant topic.

Outcome 1

The candidate should be provided with the topic for investigation. The first part of the information task is to scope the topic so that it is clearly defined.

Keywords are used in both electronic and paper source searching. Learning input is required to cover the keyword concept and how keywords may be identified. Essentially a long description of the topic needs to be reduced to a small number of words, all essential to define the concept precisely.

Other points to include are:

- use of synonyms
- dealing with ambiguous words
- need for single keywords (for example, when dealing with indexes to paper sources).

The planning stages may be thought of in terms of the questions:

- WHY are you doing the task?
- WHAT is required of you to achieve the task?
- HOW are you going to do the task?
- WHICH resources do you require for the task?
- WHO can help you with the task?
- WHERE are you going to do the task?
- WHEN are you going to do the task?

Once these stages have been completed then it is possible for the candidate to draw up an action plan. This may be in the form of a narrative, a table or a simplified Gantt chart outlining a schedule.
National Unit Specification: support notes (cont)

UNIT Information Literacy Skills (SCQF level 5)

Outcome 2

The candidate should be provided with information to cover different types of information sources, eg

- Books and leaflets
- Newspapers, journals and magazines
- Dictionaries
- Encyclopaedias
- Atlases and maps

It will be necessary to cover the likely content of each of these, common layouts and arrangements and how to search for information within these sources, using such aids as tables of contents and indexes. Alphabetisation should be covered here, with specific emphasis on indexes and page headings.

Electronic sources include:

- CD-ROMS
- Internet and WWW
- Search engines, directories and portals
- Discussion lists/groups

Information on electronic sources should be provided to the candidate. This would include advantages and disadvantages of each type of source; effective search methods within a source (eg combining of search terms using Boolean operators, use of advanced search facilities).

People can be consulted as a source of information because they:

- are experts on a topic
- have experience of the topic
- have opinions on the topic.

Information provided will cover both identifying appropriate people to act as sources of information and the techniques for gaining information in a face-to-face situation or remotely. The use of people sources can involve meeting someone, holding a discussion with them over the telephone or communicating via e-mails or letters.

A candidate should have a good understanding of common courtesy to potentially busy people giving their time for the candidate, good preparation so that pertinent questions can be set at the interview and careful note taking at meetings so that all relevant information is recorded.

The candidate should use several different sources to find information for the task. The assessment requirement is at least six different sources. These should be taken from the three source types - paper, people and electronic.
National Unit Specification: support notes (cont)

UNIT  Information Literacy Skills (SCQF level 5)

The candidate needs to be able to develop a search strategy. This covers choosing sources most likely to yield good results and deciding on the order in which the chosen sources are searched.

Outcome 3

The need for evaluating the information found in the task should be explained to the candidate. It is particularly important to demonstrate to the candidate how some apparently useful information can be unreliable. Although the most obvious examples of unreliable information are likely to be found on the Internet, it is important to show that paper and people sources can also be unreliable.

For any given information task, a set of criteria should be set up to judge the information in the following areas:

♦ Suitability
  — close match between the information and the topic area
  — depth of the information
  — language level of information

♦ Currency
♦ Reliability
  — accuracy
  — authority
  — lack of bias
  — authenticity

Each piece of information found can then be evaluated using the chosen criteria.

Outcome 4

Outcome 4 involves a review of the whole information task process. Outcome 3 deals with evaluation of the information being found. At that point the information task itself is complete and the candidate must prepare to review the effectiveness of the whole task and identify improvements for carrying out similar tasks in the future.

Each step in the information task should be reviewed by:

♦ evaluating its contribution to the result
♦ noting changes made during the task
♦ describing possible improvements.

Suggested changes could include the use of different keywords, sources of information and/or search strategies.
GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

Owing to its generic nature this Unit could be used with an appropriate associate Unit. The Unit could therefore be undertaken on its own (as a stand-alone Unit), or integrated with another Unit which requires a candidate to research information about a particular subject.

Candidates would benefit from the delivery of a combination of face-to-face, tutor-led and independent study. However a practical, hands-on approach to learning should be adopted with the emphasis on learning-by-doing. Terminology and underpinning knowledge should be introduced in a practical context.

Candidates will require access to a wide range of information sources. Assessors should therefore be familiar with their own organisation’s information resources and be willing to work with library and/or learning resource personnel. This collaboration will help the candidate to access the necessary information sources and to develop the required skills and techniques.

Throughout this Unit, candidate activities should relate to their personal, vocational or study interests. For example, candidates should be permitted to choose topics, which reflect their interests, or agreed curriculum needs, rather than prescribed topics chosen by their assessor. Their search for information and suitable information sources should be genuine (rather than contrived) and provide some relevant information on the subject/topic which the candidate can actually use.

The Unit has been constructed so that the Outcomes should be dealt with in the order they appear as they lead on logically from one to the next. The recommended approach is for the candidate to:

♦ access learning material for the four Outcomes taken in order
♦ access appropriate and candidate relevant examples and exercises
♦ undertake the information task associated with assessment.

Outcome 1

This Outcome relates to the skills and techniques needed to plan an information task effectively. This includes the scoping of the topic and a list of appropriate keywords, which will then subsequently be used in Outcome 2 to find relevant information on the candidate’s chosen topic. The range of planning techniques could include brainstorming, mind mapping (also known as spider diagrams or concept maps) or any other suitable technique.

