



PROBLEM SOLVING
SCQF Level 5
40 Hour Unit

CORE SKILLS UNIT

What are Core Skills?

Core Skills are skills and abilities that everyone uses in their family and personal life, at work, in public, in the community, and in education and training.

The Core Skills are:

- ◆ Communication
- ◆ Numeracy
- ◆ Information and Communication Technology
- ◆ Problem Solving
- ◆ Working with Others

They are important because they help you to be effective in almost everything you do. That's also why employers value them.

Improving your Core Skills helps you cope with today's quickly changing world. It will make you more confident, help you to learn more easily, and improve your career prospects.

What is this Core Skills Unit about?

This Unit is about solving problems in everyday settings.

What should I know or be able to do before I start?

You may have achieved the Core Skills Unit in Problem Solving at SCQF Level 4. Alternatively, you may be able to show that you have similar experience of solving problems — for example, planning to redecorate a room in your house; researching useful study courses; improving an ordering system.

What do I need to do?

You will:

- ◆ identify the main factors affecting a non-routine situation or issue (For example, what are the causes of the problem? Who's involved?)
- ◆ assess the importance of these factors
- ◆ consider what could be done, and then justify an approach to address the problem
- ◆ work out an action plan to deal with the key factors (For example, work out the activities involved and the order to do them in; decide which activities can be done at the same time; decide who should carry out each activity; think about working within limitations, managing time, and managing people.)
- ◆ choose and obtain the resources you will need to carry out the action plan (for example, equipment, information, money, input from other people). You might have to think about the procedures for obtaining these
- ◆ carry out the action plan, and then check whether it is complete

- ◆ work out how to judge how effective each stage of your problem solving activity has been (For example, did you identify the correct causes of the problem? Did your action plan address these causes? Did the action plan keep to the specified timescale? Did everyone carry out their allotted activities? Did you identify the correct resources and best ways of getting them? Did you use resources effectively?)
- ◆ gather evidence and use your chosen criteria to judge the effectiveness of all aspects of your problem solving activity
- ◆ draw conclusions from your problem solving activity, justifying these based on the evidence you gathered. If it's appropriate, devise alternative ways of solving similar problems in the future

How do I get this Unit?

You will need to show that you have all the skills in the Unit.

You will investigate a problem, draw up and carry out an action plan to try to solve the problem, and finally review how effective your problem solving activity has been, based on the evidence you have. You may have written evidence, such as notes of discussions with others, the action plan itself, records of activities which you undertook and your thoughts on how well things went. Your tutor may ask you questions and make notes or a recording of what you have said.

What might this involve?

Here are examples of things you might do:

- ◆ Investigate the reasons why membership is down at a club you attend. Devise and put a plan in place to attract more members.
- ◆ Draw up, follow and review a personal revision and study plan for an exam.
- ◆ Find out why your team's wastage level in production has risen over the past months. Propose and implement a solution.

What can I do next?

You could move on to the Problem Solving Core Skill Unit at SCQF Level 6.

You could think about doing other Core Skill Units in:

- ◆ Communication
- ◆ Information and Communication Technology
- ◆ Numeracy
- ◆ Working with Others.

Your tutor can advise you about this.

Guidance for tutors

At SCQF Level 5, learners should be dealing with a situation or issue in a context that is non-routine. If the situation is familiar to the learner, the relationship between the factors affecting the situation will need to be clarified. If the learner is examining an unfamiliar situation, the relationship between the factors must be clear.

Critical Thinking

Learners will recognise and analyse the main factors affecting a situation or issue. The problem requiring a solution should be non-routine. Learners will identify the factors affecting the issue and then decide on the relative importance of each of these. They may have to make a decision on competing demands, eg time, quality and cost. The learners will then evaluate the situation and devise an approach to deal with the situation.

Planning and Organising

Learners will develop an action plan that deals with the factors affecting the situation or issue. The learners will firstly identify the activities involved and then devise the action plan, making clear the order in which activities need to be carried out and relationships between them. The action plan may include activities that can be carried out simultaneously, and the learners will identify who is to carry out the activities. The learners will identify resources to be used; these may include equipment, information, people and money. Obtaining resources may also involve implementing procedures and input from others. Once the action plan has been devised the learners will carry out the activities as planned, monitor the activities allocated to others, and check the action plan is complete. They may need to adjust their plan to take account of changing circumstances.

Reviewing and Evaluating

On completion of the action plan, the learners will decide on criteria to judge how effective each stage of the problem solving activity has been. Examples of criteria include the correct identification of the causes of the problem, correct identification and sequencing of activities making up the action plan, and supporting resources and monitoring of the implementation of the action plan.

Learners must use only one problem situation to prove that they can do all of the activities in this Unit. They should not gather evidence from different problem situations for different activities.

Further information about delivery, assessment and Evidence Requirements for this Unit can be found in the corresponding support pack. The support pack also contains examples of the type and amount of activities that meet the standards of this Unit. Sample recording documentation is also included.

Learners with disabilities and/or additional support needs

The additional support needs of individual learners should be taken into account when planning learning experiences, selecting the most appropriate assessment activity and considering any reasonable steps which might be necessary to allow the learner to meet the assessment standard.

Further advice can be found in SQA's Assessment Arrangements' web pages (www.sqa.org.uk)

ADMINISTRATIVE INFORMATION

Credit Value

1Credit(s) at (insert SQA Level 11) (6 SCQF credit points at SCQF Level 5)



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|-----------------|---------------------|
| Helpdesk | 0845 279 1000 |
| Fax: | 0845 213 5000 |
| Email: | customer@sqa.org.uk |
| Website: | www.sqa.org.uk |

| | |
|------------------------|-----------------------|
| Optima Building | Ironmills Road |
| 58 Robertson Street | Dalkeith |
| Glasgow | Midlothian |
| G2 8QD | EH22 1LE |

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