Higher National Unit Specification

General information

Unit title: Social Science: Research and Methodology (SCQF level 7)

Unit code: J037 34

Superclass: ED

Publication date: August 2018

Source: Scottish Qualifications Authority

Version: 03, March 2025

Unit purpose

This unit introduces learners to the role and importance of research in the social sciences. Rigorous and systematic research is what distinguishes the social sciences from common sense explanations of social behaviour and phenomena. An appreciation of the basic research process model used in the social sciences highlights to learners that social scientists follow rigorous procedures when conducting research. The application of data handling techniques and interpretation of key information are focused on as essential skills for learners at this level.

It is intended for learners who have a general interest in research methods as well as those who would use it as a basis for further study.

Outcomes

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

1 Explain the importance of research and the research process in social science.
2 Describe and evaluate the sources and forms of data and methods of data collection.
3 Apply data handling techniques and interpret key information.

Credit points and level

1 Higher National Unit credit at SCQF level 7: (8 SCQF credit points at SCQF level 7)

Higher National Unit Specification: General information (cont)

Unit title: Social Science: Research and Methodology (SCQF level 7)

Recommended entry to the unit

Learners should possess good communication skills. Other knowledge, skills or experience relevant to the unit would also be beneficial. Ultimately, entry is at the discretion of the centre.

Core Skills

Achievement of this unit gives automatic certification of the following Core Skills component:

Complete Core Skill	None
Core Skill component	Critical Thinking at SCQF level 6 Using Graphical Information at SCQF level 6 Using Number at SCQF level 5

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this unit specification.

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.

This unit is mandatory in both the HNC and HND Social Sciences awards.

The Assessment Support Pack (ASP) for this unit provides assessment and marking guidelines that exemplify the national standard for achievement. It is a valid, reliable and practicable assessment. Centres wishing to develop their own assessments should refer to the ASP to ensure a comparable standard. A list of existing ASPs is available to download from SQA's website (http://www.sqa.org.uk/sqa/46233.2769.html).

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**.

Higher National Unit Specification: Statement of standards

Unit title: Social Science: Research and Methodology (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

Explain the importance of research and the research process in social science.

Knowledge and/or skills

- Distinguish between common sense and social science as forms of knowledge
- Describe the basic research process model used in the social sciences:

— Review of literature and existing theories
— Formulation of hypothesis or research questions
— Operationalisation: includes choice of research method, definition of concepts, measurement, sampling
— Conducting the research
— Processing of results and analysis of data

— Presentation or publication of results

♦ Intellectual property rights and plagiarism

Outcome 2

Describe and evaluate the sources and forms of data and methods of data collection.

Knowledge and/or skills

- Primary and secondary sources of data
- Primary and secondary sources of reading
- Quantitative and qualitative data collection methods
- Ethics in research

Outcome 3

Apply data handling techniques and interpret key information.

Knowledge and/or skills

- Apply data handling techniques
- Interpret key information from data handling techniques

Higher National Unit Specification: Statement of standards (cont)

Unit title: Social Science: Research and Methodology (SCQF level 7)

Evidence requirements for this unit

Learners will need to provide evidence to demonstrate their knowledge and/or skills across all outcomes by showing that they can:

Outcome 1

- Distinguish between common sense and social science as forms of knowledge
- Describe accurately the importance of following a research process in the social sciences
- Describe accurately what is involved in each stage of the research process
- Explain the significance of the concepts of intellectual property and plagiarism

Outcomes 2 and 3

- Distinguish accurately between primary and secondary sources of data
- Accurately explain primary and secondary sources of reading
- Explain why consideration of ethical issues are important in research
- Evaluate quantitative data collection methods (a minimum of two methods), stating why they would or would not be useful in a given research situation
- Accurately apply a minimum of two data handling techniques, relevant to any social science discipline, as part of a specific practical task
- Correctly interpret information from a minimum of two data handling techniques, relevant to any social science discipline, as part of a specific practical task

The data handling techniques are:

- Graphs and charts eg, pie charts, bar charts, histograms, scattergrams
- Table of results
- Measures of central tendency
- Measures of dispersion

Skills in numeracy, which underpin the production and interpretation of social science data handling techniques, are an essential part of this unit. As part of the practical task for Outcomes 2 and 3, learners must: solve problems involving one numerical or statistical concept eg, negative numbers, quantitative data, discrete and continuous data, numbers represented by symbols, a statistical concept such as range, decide which operations are to be carried out and the order in which to carry them out. At this level, learners must show that they can carry out calculations involving four operations, carry out a number of sustained calculations or at least one complex calculation eg, a complex statistical calculation such as calculating standard deviation or correlation co-efficient. This will be done as part of a specific practical task.

