



## Higher National Unit specification: general information

**Unit title:** Social Science: Research and Methodology

**Unit code:** FM66 34

**Superclass:** ED

**Publication date:** February 2013

**Source:** Scottish Qualifications Authority

**Version:** 03

### Unit purpose

This Unit introduces candidates 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 candidates 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 candidates at this level.

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

On completion of the Unit the candidate should 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.

### Recommended prior knowledge and skills

Candidates 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.

## General information (cont)

### Credit points and level

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

*\*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

The achievement of this Unit gives automatic certification of the following:

Using Number @ SCQF level 5

There are also opportunities to develop aspects of the Core Skills of Communication at SCQF level 6 and Information and Communication Technology at SCQF level 5 in this Unit and these 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.

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>).

### Assessment

- 1 Outcomes 1 and 2 will be assessed by one closed book assessment covering all evidence requirements for both Outcomes
- 2 Outcome 3 will be assessed by one closed book assessment covering all evidence requirements for this Outcome

Since the Core Skill component of Using Number at SCQF Level 5 is embedded in this Unit, it is strongly recommended that you follow the assessment guidelines given. If you wish to use a different assessment model, you should seek prior verification of the assessment instrument(s) you intend to use to ensure that the Core Skill is still covered.

Exemplar instruments of assessment and marking guidelines have been produced to indicate the national standard of achievement required at SCQF level 7.

## Higher National Unit specification: statement of standards

**Unit title:** Social Science: Research and Methodology

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The sections of the Unit stating the Outcomes, Knowledge and/or Skills, and Evidence Requirements are mandatory.

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. Candidates 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
- ◆ Literature review
- ◆ Theory
- ◆ Formulation of hypothesis
- ◆ Operationalisation: choice of research method, definition of concepts, measurement setting, sampling
- ◆ Conducting the research
- ◆ Processing of results and analysis of data
- ◆ Presentation 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
- ◆ Qualitative and quantitative data
- ◆ Data collection methods

## Higher National Unit specification: statement of standards (cont)

**Unit title:** Social Science: Research and Methodology

### 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

#### Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

#### Outcomes 1 and 2

- ◆ Distinguish between common sense and 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
- ◆ Distinguish accurately between primary and secondary sources of data
- ◆ Accurately explain primary and secondary sources of reading
- ◆ Distinguish accurately between qualitative and quantitative data
- ◆ Accurately explain data collection methods

#### Outcome 3

Accurately apply a minimum of two data handling techniques, relevant to two social sciences disciplines, from information presented to him/her.

Correctly interpret information from a minimum of two data handling techniques, relevant to two social science disciplines.

The data handling techniques are:

- ◆ Graphs and charts e.g. 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 Outcome 3, candidates must: solve problems involving one numerical or statistical concept, e.g. 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, candidates must show that they can carry out calculations involving four operations, carry out a number of sustained calculations or at least one complex calculation, e.g. a complex statistical calculation such as calculating standard deviation or correlation co-efficient.

## Higher National Unit specification: statement of standards (cont)

**Unit title:** Social Science: Research and Methodology

The Unit will be assessed by closed book assessments. The use of notes, textbooks, handouts, VLE and other materials will not be permitted with the exception of mathematical formulae which will be handed out by the tutor/lecturer before the assessment begins. The assessments will be conducted under supervision.

The structured questions could sample six out of the eight topics but methods of data collection should always be included.

### Assessment Guidelines

A variety of assessment methods may be used to enable candidates to meet the Evidence Requirements. The following are suggestions and there may be other methods that would be suitable. Centres are reminded that prior verification would help to ensure that the national standard is being met.

The Unit could be assessed using two instruments of assessment one covering Outcomes 1 and 2 the other covering Outcome 3. The assessment for Outcomes 1 and 2 could take the form of a set of unseen structured questions and stimuli, requiring a response of approximately 1300 words or an oral response to set questions requiring the candidate to respond in sustained detail for 10 minutes.

The structured questions could be presented in multiple-choice format which would facilitate e-assessment.

The assessment for Outcome 3 will also take the form of a set of structured questions and stimuli, requiring a response of approximately 200 words and numerical calculations. Candidates will not know the questions in advance. However, the broad topic area should be handed out at an appropriate point in the delivery of the unit. The use of notes, textbooks, handouts, VLE and other materials will not be permitted with the exception of mathematical formulae which will be handed out by the tutor/lecturer before the assessment begins. It is recommended that the assessment should be undertaken in two sittings. One for Outcomes 1 and 2 of approximately 2 hours' duration and one for Outcome 3 of one hour's duration.

By way of suggestion only, it may be appropriate to structure assessment questions around the following schema:

### Outcomes 1 and 2

- 1 Distinction between common sense and science as forms of knowledge
- 2 The importance of following the research process in the social sciences
- 3 The stages of the research process
- 4 Intellectual property rights and plagiarism
- 5 Sources of data, primary and secondary
- 6 Sources of reading, primary and secondary
- 7 Types of data, quantitative and qualitative
- 8 Methods of data collection

## Higher National Unit specification: statement of standards (cont)

**Unit title:** Social Science: Research and Methodology

### Outcome 3

- 1 Applying techniques of handling data
- 2 Interpreting data

In Outcomes 1 and 2 it is envisaged that candidates will give a brief explanation of all issues identified in the evidence requirements. However it would be appropriate for candidates to provide a more detailed account of any issue relevant to the discipline(s) being studied. For example, a centre with candidates studying Psychology may wish to emphasise the importance of primary research methods such as experiments. Centres with candidates studying History may wish to emphasise the importance of, for example, historiography. All centres will have candidates studying Sociology and may want to focus on observation or structured and unstructured interviews. Centres with candidates studying Politics may wish to focus on surveys.

