

# **General information**

Unit title: Research Skills (SCQF level 7)

Unit code: J1NB 47

Superclass: KB

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## **Unit purpose**

The unit is designed to develop skills in investigating, analysing, evaluating and presenting complex information from a variety of primary and secondary sources. It is suitable for a wide range of learner groups and can be taken as part of a group award or as a stand-alone unit.

#### **Outcomes**

On successful completion of the unit, the learner will be able to:

- 1 Plan a research investigation.
- 2 Access, analyse and evaluate complex data from a range of primary and secondary sources.
- 3 Present a research investigation.

## Credit points and level

1 SQA unit credit(s) at SCQF level 7: (8 SCQF credit points at SCQF level 7).

#### Recommended entry to the unit

While entry is at the discretion of the centre, learners should have competence in *Communication Skills* to SCQF level 6. This could be demonstrated by achievement of one of the following or equivalent:

C824 12	Higher English, SCQF level 6
C827 12	English for Speakers of Other Languages (Higher), SCQF level 6
F3GB 12	Communication (Core Skill), SCQF level 6
FA1W 12	Communication (NC), SCQF level 6
HR1C 46	Workplace Communication in English, SCQF level 6
IELTS 6.0	

Or other similar qualifications or experience.

#### **Core Skills**

Opportunities to develop aspects of Core Skills are highlighted in the support notes section for this unit specification.

There is no automatic certification of Core Skills or Core Skill components in this unit.

# **Context for delivery**

If this unit is delivered as part of a group award, it is recommended that it should be taught and assessed within the subject area of the group award to which it contributes.

# **Equality and inclusion**

This unit specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods, or considering alternative evidence.

Further advice can be found on our website www.sqa.org.uk/assessmentarrangements.

## Statement of standards

Unit title: Research Skills (SCQF level 7)

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 SQA.

Where evidence for outcomes is assessed on a sample basis, the whole of the content listed in the knowledge and/or skills section must be taught and available for assessment. Learners should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

#### **Outcome 1**

Plan a research investigation.

# Knowledge and/or skills

- Research purpose and objectives
- Research methods
- ♦ Legal, regulatory, ethical and social considerations
- Plagiarism
- Identification and selection of resources
- Primary and secondary sources of information
- ♦ Library classification and cataloguing systems
- Contact methods
- Identification of key research questions
- Research investigation timescales

#### Outcome 2

Access, analyse and evaluate complex data from a range of primary and secondary sources.

## Knowledge and/or skills

- Research techniques
- Contacts and networking
- ♦ Access and retrieval of online, digital and other data
- Questioning tools and techniques
- Analysis, critical evaluation and selection of qualitative and quantitative data
- Evaluation of relevance of data to research objectives
- Accuracy and precision in summarising and recording information
- Referencing systems
- Management of data

#### **Outcome 3**

Present a research investigation.

#### Knowledge and/or skills

- Analytical and evaluative skills
- ♦ Conventions of research reporting
- Presentation of findings and conclusions
- ♦ Effective use of language, register and style
- Presentation skills

## **Evidence requirements for this unit**

Assessment should be carried out:

outcome by outcome

The centre should ensure the authenticity of the learner's work.

#### Outcome 1

Learners will need to provide evidence to demonstrate their knowledge and/or skills by showing that they can produce a detailed plan for a research investigation which clearly and accurately:

- defines research purpose and objectives
- identifies primary and secondary sources
- specifies research methods to be used
- produces a research timeline

The assessment will be completed in open-book conditions.

#### Outcome 2

Learners will need to provide evidence to demonstrate their knowledge and/or skills across all outcomes by showing that they can access, analyse and evaluate complex data from a range of primary and secondary sources. The learner must:

- implement a research plan effectively
- select data relevant to research objectives from a range of primary and secondary sources
- analyse and critically evaluate data relevant to research objectives
- produce a referenced record of research activities

The assessment will be completed in open-book conditions.

#### Outcome 3

Learners will need to provide evidence to demonstrate their knowledge and/or skills across all outcomes by showing that they can present a research investigation. The learner must:

 present, to a professional standard, findings and conclusions based on accurate analysis, interpretation and evaluation of data

Information and conclusions will be a minimum of 1,000 words or at least 10 minutes in oral equivalent, not including references.

The assessment will be completed in open-book conditions.

# **Support notes**

Unit title: Research Skills (SCQF level 7)

Unit support notes are offered as guidance and 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

The unit introduces learners to the essential skills of research — defining tasks, locating and selecting sources, evaluating the reliability of data gathered, organising and presenting conclusions. It is suitable for a wide range of learners who need to develop skills in researching, evaluating and presenting complex information as part of their course of study or as professional development. There may be opportunities for integration with other award units involving investigation and analysis.

Learners should be encouraged to generate original ideas through research as they analyse and evaluate the relevance of their findings to their aims and objectives. The content, format, medium, reporting and referencing systems of the research will be as recognised by the type of investigation and the vocational discipline. These may vary considerably, depending on the area of study. Compliance is needed with any relevant industry standards such as, for example:

MSC B8 Ensure compliance with legal, regulatory, ethical and social requirements.