For Outcome 1, the assessment will be open-book, the format of which should be agreed between the lecturer and learner in advance (essay, structured questions, poster presentation, oral presentation, etc). A written response should be 800–900 words; an oral response 6–8 minutes. It is up to the centre to take steps to ensure authenticity of the learner's work.

Higher National Unit Specification: Statement of standards (cont)

Unit title: Social Science: Research and Methodology (SCQF level 7)

In Outcome 1, it is envisaged that learners will give a brief explanation of all issues identified in the evidence requirements. Learners should be encouraged to use examples from various social sciences disciplines in their explanations. However, it would be acceptable if they wish to base answers mainly on one or two disciplines, as long as they were aware of how research occurs in other areas.

For Outcomes 2 and 3, the assessment will be open-book, completed according to a prescribed format. It is expected that the learner will carry out much of their own research, although, if research is carried out as part of a group activity, it is expected that the learner will contribute to the carrying out of the task, and will report on the task individually, without collaboration at that point. The response should be 600 words approximately. To meet the requirement for the *Numeracy* Core Skill, the calculations should be done under supervised conditions, so the lecturer can satisfy themselves that it is indeed the learner's own work.

In Outcomes 2 and 3, learners should be asked to plan a short piece of research on a topic of interest that allows them to use one method of data collection that generates quantitative data (such as surveys or experiment or focus groups, etc) and apply two data handling techniques relevant to social sciences. An evaluation of the possible data collection methods in relation to a topic under research should be given to show they understand why the method they choose for the practical task suits for the information required in the research task.

Higher National Unit Support Notes

Unit title: Social Science: Research and Methodology (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 forms part of the HNC/D Social Sciences Group Awards and is primarily designed to provide learners with knowledge of the nature, role and importance of research in the social sciences. The unit also introduces the learner to the importance of the research process and in developing skills of analysis and interpretation of data. Since research is fundamental to all of the social sciences it is likely the unit will be delivered in year one of a HNC award. This should allow the unit to be delivered in such a way that enables learners to appreciate the relevance of the unit to research in the social sciences.

Wherever possible, examples used should have relevance to the subject units studied previously or simultaneously.

Guidance on approaches to delivery of this unit

This unit is best delivered in the order of the outcomes. Outcome 1 establishes the importance of the use of rigorous and systematic research to distinguish social science explanations from other explanations such as common sense. By examining the research process, the learners come to understand the dynamics of the relationship that exists in the social sciences between theory and research.

Learners should also be encouraged to understand the research process as a practical activity that is both communal in that research is peer reviewed and, at times, collaborative and individual and competitive in that scientists sustain and advance their careers through the act of creating new knowledge and understandings over which they will want to establish intellectual property rights. It is only in this context that the full significance of plagiarism can be understood. It is also important that learners understand the role of ethics in planning research (although this understanding is assessed during the Outcome 2 and 3 task).

Higher National Unit Support Notes (cont)

Unit title: Social Science: Research and Methodology (SCQF level 7)

In Outcomes 2 the detail of research is examined: the pros and cons of primary and secondary data, the significance of considering ethical issues in planning and carrying out research and the use of quantitative data and the various methods of data collection. Although this unit covers methods of data collection that generate quantitative and/or qualitative data in the learning and teaching, the focus for assessment in Outcome 2 and 3 would be quantitative methods. It would be advisable to contrast the use of methods that generate quantitative data with the use of methods that generate qualitative data, to encourage learners to understand where one would be useful compared to another. This would form part of the teaching, although only methods that generate quantitative data would be assessed. The advantages and disadvantages of different methods that allow for data collection should be covered, particularly in terms of why one method might be more useful than another in a given situation.

This will also be useful if the learner is also studying for the graded units in Social Sciences. Learners should be encouraged to recognise that no method is always fool-proof or perfect, but a choice will be made based on what factors are considered at a particular point, for a particular purpose in research. Learners should be encouraged to evaluate a method in relation to purpose and aim of any research.