One planning process which may be used has seven stages in which candidates are encouraged to think about what they are doing, why they are doing it, how they are going to do it, where and when it will be done, which resources will be required and who can give the most help. However there are several other planning models that are equally acceptable.
National Unit Specification: support notes (cont)

UNIT Information Literacy Skills (SCQF level 5)

Outcome 2

This Outcome relates to the wide variety of information sources that are available. To find relevant information on any given topic a candidate must know the three types of information source (paper, people and electronic), the advantages and disadvantages of each and also where they are located and how to use them.

The required tasks ensure that the candidate can demonstrate their knowledge of the different information source types and can make informed use of a variety of sources in order to find relevant information on their chosen topic effectively. This encourages the candidate to know about and use more than one source of information. This avoids candidates relying simply on a single search engine.

Possible information sources could include:

- Electronic sources — the World Wide Web (including search engines, directories, portals, databases, library catalogues and discussion lists/groups), databases and CD-ROMs
- People sources — people and organisations eg library and information staff, tutors, assessors, managers, voluntary organisations, companies or subject specialists.
- Printed sources — books, dictionaries, encyclopaedias, journals/magazines, newspapers, leaflets, atlases and maps.

It is worth looking at the advantages and disadvantages of the three types which include accessibility (including ease of use), reliability (including accuracy, authenticity and bias) and currency.

This Outcome also relates to search strategies used. The required tasks ensure that the candidate can demonstrate use of the chosen keywords (and Boolean terms if appropriate) within different sources of information, using indexes (print and electronic), catalogues, databases, search engines, etc.

Sometimes it is not always obvious which part of the search strategy is not working and it can often be a case of trial and error, or of changing just one aspect of the search strategy at a time rather than changing several aspects all at once. Information searches are seen as circular rather than linear with the search cycle being completed and/or restarted several times using different keywords, Boolean terms and/or information sources in the search for relevant information.

Outcome 3

This Outcome relates to the use of evaluation criteria when choosing and selecting information sources for a specific topic and evaluating information found within them. The required tasks ensure that the candidate can demonstrate their knowledge of a set of evaluation criteria and the ability to use the criteria to judge the information found.
National Unit Specification: support notes (cont)

UNIT Information Literacy Skills (SCQF level 5)

The set of evaluation criteria should include currency, suitability and reliability (including accuracy, authenticity, authority and bias) of the information. There may be other sets of evaluation criteria that are equally acceptable. However, regardless of which set of criteria is used it is important that all elements within the criteria are used to evaluate the information. Candidates must be able to explain their choice of evaluation criteria.

Outcome 4

This Outcome relates to the candidates being able to think about:

♦ the success or otherwise of the results the searching has produced
♦ the steps and processes gone through to produce those results
♦ how the process could be improved in future — either for the same task or a similar task in an other topic.

Some candidates, who already have made their changes or ‘fine tuning’ as they worked their way through each step with successful results, can describe that process and may not have anything further to add.

OPPORTUNITIES FOR CORE SKILL DEVELOPMENT

There may be opportunities throughout this Unit to gather evidence for aspects of Core Skills. This Unit requires that candidates:

♦ Use a computer to carry out electronic searches for information. This may provide opportunities to gather evidence for the Information Technology Core Skill.
♦ Interact with people and record and analyse information which may provide opportunities to gather evidence for the Communication Core Skill.
♦ Plan a task and carry out evaluation of the overall task activities which may provide opportunities to gather evidence for the Problem Solving Core Skill.

GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

It is important to note that, as this Unit is at SCQF level 5, the planned information task and the investigating and evaluating work undertaken by the candidate will be of a straightforward (though not trivial) nature.

The activity log will show that the candidate has completed all of the tasks. An assessor must endorse each candidate activity log with the candidate’s name, their name, signature and the relevant date(s).

Outcome 1

The evidence relating to the skills and techniques needed to identify the topic and the list of appropriate keywords can be recorded in any suitable format eg text, diagram, taped discussion, etc. The identification of the different stages of the planning process could simply be a list of the different stages, or a piece of explanatory text which could be included as an introductory paragraph to the action plan.
National Unit Specification: support notes (cont)

UNIT  Information Literacy Skills (SCQF level 5)

The action plan could be in the form of a diagram, flow chart, mind map, table, simple GANTT chart etc to show how the candidate plans to find information on the topic. This evidence may be supplemented by oral questions where necessary to obtain further information relating to the plan itself (or certain aspects of it) or to clarify the candidate’s thinking.

Outcome 2

The evidence could be presented electronically or in print format, eg

♦ Screen dumps of the keywords (and Boolean terms if appropriate) entered into a search engine search box, with the resulting list of possible websites and the relevant information being highlighted by the candidate.
♦ A copy of the results of a library catalogue or database search alongside the keywords and/or Boolean terms used.
♦ Photocopies of page(s) from a printed source’s index with the relevant entries highlighted by the candidate.
♦ A record of enquiries made with the name of an individual or organisation alongside the results.

Outcome 3

Candidates could compile a list of evaluation criteria and for each criterion provide an explanation of why it is appropriate to their information task.

Candidates could then draw up a table with the details of the information found in a particular source and their evaluation against the chosen criteria.

Outcome 4

Candidates could record the success or otherwise of their chosen keywords, search strategy and choice of information sources in a table. They could then draw up a table with their suggested improvements for each step.

Where necessary this evidence may be supplemented by assessor questioning to obtain the candidate’s reasoning for the suggested changes.

CANDIDATES WITH DISABILITIES AND/OR ADDITIONAL SUPPORT NEEDS

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering alternative Outcomes for Units. Further advice can be found in the SQA document Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs (www.sqa.org.uk).