

Higher National Unit Specification

General information for centres

Unit title: Fundamentals of Quality

Unit code: DV9T 34

Unit purpose: This Unit is intended to enable the candidate to explain the fundamental quality management principles and practices and the role of the quality function within an organisation. The Unit should introduce the candidate to:

- ◆ definitions of quality and the evolution of quality, present day position and looking forward
- ◆ the role of the quality function/department, its activities, organisation and responsibilities
- ◆ inter-relationships with other organisational functions/departments

On completion of the Unit the candidate should be able to:

- 1 Explain the fundamental principles of quality and quality management, and how they have evolved.
- 2 Explain the role of quality and quality management within an organisation.
- 3 Explain the inter-relationships of quality with other organisational functions or departments.

Credit points and level: 1 HN 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.*

Recommended prior knowledge and skills: It is recommended that candidates undertaking this Unit possess good written and/or verbal communication skills, together with a knowledge of organisation structures and the factors that influence employee behaviour at work.

Core Skills: There are opportunities to develop the Core Skill of Communication at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

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.

Assessment: The assessments for this Unit could consist of Closed-Book and Open-Book Assignment modes.

The assessment for Outcome 1 could be a closed-book series of structured questions designed to assess the candidates' knowledge and understanding of the subject areas identified within the Evidence Requirements.

General information for centres (cont)

Assessment for all Outcomes may be integrated or individually assessed, with an appropriate instrument of assessment using a case study based on a real or fictitious organisation. Candidates should be provided with, or directed to, information relating to the organisation and its environment. If the candidate is directed to gather information, the case study should ideally be based on an organisation that the candidate is familiar with, or one about which the candidate can easily gather data. Candidates who have current or past work experience may be able to base their assignment on an organisation in which they have previously worked.

Higher National Unit specification: statement of standards

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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 fundamental principles of quality and quality management, and how they have evolved

Knowledge and/or skills

- ◆ Historical development of quality
- ◆ Fundamental principles of quality
- ◆ Fundamental principles of quality management

Evidence Requirements

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

- ◆ explain the historical development of quality
- ◆ explain the concept of quality
- ◆ explain the fundamental principles of quality, covering the basic principles of quality requirements, grade, capability, customer satisfaction (both internally and externally)
- ◆ explain the concept of quality management
- ◆ explain the fundamental principles of quality management, covering management, quality management system, quality planning, quality control, quality assurance, quality improvement, effectiveness and efficiency

Assessment guidelines

This Outcome should be assessed by a series of restricted response questions, covering each of the Evidence Requirements, under closed-book conditions, within one to two hours.

Outcome 2

Explain the role of quality and quality management within an organisation

Knowledge and/or skills

- ◆ Concepts relating to an organisation
- ◆ The role of the Quality Function in relation to the aims and objectives of an organisation

Higher National Unit specification: statement of standards (cont)

Unit title: Fundamentals of Quality

- ◆ Quality Management activities
- ◆ The Process Model referred to within current Quality Management System standard

Evidence Requirements

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

- ◆ explain these concepts of an organisation: organisational structure; infrastructure; work environment; internal and external customers
- ◆ explain the role of the quality function within an organisation
- ◆ explain the implementation of the management of quality within an organisation and activities including planning, implementation, control, evaluation, motivation, preventative and corrective action
- ◆ explain the Process Model

The evidence must demonstrate that the candidate has knowledge of the relevant concepts.

Assessment guidelines

This Outcome can be assessed individually or by an integrated approach with Outcome 3, through an assignment in relation to an organisation that the candidate is familiar with or a fictitious case study. Individual assignment approximately 750 words, while combined assignment 1,500 words.