In Outcome 3 ways of processing and interpreting quantitative data are examined. It is useful to highlight the various methods by carrying out some practical activity with learners, in order that they understand the issues of planning, and interpreting data.

The social sciences use evidence from well-established research methods in order to generate explanations for social behaviour and phenomena. Learners should be aware of the differing methods of generating evidence. Examples should be provided from primary and secondary sources relevant to the disciplines studied.

Methods of data collection that produce quantitative evidence should be explored. The learners should be encouraged to recognise why one method would be more useful than another is certain situations. A range of research methods should be considered, appropriate to the disciplines being studied. However, it is not necessary to cover all methods in detail. Commonly used research methods that generate quantitative data include structured observation, experimentation, some structured interviews/focus groups, content analysis and questionnaires. Commonly used research that generates qualitative data includes for example, diary accounts, case studies, open-ended questionnaires, unstructured interviews and unstructured observation.

NB: Learners can use a calculator or a computer programme, such as Excel, SPSS or PSSP, etc, to generate results for the practical task. It is important that learners show they understand which formula they should use to analyse their data, so questioning them or ensuring they give an explanation in their assessment response is crucial for the *Numeracy* Core Skill (SCQF level 5).

Many social science disciplines present quantitative evidence in graphic as well as statistical form. Learners are, therefore, required to interpret a range of representations.

In completing Outcome 3 learners are expected to be able to: solve problems involving one numerical or statistical concept. Decide upon the operations to be undertaken and the sequence that should be followed when carrying them out. At this level, learners must show that they can carry out calculations involving four operations. Carry out a number of sustained calculations or at least one complex calculation.

Higher National Unit Support Notes (cont)

Unit title: Social Science: Research and Methodology (SCQF level 7)

One useful way of achieving the outcome is to carry out research that requires a standard deviation calculation or a correlation on data collected by the learner. The learner would be familiar with the formulae required for these complex calculations. The learner should be encouraged to produce a graphical representation, histogram, bar chart or similar to aid their interpretation of results. It would be expected that some conclusion would be drawn from this complex data.

Centres should structure the teaching programme to allow time for development of Core Skills and other transferable skills and for assessment practice within the notional hours suggested.

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.

The unit could be assessed using two instruments of assessment, one covering Outcome 1 the other covering Outcomes 2 and 3.

The assessment for Outcome 1 could take the form of a set of structured questions and stimuli or an essay requiring a response of approximately 800–900 words or an oral response to set questions requiring the learner to respond in sustained detail for 6–8 minutes.

The assessment for Outcomes 2 and 3 could take the form of a set practical task, requiring the learner to plan and carry out some quantitative research in a social science discipline that aids their understanding of a particular concept or idea. The resulting report would require a response of approximately 600 words, numerical calculations carried out and interpreted and a broad conclusion drawn.

Given the requirement for sustained calculations or at least one complex calculation (to meet the requirements of *Numeracy* at SCQF level 5) it is suggested that a calculation such as standard deviation, or correlation would be useful in the task. To meet the requirement for the *Numeracy* Core Skill, the calculations should be done under supervised conditions, so the lecturer can satisfy themselves that it is indeed the learner's own work.

Learners should also be asked to interpret information (ie, draw conclusions) that they have compiled from a minimum of two data handling techniques relevant to Social Sciences (such as from their table of results and from a standard deviation calculation).

It is possible to combine this assessment with assessment required in another HN Unit, such as *Psychology B: Explanation and Research of Psychological Topics* — Outcome 2, or F6NE 34 *An Investigation in the Social Sciences* — Outcomes 2 and 3, as the evidence requirements for these units could be appropriate to meet much of the requirements for Outcome 2 and 3 of this unit.

It is important to ensure that the type of research carried out, the numeracy calculations completed and the conclusions drawn in the combined assessment meet all requirements for this unit.

Higher National Unit Support Notes (cont)

Unit title: Social Science: Research and Methodology (SCQF level 7)

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.

Remediation and re-assessment

Remediation for Outcome 1 should be done by a review of the original work. If additional information is required this can be added, as long as it is in context. Lecturers and tutors should use their professional judgement with regards to the number of words that can be added. Oral clarification could be used for minor omissions or to clarify minor detail. If it is thought appropriate that a learner tackle a different question, then the new submission would count as a re-assessment.