The unit will provide underpinning knowledge to prepare learners for undertaking more complex indepth research. This could include assignments undertaken for the graded units of an HN award or preparation for progression to degree courses.

## Guidance on approaches to the delivery of this unit

At the start of delivery, learners should be made fully aware of the definition of, and penalties for, Plagiarism and be advised on ways to avoid it. Delivery outcome by outcome will allow tutors to give feedback at each stage of development. Learners need to be encouraged to think critically as they analyse and evaluate the reliability and credibility of data gathered. Headings or pro forma could be provided to support planning as a brief and realistic objectives are negotiated. Learners should understand the importance of timescales and be encouraged to work independently, self-managing their research investigation.

A clear definition of primary and secondary sources appropriate to the area of research should be provided. Primary sources could include, for example — focus groups, meetings, interviews, surveys, fieldwork and personal observation. The emphasis should be on learning the techniques for original research. Learners should become familiar with a range of survey and interview types and methods, adapting those relevant to their particular investigative research. Advice should be given on note taking, questionnaire design, sampling methods and procedures and interview skills. The

investigation could be on a small scale. Learners could practise designing interview questions and questionnaires, working in small focus groups that could also be used to provide primary sources of information. Peer discussions could evaluate relevance to purpose and practicability.

A library tour could provide an overview of classifications and cataloguing. It is important that learners know how to use library resources. Online access to a range of current secondary sources is essential, particularly when other primary and secondary sources are used to support analysis. Learners could be provided with evaluation criteria to check the reliability, authority and purpose of information accessed.

Efficient systems of recording and referencing sources during data gathering should be related to the selected medium and vocational area. Outlines and structures could be provided to support the management of the investigation. Qualitative and quantitative data, with details of the analytical and evaluation processes used, should be retained.

The practicalities of editing, collating and presenting relevant data will depend on the remit or brief agreed and on current industry standards. Results should be presented in a form that supports a reader or listener to understand data and sources. Where appropriate, tables or diagrams may be used to summarise results and present numerical data effectively. Learners should have access to models of format and style, including appropriate software, suitable for the needs of the vocational area and selected medium. The context and conduct of written or oral reporting must be to the accepted professional standards for the vocational area. Feedback from tutors on formative and draft work is good practice.

#### Guidance on approaches to assessment of this unit

Evidence can be generated using different types of assessment. The following are suggestions only. There may be other methods that would be more suitable to learners.

Centres are reminded that prior verification of centre-devised assessments would help to ensure that the national standard is being met. Where learners experience a range of assessment methods, this helps them to develop different skills that should be transferable to work or further and higher education.

All assessments are conducted in open-book conditions. Although the evidence requirements for all three outcomes are likely be integrated in a single investigation, it is recommended that tasks are undertaken outcome by outcome to allow for feedback at each stage of planning and implementing the research investigation. If assessment is integrated with investigative reporting for another part of a group award it is important to ensure that the requirements for all units are clearly evidenced.

#### **Outcome 1**

Assessment for Outcome 1 is evidenced by a detailed plan.

Timescales, objectives, sources, resources and methods to be used should be specified as appropriate. Structured headings could be provided as a framework for the task that may be completed orally or in writing.

#### Outcome 2

Assessment for Outcome 2, the referenced record of research activities, may be evidenced in a range of formats that should reflect industry practice. Records could include, for example, notebooks, reflective logs, meetings records, transcripts or recordings.

#### Outcome 3

A written report, including information and conclusions, should be a minimum of 1,000 words. Structured headings/subheadings may be provided to make clear to learners the anticipated content and detail required. Referencing should be to a recognised system or in a specified house style. In some written reporting, citation and bibliographies would be expected.

If research results are presented orally, the presentation should last for at least 10 minutes and be in line with industry practice. A detailed observation checklist, learner notes, including reference sources, and a recording of performance should be retained as evidence.

The centre should ensure the authenticity of the learner's work. Retention of notes and draft work, notes of any interventions made, tracking records, emails or log records can be a valuable aspect of quality assurance, indicate progress and provide helpful information for the Internal and External Verification process.

Providing formal, detailed feedback to learners is good practice and is particularly valuable to learners who need to be re-assessed on any outcome. Precise, supportive comments should be related clearly to the evidence requirements. They can also support authentication of a learner's work.

## **Credit transfer**

There is full credit transfer between this unit and unit HR0Y 47 Research Skills.

## **Opportunities for e-assessment**

E-assessment may be appropriate for some assessments in this unit. By e-assessment, we mean assessment which is supported by Information and Communication Technology, such as e-testing or the use of e-portfolios or social software. Centres wishing to use e-assessment must ensure that the national standard is applied to all learner evidence and that conditions of assessment — as specified in the evidence requirements — are met, regardless of the mode of gathering evidence. The most up-to-date guidance on the use of e-assessment to support SQA's qualifications is available at: www.sqa.org.uk/e-assessment.

