![Scottish Qualifications Authority logo]

National Unit Specification: general information

UNIT   Information Handling Skills (Intermediate 2)

NUMBER   DF9J 11

COURSE

SUMMARY

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

OUTCOMES

1. Plan an information task.
2. Identify a range of information sources and use them to investigate a chosen information task.
3. Evaluate the selected information.
4. Review search results and suggest possible improvements.

RECOMMENDED ENTRY

While entry is at the discretion of the centre, it would be beneficial if candidates had basic computing skills (such as using a keyboard, mouse, etc.) and good oral/written communication skills. These may be evidenced by the possession of formal qualifications such as relevant National Units or Courses in Computing Studies and/or English at Intermediate 1.

Some prior knowledge or awareness of the different types and uses of information sources (or achievement of the online *Information Handling Skills* course) would also be helpful.

Administrative Information

National Unit Specification: general information (cont)

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
This unit provides automatic certification of the following:

Complete Core Skills for the Unit: Problem Solving Intermediate 2

Additional Core Skills Components for the Unit: Critical Thinking Intermediate 2
Reviewing and Evaluating Intermediate 2
Planning and Organising Intermediate 2

National Unit Specification: statement of standards

UNIT Information Handling Skills (Intermediate 2)

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)   A topic is selected and a range of techniques is used to define it clearly.
b)   A suitable strategy is adopted to identify appropriate keywords.
c)   The different stages of the planning process are identified correctly.
d)   An appropriate action plan is prepared.

Evidence requirements
The candidate must produce/provide:

a)   Evidence to show that s/he has selected and used a range of techniques to define the topic clearly.
b)   Evidence to show that s/he has produced an appropriate list of keywords. Where necessary this evidence may be supplemented by oral questions to establish the strategy used.
c)   Written or oral evidence to show that s/he can identify the different stages of the planning process.
d)   Written evidence of an action plan to show how s/he plans to find information on the chosen topic. This evidence may be supplemented by oral questions where necessary.

OUTCOME 2
Identify a range of information sources and use them to investigate a chosen information task.

Performance criteria
a)   The broad categories/formats of information sources are identified correctly, together with one advantage and one disadvantage of each.
b)   A range of suitable information sources is identified.
c)   The selected information sources are searched effectively to find relevant information on the chosen topic.

Evidence requirements
The candidate must produce/provide.
a)   Written or oral evidence to show that she/he can identify the three broad categories/formats of sources of information and give one advantage and disadvantage for each.
b)   Evidence to show that she/he has selected a range of suitable information sources. The range must include at least **six** information sources made up of **two** different sources from each of the three broad categories.
c)   Evidence to show that she/he has used a selection of appropriate search strategies for the selected information sources and that relevant information has been found.

National Unit Specification: statement of standards (cont)

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This evidence may be supplemented where necessary by oral questioning and/or observing the candidate carrying out a search.

OUTCOME 3
Evaluate the selected information.

Performance criteria
a)   The criteria used to evaluate information are identified correctly.
b)   The criteria are used correctly to evaluate the relevant information.

Evidence requirements
The candidate must produce/provide:
a)   Written or oral evidence to show that she/he can correctly identify criteria that can be used to evaluate information sources. The criteria should be explicit and may be devised by the candidate or selected from an established set of criteria.
b)   Evidence to show that she/he can evaluate the information she/he found. It is not necessary for the candidate to evaluate all the information found however **one** piece of information from **each** of the three broad categories of sources must be evaluated.

OUTCOME 4
Review search results and suggest possible improvements.

Performance criteria
a)   The action plan, selected keywords, information sources and search strategy used are reviewed in light of the results produced.
b)   Appropriate changes for a similar future search are identified.

Evidence requirements
For this **outcome** the candidate must produce/provide:

Written or oral evidence to show what changes or 'fine tuning' (if any) the candidate would make to her/his action plan, keyword selection, information sources selected and search strategy in light of the results produced.

Candidates may use their own evidence from the previous outcomes and add their comments/changes to them.

Where necessary this evidence may be supplemented by oral questions to obtain the candidate's reasoning for the suggested changes.

National Unit Specification: support notes

UNIT   Information Handling Skills (Intermediate 2)

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
Background to the development of this unit - the online course 'Information Handling Skills'

This unit arose as an unanticipated 'by-product' resulting from the development of the material for the online course: *Information Handling Skills.* This online course material is available through Scottish college VLE's and library/learning centre Intranets or downloadable from:
SFEU (Scottish Further Education Unit) http://www.sfeu.ac.uk/sfeu.asp?pageid=2.5.101 or SLIC (Scottish Library and Information Council) www.slainte.org.uk/slic/index.htm

To undertake the online course, candidates do not need any prior information skills and knowledge. However they do need a few basic computer skills such the ability to use a mouse, re-size and close a window and navigate/move from page to page. The *Information Handling Skills* course material shows candidates how to use and retrieve information from a variety of sources and seeks to develop the skills and techniques required for using and evaluating the information found.

This Unit

Because information handling skills are now required in such a wide range of contexts, it seemed appropriate to offer a formal unit qualification for those candidates who required it regardless of whether they had experience of the online course or not.

Although the online *Information Handling Skills* course material itself does not actually require the candidate to produce evidence for any of the activities it covers, nevertheless candidates who do the online course will learn the skills and techniques needed to enable them to carry out the activities described in **this unit** and produce the evidence required.

This unit is therefore suitable for all candidates, whether or not they have experienced the online course. However to achieve this unit candidates should have some prior knowledge and/or awareness of different information sources, and how and when to use them.