For Outcomes 2 and 3, if the learner has one of the calculations incorrect eg, standard deviation or interpretation of data, then they could be remediated on that part only. However, if the basic design of the task is not carried out appropriately to allow the learner to meet the evidence requirements, then a new task would be required. This would count as a re-assessment. Any remediation or reassessment for calculations must be carried out under supervised conditions, as in the original assessment.

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 (ICT), such as e-testing or the use of e-portfolios or social software. Centres which wish 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

The delivery and assessment of this unit may contribute towards the development of Core Skills in *Communication*, *Numeracy* and *Information and Communication Technology* and the development of other transferable skills, such as, essay writing, referencing, citation and bibliography skills and thinking, analytical and critical skills.

It is possible to develop ***Communication* at SCQF level 6** if the assessment takes the form of an essay or oral presentation or formal report. For **Written Communication at SCQF level 6 the skill is: produce well-structured written communication on complex topics**. To develop this skill learners can be encouraged in both formative and summative assessment to present all essential ideas/information and supporting detail in a logical and effective order; use a structure that is organised and use paragraphing to make distinctions between facts, opinions, arguments and conclusion, use a format, layout, and word choice which are appropriate to the content and context, and use spelling, punctuation, vocabulary and sentence structures which are consistently accurate.

Higher National Unit Support Notes (cont)

Unit title: Social Science: Research and Methodology (SCQF level 7)

The learners could be tasked with producing a written communication which presents, analyses, and evaluates a substantial body of information. These skills can be developed through formative activities, such as research and evaluation of key examples of research without being formally assessed for certification of the Core Skill.

For Oral Communication at SCQF level 6 the skill is: produce and respond to oral communication on a complex topic. In summative assessment the learner could be encouraged to give a detailed oral presentation on any of the topics/issues outlined in the outcomes. The specific skills of using an appropriate level of vocabulary, consistent spoken language structures and formality, conveying all essential information, opinions, or ideas with supporting detail accurately and coherently, and with varied emphasis as appropriate and responding to others, taking account of their contributions would be developed in an oral presentation or in an oral explanation of a poster exhibition. A formative assessment could be constructed that would encourage learners to work in a small group, with a few people contributing to the presentation.

For the Core Skill in *Numeracy* at SCQF level 5 the skills are: 'Using Number, apply a range of numerical skills in various everyday situations' and **'Using Graphical Information, interpret and communicate graphical information in everyday situations**'. In the summative assessment for Outcome 3 learners must demonstrate competency in a number of data handling techniques including graphs, charts, table of results, measures of central tendency and measures of dispersion. They also have to solve problems involving one numerical or statistical concept eg, negative numbers, quantitative and qualitative data, discrete and continuous data, numbers represented by symbols, a statistical concept such as range decide which operations are to be carried out and the order in which to carry them out. At this level, learners must show that they can carry out calculations involving four operations,

carry out a number of sustained calculations or at least one complex calculation eg, a complex statistical calculation such as calculating standard deviation or correlation co- efficient.

For the Core Skill of *Information and Communication Technology* at SCQF level 5 the skills are: 'Accessing Information, use ICT independently, effectively, and responsibly to access information within a range of tasks' and 'Providing/Creating Information, use ICT independently, effectively, and responsibly to carry out a range of processing tasks'. This unit can help to develop such skills by the use of mini formative presentations using PowerPoint or other ICT presentation tool that will also support the development of oral communication. A summative assessment using ICT presentation methods is also possible. Specific areas of accessing information using internet searches or VLE use and providing and creating information can be developed in such tasks. Creating a blog or a website for the summative assessment is another way in which this Core Skill can be developed. This could be used where learners (and their lecturer) have particular skills and interest in ICT.

Critical thinking and analytical skills could be developed by posing questions at appropriate points in the delivery, enabling discussion and promoting the need for learners to take responsibility for learning by encouraging the development of research skills via the internet or using text books.

Higher National Unit Support Notes (cont)

Unit title: Social Science: Research and Methodology (SCQF level 7)

Curriculum for Excellence

The Curriculum for Excellence aspires to place learners at the centre of the curriculum and develop their capacities as Successful Learners, Confident Individuals, Responsible Citizens and Effective Contributors. The four capacities will be developed throughout this unit.