In Outcome 3, candidates should be asked to apply a minimum of two data handling techniques relevant to two social science disciplines. Given the requirement for sustained calculations or at least one complex calculation it is suggested that Psychology and one other discipline might be used.

For example in Psychology measures of central tendency, dispersion and correlation are often used whereas in History graphs or bar charts are more typical. Candidates should also be asked to interpret information that has been extracted from a minimum of two data handling techniques relevant to two social science disciplines. For example a histogram used in Sociology and a scattergram used in Psychology.

NB: It is important that the language used in the assessment instrument reflects SCQF level 7 in each type of task.

## **Higher National Unit specification: support notes**

### **Unit title: Social Science: Research and Methodology**

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**

The Unit forms part of the HNC/D Social Sciences Group Awards and is primarily designed to provide candidates with knowledge of the nature, role and importance of research in the social sciences. The Unit also introduces the candidate 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 candidates 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 the delivery and assessment 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 candidates come to understand the dynamics of the relationship that exists in the social sciences between theory and research.

Candidates 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. In Outcome 2 the detail of research is examined: the pros and cons of primary and secondary data, the significance of quantitative and qualitative data and the various methods of data collection. In Outcome 3 ways of processing and interpreting quantitative data are examined.

The social sciences use evidence from well-established research methods in order to generate explanations for social behaviour and phenomena. Candidates 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 qualitative and quantitative evidence should be explored, e.g. case studies generate qualitative evidence whilst the experimental method generates quantitative evidence. Both forms of evidence are important to the social scientist. A range of research methods should be considered, appropriate to the disciplines being studied. Commonly used research methods include observation, case studies, experimentation, interviews and questionnaires.

NB: Candidates can use a calculator, however all working must be shown.

## Higher National Unit specification: support notes (cont)

### Unit title: Social Science: Research and Methodology

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

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

One possible way of achieving the Outcome is to carry out a standard deviation calculation on a given set of data provided by the tutor/lecturer. The candidate will be provided with the standard deviation formula. Data may also be provided to permit the candidate to produce a graphical representation, histogram, bar chart or similar.

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.

Remediation for Outcomes 1 and 2 could be done by oral clarification for minor omissions or to clarify minor detail. If additional information is required this can be added, as long as it is in total approximately 100 words or less per Outcome.

For Outcome 3, if the candidate has one of the calculations incorrect eg standard deviation, then he/she could be remediated on the one calculation only. However, if more than one calculation is incorrect then the candidate would have to be reassessed for Outcome 3.

### Opportunities for developing Core Skills

The delivery and assessment of this Unit may contribute towards the development of Core Skills of *Communication*, *Numeracy* and *Information & 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. **For written communication at SCQF level 6 the skill is: produce well structured written communication on complex topics.** To develop this skill candidates 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.

The candidates 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.

## Higher National Unit specification: support notes (cont)

**Unit title:** Social Science: Research and Methodology

**For oral communication at SCQF level 6 the skill is: produce and respond to oral communication on a complex topic.** In summative assessment the candidate 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 candidates 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 candidates must demonstrate competency in a number of data handling techniques including graphs, charts, tables of results, measures of Central Tendency and measures of Dispersion. They also have to solve problems involving one numerical or statistical concept, e.g. 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, candidates must show that they can carry out calculations involving four operations, carry out a number of sustained calculations or at least one complex calculation, e.g. 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 candidates (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 candidates to take responsibility for learning by encouraging the development of research skills via the Internet or using text books.

## Higher National Unit specification: support notes (cont)

**Unit title:** Social Science: Research and Methodology

### 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. Candidates 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.

## **Higher National Unit specification: support notes (cont)**

**Unit title:** Social Science: Research and Methodology

### **Open learning**

This Unit could be delivered by open or distance learning; however, it would require planning by the centre to ensure sufficiency and authenticity of candidate evidence.

Arrangements would have to be made to ensure that the assessments were conducted closed book and under supervision.

### **Disabled candidates and/or those with additional support needs**

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

## History of changes to Unit

Version	Description of change	Date
03	Amendment to remediation and reassessment statement. Clarification on the use of calculators.	06/02/13
02	Paragraphs added to the end of the section Guidance on the delivery and assessment.	15/11/11

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## General information for candidates

### Unit title: Social Science: Research and Methodology

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 and the application of data handling techniques and interpretation of key information are focused on as essential skills for candidates 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 research methods will be studied relevant to the disciplines you are studying. It is essential for you to understand the differences between primary/secondary and qualitative/quantitative 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 and 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 Outcomes 1 and 2 the other covering Outcome 3.

The assessment for Outcomes 1 and 2 could take the form of a set of unseen structured questions and stimuli, requiring a response of approximately 1300 words or an oral response to set questions requiring the candidate to respond in sustained detail for 10 minutes. The structured questions could be presented in multiple-choice format. Your centre will inform you of the chosen method, which will be closed book. This means that you will not be allowed access to notes.

The assessment for Outcome 3 will also take the form of a set of structured questions and stimuli, requiring a response of approximately 200 words and numerical calculations. Candidates will not know the questions in advance. However, the broad topic area should be handed out at an appropriate point in the delivery of the unit. The use of notes, textbooks, handouts, VLE and other materials will not be permitted with the exception of mathematical formulae which will be handed out by your tutor/lecturer before the assessment begins.

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 credited with the core skill component *Using Number* at SCQF level 5.

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.