Outcome 3

Explain the inter-relationship of quality with other organisational functions or departments

Knowledge and/or skills

- ◆ Role of quality within other organisational functions or departments
- ◆ Methods used to identify and assess quality within functions or departments
- ◆ Role of quality and environmental issues
- ◆ Role of quality and health and safety issues

Evidence Requirements

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

- ◆ explain the inter-relationships between quality and three other organisational functions or departments
- ◆ explain the common issues and methods used to identify and assess quality requirements within an organisation's functions or departments
- ◆ explain the common objectives of Quality, Environmental and Health and Safety issues within an organisation

Higher National Unit specification: statement of standards (cont)

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Assessment guidelines

This Outcome can be assessed individually or by an integrated approach with Outcome 2, through an assignment in relation to an organisation that the candidate is familiar with or a fictitious case study. It is suggested that the individual assignment consists of approximately 750 words, while the combined assignment would consist of 1,500 words.

Administrative Information

Unit code:	DV9T 34
Unit title:	Fundamentals of Quality
Superclass category:	VD
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Higher National Unit specification: support notes

Unit title: Fundamentals of Quality

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

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

Guidance on the content and context for this Unit

This Unit is a mandatory unit for the group award HNC Quality and is designed to provide candidates with fundamental knowledge of Quality and Quality Management principles.

The Unit highlights the concepts of quality and quality management within the context of an organisation, and how these concepts have evolved over the years. It also covers the inter-relationships between quality and the other organisational functions or departments and the common issues with Environment and Health and Safety.

The Unit covers all aspects of quality and quality management within an organisation, and is designed to:

- ◆ enhance the candidates knowledge of the definitions of quality, quality management, and the evolution of quality, present day position and looking forward
- ◆ enhance the candidates understanding of the role of the Quality function, its activities, organisation and responsibilities
- ◆ enhance the candidates understanding of the Inter-relationships between quality and other organisational functions or departments

This is an introductory Unit and should provide an overview of quality, not a detailed knowledge.

There are numerous different theories and models that can be used to demonstrate the content of this Unit, and to explain the role within organisations. The following gives some guidance on the content for each individual Outcome, it is neither exhaustive nor prescriptive:

Outcome 1

The concept of Quality by definition with reference to the current versions of ISO 9000 Fundamentals and Vocabulary and ISO 8402: Glossary of terms used in Quality Assurance.

The concept of quality can be further enhanced by an understanding of related concepts such as requirement, grade, capability, customer satisfaction, based on the thematic groupings of clause 3 of the current version of ISO 9000 standard.

The fundamental principles of quality management are enhanced by the related concepts of management, quality management system, quality planning, quality control, quality assurance, quality improvement, effectiveness and efficiency, based on the thematic groupings of clause 3 of the current version of ISO 9000 standard.

Higher National Unit specification: support notes (cont)

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There are various theories on the evolution of quality and the management of quality within organisations, and this can be explored through any of these theories and philosophies of Deming, Crosby, Feigenbaum, Juran, Ishikawa and Taguchi to the new wave of Quality Gurus, covering Traditional Quality Control methods through to Continuous Improvement.

Outcome 2

The concepts relating to an organisation; organisational structure, infrastructure, work environment, internal and external customers, stakeholders are illustrated in the thematic groupings of clause 3 of the current version of ISO 9000 standard.

An understanding of the Process Model, highlighted in the current version of ISO 9000 standard would be beneficial for the candidate to develop an understanding of the concepts of quality and quality management.

There are numerous models, systems and philosophies on the related concepts of Quality Management activities such as planning, implementation, control, evaluation, motivation, preventative and corrective action. A basic understanding of these management principles would be beneficial to the candidate.

Outcome 3

The role of the Quality function or department in relation to the aims and objectives of an organisation can be demonstrated by actual case study of the candidates own organisation and/or a pre-selected organisation. Detailed knowledge of the role of other functions or departments, outwith the Quality function or department, would be beneficial for the candidate, such as marketing, design and development, purchasing, production planning, production/manufacturing, finance, sales and after-sales servicing.

Detailed knowledge of the methods used to identify and assess quality within these areas, is not necessary, though it would be helpful for candidates to appreciate the complexity of the achievement of quality within these areas.