This unit will develop the literacy and communication skills of the learners by way of formative and summative assessments. Independent learning is required throughout this unit, whilst the opportunity is available for group learning through formative tasks. The subject of research and methodology demands independent thinking and through reasoned evaluation encourages learners to reach satisfactory conclusions. Further opportunity is offered to develop technological skills by way of researching via the internet, the production of word documents, PowerPoint presentations, blogs and/or the creation of a website. Collectively these skills contribute towards the creation of a **Successful Learner**.

Time management skills should improve during the delivery of this unit, as should the ability to relate to others through formative tasks. The issues in research and methodology should allow the learner to develop their own thoughts of the world around them, and they will be given the opportunity to express these views within the classroom setting. This should lend to the emergence of a **Confident Individual**, particularly if they gain success in the achievement of the unit.

Research and methodology can also contribute to learners becoming **Responsible Citizens** by allowing the opportunity to develop knowledge and understanding of how knowledge is developed and the nature of the distinction between facts and opinions.

Learners will be encouraged to develop a more critical view of arguments and information, important skills in a democratic society.

Learners can become **Effective Contributors** to society by learning to work together effectively in teams within the class setting. This can be achieved through group-work where they can apply critical thinking within new contexts. In planning group tasks, evaluating data and presenting their findings, learners will also develop problem solving skills. Both oral and written communication skills will also be developed. This can be achieved through written work, individual PowerPoint presentations, and the creation of blogs and websites.

All these skills can be developed within the unit.

This unit has the Critical Thinking component of Problem Solving and Using Graphical Information and Using Number components of Numeracy embedded in it. This means that when learners achieve the unit, their Core Skills profile will also be updated to show they have achieved Critical Thinking at SCQF level 6, Using Graphical Information at SCQF level 6, and Using Number at SCQF level 5.

History of changes to unit

Version	Description of change	Date
03	Clarification that multiple choice is not a suitable assessment method for this unit.	05/03/25
02	Core Skills Components Critical Thinking and Using Graphical Information at SCQF level 6, and Using Number at SCQF level 5 embedded.	31/08/18

Additional copies of this unit specification can be purchased from the Scottish Qualifications Authority. Please contact the Business Development and Customer Support team, telephone
0303 333 0330.

General information for learners

Unit title: Social Science: Research and Methodology (SCQF level 7)

This section will help you 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 introduces you to the role and importance of research in the social sciences. Rigorous and systematic research is what distinguishes the social sciences from common sense explanations of social phenomena. The application of data handling techniques and interpretation of key information are focused on as essential skills for learners at this level. An appreciation of the basic research process model used in the social sciences will highlight to you that social scientists follow rigorous procedures when conducting research.

A range of quantitative research methods will be studied relevant to the disciplines you are studying. It is essential for you to understand the differences between primary/secondary sources of data.

Since social scientists often use visual and statistical representations when presenting evidence, you are required to demonstrate competency in a range of graphical representations and statistical techniques.

On completion of the unit, you will be able to explain the role and importance of research in the social sciences, be able to produce and interpret social science data handling techniques appropriate to selected social science disciplines. You will also be able to describe the stages of the basic research process model in the social sciences and understand the importance of following rigorous research procedures.

The unit will be assessed using two instruments of assessment, one covering Outcome 1, the other covering Outcomes 2 and 3. The assessment for Outcome 1

may take the form of a set of structured questions and stimuli or an essay requiring a response of approximately 800–900 words or an oral response to set questions requiring you to respond in sustained detail for 6–8 minutes.

The assessment for Outcomes 2 and 3 may take the form of a set practical task, requiring you to plan and carry out some quantitative research in a social science discipline that aids your understanding of a particular concept or idea. The resulting report would require a response of approximately 600 words, numerical calculations carried out and interpreted and a broad conclusion drawn.

Your centre will inform you of the chosen methods, which will be open-book.

As you progress through the unit material, you will be encouraged to develop the Core Skills of *Communication* at SCQF level 6 and *Information and Communication Technology* at SCQF level 5 in this unit by the types of activities you will experience.

You will also be given opportunities throughout the unit to develop as a successful learner, a confident individual, a responsible citizen and an effective contributor.

General information for learners

Unit title: Social Science: Research and Methodology (SCQF level 7)

This unit has the Critical Thinking component of Problem Solving and Using Graphical Information component of Numeracy embedded in it. This means that when you achieve the unit, your Core Skills profile will also be updated to show you have achieved Critical Thinking at SCQF level 6, Using Graphical Information at SCQF level 6, and Using Number at SCQF level 5.