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT
Owing to its generic nature this unit could be used in conjunction with a wide range of subject areas/topics as part of personal, vocational or curriculum research activities. The unit could therefore be undertaken on its own (as a stand-alone unit), or integrated with another unit which also required a candidate to research or find 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 are introduced in a practical context.

National Unit Specification: support notes (cont)

UNIT   Information Handling Skills (Intermediate 2)

The four outcomes should be taught in the order they appear, as each outcome is dependent on the previous one.

Candidates will require access to a wide range of information sources and it may be necessary for sources outwith their own organisation to be used. Teachers and lecturers 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 learn/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 tutor. Their search for information and suitable information sources should be genuine (rather than contrived) and seek to gain some relevant information on the subject/topic which the candidate can actually use.

Although Information Handling Skills are not listed as a core skill, these skills do contain core skill activities such as communication, working with others and problem solving. For example if a topic is divisible then the elements could be split up into subtopics for individual group members and the activities of planning an information task, searching, finding and evaluating information could be carried out individually and/or as a team working together. These tasks will also involve a degree of communication and problem solving. It should be noted, however, that if a team approach is used, **all** candidates must generate evidence of all three Problem Solving components **individually** in order to ensure that the requirements for the core skill are met.

Outcome 1
This outcome relates to the skills and techniques needed to plan an information task effectively. This includes the identification 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.

The planning process in the Information Handling Skills material has six 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 and **who** can give the most help. However there are several other planning models that are equally acceptable as alternatives.

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 what broad categories of information sources there are, the advantages and disadvantages of each and also where they are located and how to use them.

National Unit Specification: support notes (cont)

UNIT Information Handling Skills (Intermediate 2)

The required tasks ensure that the candidate can demonstrate her/his knowledge of the different information source categories (i.e. electronic, people and printed sources), and can make informed use of a wide variety of them in order to find relevant information on their chosen topic effectively. By specifying the use of two sources from each of the three different categories of information, the candidate will be encouraged to know about and use more than one source of information. This is designed to encourage candidates to use more than just one source of information such as the World Wide Web.

Possible information sources could include:
- Electronic sources – the World Wide Web, databases, library catalogues and CD-ROMs.
- People sources – people and organisations e.g. library and information staff, teacher, tutor, managers, colleges, companies or subject specialists.
- Printed sources – books, dictionaries, encyclopaedias, journals/magazines, newspapers, thesauri, leaflets and maps.

Examples of advantages and disadvantages could include accessibility (including ease of use), reliability (including accuracy, authenticity and bias) and currency.

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

If no relevant information has been found then the candidate will have to look again at the keywords and Boolean terms used and the information sources selected for their chosen topic, then try again or if necessary start the search again.

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.
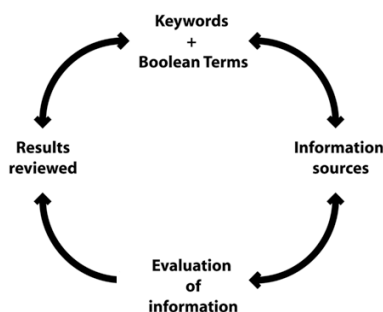
Outcome 3
This outcome relates to the use of evaluation criteria when choosing and selecting information sources for a specific topic.

National Unit Specification: support notes (cont)

UNIT Information Handling Skills (Intermediate 2)

The required tasks ensure that the candidate can demonstrate her/his knowledge of a set of evaluation criteria and the ability to use the criteria to judge different categories of information sources (i.e. electronic, people and print).

The set of evaluation criteria in the *Information Handling Skills* online material includes elements that cover currency, suitability and reliability (including its accuracy, authenticity, authority and bias) of the information. There are 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.

Outcome 4

This outcome relates to the candidate's being able to think about the success or otherwise of the results her/his search has produced, the steps and processes s/he has gone through to produce those results and how the process could be improved if s/he had to use it again - either for the same task or a similar task in an other topic.

Suggested changes could include the use of different keywords, sources of information and/or search strategies.

Some candidates may already have made their changes or 'fine tuning' as they worked their way through each outcome and with successful results will not have any further changes to make.

GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

It is important to note that as this unit is at Intermediate 2 level, the planned information task must be a fairly simple (though not trivial) one and that the investigating and evaluating work undertaken by the candidate will be of a straightforward nature.

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 e.g. text, diagram 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.

The action plan could be in the form of a diagram, flow chart, mind map etc to show how the candidate plans to find information on her/his chosen 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.

National Unit Specification: support notes (cont)

UNIT   Information Handling Skills (Intermediate 2)

Outcome 2
The evidence could be stored electronically or in print format – for example:
- Printouts of the keywords and Boolean terms 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 Boolean terms used.
- Photocopies of a printed source's index and the relevant page/s information highlighted by the candidate.
- A written note of enquiries made with the name of an individual or organisation alongside the results.

Outcome 3

The candidate could use the above evidence as the material to be evaluated and simply add their evaluation comments to it or draw up a table with the name of the information source and their evaluation.

Information source	Evaluation comments

Outcome 4
Candidates may use their own evidence from the previous outcomes and add their comments/changes to them.

Alternatively the candidate could record the success or otherwise of their chosen keyword, search strategy and information source in a table

Chosen keyword, Search strategy and Information Source	Result/s	Suggested possible improvements

and then summarise this in a paragraph or draw up a table with their suggested improvements for each step.

National Unit Specification: support notes (cont)

UNIT   Information Handling Skills (Intermediate 2)

	Successful/ Unsuccessful	**Suggested possible improvements**
Keywords selected		
Search strategies used		
Information sources used		
Evaluation Criteria		
Action plan		

Where necessary this evidence may be supplemented by oral questions to obtain the candidate's reasoning for the suggested changes.

SPECIAL NEEDS

This unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering special alternative outcomes for units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, September 2003).