Detailed knowledge of environmental and health and safety policies and procedures are not necessary, though it would be beneficial for the candidate to develop an understanding of the basic principles and the common elements between these issues and Quality related issues within an organisation. Reference to the current versions of the Management Standards of ISO 14001 and OHSAS 18001 would be helpful.

Guidance on the delivery and assessment of this Unit

It is envisaged that this unit will be delivered through lecturer/learner discussion and reference to appropriate text, support material, experience and case study. The appropriate use of examples and case study can help keep the unit relevant to the candidates own organisation or one which they are familiar with.

Higher National Unit specification: support notes (cont)

Unit title: Fundamentals of Quality

Candidates should be encouraged to relate theory and practice within their discussions and analysis. Candidates should also be encouraged to apply models and philosophies of quality related issues to real and/or fictitious organisations, and draw conclusions that relate to the fundamental principles of quality and quality management.

The Unit aims to integrate both theory and practice but the focus should be on the practical aspects of quality function within an organisation and the inter-relationships with other functions.

Summative assessment should focus on the candidates understanding of the concepts of quality and quality management within the organisation. Candidates should be encouraged to practice applying theoretical models and philosophies to the concept of quality within the organisation. Formative assessment can be an ongoing part of the unit with candidates being given the assessment s/assignments to work on as each topic is taught.

Assessment for Outcome 1 should be based on a series of closed-book questions covering the subject areas identified in the Unit. Assessments for Outcomes 2 and 3 should be an assignment based on a real or fictitious case study, and the candidate should be given suitable information and guidance to conduct the assignment. The assessment for Outcomes 2 and 3 can be integrated or individually assessed.

Opportunities for developing Core Skills

The delivery and assessment of this Unit may contribute towards the 'Reading' and 'Writing' components of the Core Skill of Communication at SCQF level 6 because of the requirement to read various documents including textbooks, Standards and Glossaries, and to provide written answers to formative and summative assessments.

Open learning

This Unit is suitable for open or distance learning methods, and if it is decided to deliver the Unit through any of these methods, additional resources for candidate support, assessment and quality assurance will be required. For further information and advice please refer to the SQA guide: *Assessment and Quality Assurance for Open and Distance Learning (A1030, February 2001)*.

Candidates with additional support needs

This Unit specification is intended to ensure that there are no artificial barriers to learning or assessment. The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering alternative Outcomes for Units. For information on these, please refer to the SQA document *Guidance on Alternative Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs*, which is available on the SQA website www.sqa.org.uk.

General information for candidates

Unit title: Fundamentals of Quality

This Unit is a one credit mandatory Unit at SCQF level 7. It is recommended that you possess good written and/or verbal communication skills, together with a knowledge of organisation structures and the factors that influence employee behaviour at work.

This Unit is recommended as a pre-requisite to all other units within the framework of the HNC Quality (G86N 15).

The Unit covers all aspects of quality and quality management within an organisation, and is designed to:

- ◆ enhance your knowledge of the definitions of quality, quality management, and the evolution of quality, present day position and looking forward
- ◆ enhance your understanding of the role of the Quality function, its activities, organisation and responsibilities
- ◆ enhance your understanding of the Inter-relationships between quality and other organisational functions or departments

There are numerous different theories and models that can be used to demonstrate the content of this Unit, and to explain the role within organisations.

The Unit has three Outcomes. The first Outcome addresses the fundamental principles of quality and quality management, and how they have evolved. The second Outcome addresses the role of the quality function and quality management within an organisation. The third Outcome addresses the inter-relationships of quality with other organisational functions or departments.

The content of the Unit will be kept relevant through the appropriate use of examples and by focusing the areas of study on organisations that are relevant to you. This should provide the flexibility required to study, as appropriate, organisations of different sizes, public and private organisations, and organisations operating in different markets.

For a successful completion of this Unit, you will be required to achieve a satisfactory level of performance on the assessment work. This will require you to assess and discuss the concepts of Quality Function and Quality Management within an organisation.