## Opportunities for developing Core and other essential skills

This unit provides opportunities for the natural development of the Core Skills of *Communication*, *Information and Communication Technology (ICT)* and *Problem Solving* at SCQF level 6 and *Numeracy* at SCQF level 5. Learning and teaching approaches should ensure that where appropriate these skills are developed to the level required for future progression.

# **Communication SCQF level 6**

The components of this Core Skill are:

#### Oral

Produce and respond to oral communication on a complex topic.

# **Written Communication (Writing)**

Produce well-structured written communication on complex topics.

## **Written Communication (Reading)**

Read, understand and evaluate complex written communication.

Learners undertaking this unit will have well-developed existing skills in *Communication* that will be enhanced by researching, analysing and evaluating a range of complex primary and secondary information and by the reporting of conclusions orally and/or in writing.

## **Problem Solving SCQF level 6**

The components of this Core Skill are:

#### **Critical Thinking**

Analyse a complex situation or issue.

## **Planning and Organising**

Plan, organise and complete a complex task.

## **Reviewing and Evaluating**

Review and evaluate a complex problem solving activity.

Planning, identifying factors involved and evaluating their relevance will underpin work on the assessment task and develop skills in *Problem Solving*.

# Information and Communication Technology SCQF level 6

The components of this Core Skill are:

#### **Accessing Information**

Use ICT independently to carry out complex searches across a range of tasks.

#### **Providing/Creating Information**

Use ICT independently to carry out a range of processing tasks.

Effective and efficient use of *ICT* in sourcing a range of primary and secondary data, making contact with others and presenting the investigative report is likely to be routine practice. Accessing, using, recording and storing digital media will also develop the digital competence needed in workplace practice.

# **Numeracy SCQF level 5**

The components of this Core Skill are:

## **Using Graphical Information**

Interpret and communicate graphical information in everyday situations.

## **Using Number**

Apply a range of numerical skills in various everyday situations.

Opportunities to interpret and present information in numerical, statistical and graphic forms will enhance skills in Using Number and Graphical Information. Accuracy in calculations and effective presentation of data could be supported by access to appropriate software.

Further information about Core Skills can be found at: http://www.sqa.org.uk/sqa/37863.2209.html

# **Essential skills**

The practical focus of this unit is designed to encourage independent working and enhance skills for future progression including:

- creativity
- working independently/autonomously/self-management
- using initiative/being proactive
- problem solving, presenting ideas and solutions, making decisions
- time management working effectively to meet deadlines
- adopting professional standards and working practices

There could also be opportunities to develop knowledge and skills in citizenship and sustainability.

#### Citizenship

Investigative research could encourage awareness of rights and responsibilities within communities at local, national and global levels. As a result learners may develop abilities in making informed decisions, taking thoughtful and responsible action and being outward looking towards society.

#### Sustainability

Working practices could be reviewed in group work to ensure practical approaches to recycling and waste reduction. Strategies and recommendations on environmental issues could be suggested by reviewing articles from current trade and professional journals.

Use of digital media for tutor/learner communication and submission of materials is likely to be routine practice.

# History of changes to unit

Version	Description of change	Date

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SQA acknowledges the valuable contribution that Scotland's colleges have made to the development of SQA Advanced Qualifications.

## **Further information**

Call SQA's Customer Contact Centre on 44 (0) 141 500 5030 or 0345 279 1000. Alternatively, complete our <u>Centre Feedback Form</u>.

# **General information for learners**

Unit title: Research Skills (SCQF level 7)

This section will help you to decide whether this is the unit for you by explaining: what the unit is about; what you should know or be able to do before you start; what you will need to do during the unit; and opportunities for further learning and employment.

This unit is about developing the skills to plan, carry out and report on a research investigation. Before you begin this unit you should already have well-developed skills in *Communication* and *Information and Communication Technology (ICT)*.

You will look at how to access and critically evaluate data from primary sources, such as interviews, surveys and personal observation, and such secondary sources as web sites, books and professional journals. You will set objectives and then plan, carry out and report on the results of your research.

You will be assessed at each stage of the research investigation, and you will have to show that you can:

- plan a research investigation
- access, analyse and evaluate complex data from a range of primary and secondary sources
- present a report on a research investigation

Your report must be a minimum of 1,000 words or at least 10 minutes oral equivalent and be to a professional standard.

There will be opportunities to develop and consolidate the Core Skills of *Communication at SCQF level 6, Information and Communication Technology (ICT) at SCQF level 6, Problem Solving at SCQF level 6 and Numeracy at SCQF level 5.* 

You will be given opportunities to develop an awareness and understanding of business, enterprise, citizenship and sustainability. Working on the research investigation should enhance key employability skills including:

- creativity
- working independently/autonomously/self-management
- using initiative/being proactive
- problem solving, presenting ideas and solutions, making decisions
- time management
- working effectively to meet deadlines
- adopting professional standards and working practices

ne skills developed in this unit are essential both to you as a learner and to you in your worki	ng