

COMPUTING
Access 2

Second edition – published August 1999

**NOTE OF CHANGES TO ACCESS 2 ARRANGEMENTS
SECOND EDITION - PUBLISHED SUMMER 1999**

CLUSTER TITLE: Computing (Access 2)

CLUSTER NUMBER: C017 08

National Cluster Specification

Cluster Details Minor textual changes.
 Core skills statements inserted

National Unit Specification:

All Units Minor textual changes
 Special Needs and core skills statements inserted

National Cluster

COMPUTING (ACCESS 2)

CLUSTER NUMBER C017 08

STRUCTURE

The cluster comprises three units:

<i>D529 08</i>	<i>Using Computer Aided Learning (Acc 2)</i>	<i>1 credit (40 hours)</i>
<i>D530 08</i>	<i>Using Technological Equipment (Acc 2)</i>	<i>1 credit (40 hours)</i>
<i>D531 08</i>	<i>Using a Computer (Acc 2)</i>	<i>1 credit (40 hours)</i>

In common with all courses, this programme of study includes a further 40 hours over and above the 120 hours of the component units. This is for induction, extending the range of learning and teaching approaches, support, consolidation and integration of learning. This time is an important element of the programme of study and advice on its use is included in the cluster details.

RECOMMENDED ENTRY

Entry is at the discretion of the centre.

CORE SKILLS

This cluster gives automatic certification of the following:

Complete core skills for the cluster	Problem Solving	Acc 2
	Information Technology	Acc 2
Additional core skills components for the cluster	None	

For information about the automatic certification of core skills for any individual unit in this cluster, please refer to the general information section at the beginning of the unit.

Administrative Information

Publication date:	August 1999
Source:	Scottish Qualifications Authority
Version:	02

© Scottish Qualifications Authority 1999

This publication may be reproduced in whole or in part for educational purposes provided that no profit is derived from reproduction and that, if reproduced in part, the source is acknowledged.

Additional copies of this specification (including unit specifications) can be purchased from the Scottish Qualifications Authority for £7.50. **Note:** Unit specifications can be purchased individually for £2.50 (minimum order £5).

National Cluster: details

CLUSTER Computing (Access 2)

RATIONALE

Knowledge and skills in the use of information technology (IT) are essential for all individuals. In the 'information age' skills in handling information and processing data will be crucial. IT skills are becoming essential not just for vocational purposes but also for daily living as every aspect of our lives is increasingly affected by new technology. Individuals with the means or skills to utilise IT will be able to take advantage of many opportunities offered. Increasingly IT skills will be required for effective citizenship.

The Computing and Information Technology framework seeks to address these issues through coherent IT provision. Provision at Access level is the foundation of the framework and the programme of study aims to provide a 'first experience' of IT skills with accompanying basic knowledge and understanding.

It is anticipated that the programme of study will be attractive to a wide range of potential candidates, but particularly to candidates who wish to gain basic IT skills and have had no previous experience of IT.

The aims of this cluster at Access 2 are to provide a first experience of using IT skills and to promote the following aspects:

- foster confidence and enjoyment in using IT
- develop basic skills in using IT and technological equipment
- develop basic skills in using software for education and leisure
- encourage target setting and evaluation skills
- develop specific and core skills
- facilitate progression to the corresponding cluster at Access 3.

CONTENT

It should be noted that at Access 2 computing includes using technological equipment such as household and office equipment and information systems such as e-mail, fax.

The cluster was selected to encompass the basic knowledge and skills relating to the operation and application of computer systems. It is intended to suit the needs of candidates who are interested in computing and IT, and candidates with special needs who would derive benefit from using IT or use IT as part of their everyday experience.

Undertaking the cluster as a coherent whole offers a number of benefits:

- together, the three component units offer opportunities for delivery as a coherent, integrated, holistic experience
- balance and breadth of candidates' experiences and learning will be promoted
- practical activity may be integrated
- skills and abilities developed through practical activity support learning as a whole.

National Cluster: details (cont)

CLUSTER Computing (Access 2)

The units which make up the programme of study have been designed to promote the use of computers and technology in a meaningful and motivating learning experience.

Although the units can be taught concurrently, teachers and lecturers are encouraged to adopt a style of delivery which is most suitable to the prior knowledge and experience of the candidates. The increase in understanding which accrues from the integration possible in the cluster provides added benefit above that gained when candidates study a free-standing unit. The nature of the programme of study encourages the generation of enough evidence to allow a holistic approach to assessment, which will satisfy the requirements of most unit outcomes and performance criteria.

Using Computer Aided Learning (Acc 2)

The aim of this unit is to develop the candidate's appreciation of the use that software has within education and leisure. Many candidates, including those with special needs, will use software to support their learning. Software within the education context should be selected initially by the teacher or lecturer and should be at an appropriate level for the candidate. Programs selected will cover number and language and two from any of the following contexts: music, crafts, technical, adventure, problem solving.

Within the leisure context, the candidate should be encouraged to make decisions, to choose when and where a program is used. Candidates may do this in a time to suit themselves, during the working day, at home, or in some other venue.

Although this unit is based on the use of software, candidates should be encouraged to develop communication skills, personal and interpersonal skills and to form working relationships with other candidates.

Core skills of Communication, Numeracy, Problem Solving and Using Information Technology may be developed in association with this unit.

Candidates will have the opportunity to set targets and evaluate their experience.

Using Technological Equipment (Acc 2)

The aim of this unit is to develop the candidate's appreciation of the use that technological equipment has within the household and office/workplace and for personal use. Ideally, this unit should allow candidates to develop skills and abilities through holistic, practical activity to support learning as a whole. Many tasks could be offered through a computing or office environment, but many can also be offered as part of everyday living skills or life skills.

National Cluster: details (cont)

CLUSTER Computing (Access 2)

Using a Computer (Acc 2)

This unit is designed to develop basic knowledge and skills in the use of a computer. The candidate is encouraged from the start to use the correct names of the components of a computer systems including monitor, mouse, keyboard, hard disc, disc, printer.

It is likely that the core skills for IT at Access 2 can all be attained through achievement of this unit. Candidates will demonstrate use of equipment and a variety of software. The skills of loading, printing, saving will be practised with a variety of programs, in support of many different subject areas.

The other core skills of Communication, Numeracy, Problem Solving, and Working with Others can also be developed in association with this unit.

Candidates will be introduced to simple word processing.

ASSESSMENT

Access differs from other levels in that there is no external assessment. However a cluster provides opportunities for sustained and progressive learning and for more broadly-based integration of knowledge and skills than is possible in discrete units.

Candidates should be aware of assessment criteria and instruments. It is anticipated that ongoing assessment will take place, informing and supporting candidates. Holistic approaches to assessment should be adopted. A variety of approaches to assessment may be appropriate. Details of assessment are provided in the unit specification. Candidates will prepare for the outcomes of each unit, which will evolve through learning and teaching activities across the units.

A number of assessment instruments can be used across the component units and these offer opportunities for a more integrated and holistic approach. Whenever possible, evidence for assessment is gathered as part of the integrated coursework.

The instruments of assessment which can be used in this way include:

- practical exercises where observation of practical skills are recorded using a checklist
- personal log or diary
- personal interview which may involve setting personal targets and review of progress towards the targets.

It is recommended that the candidate assembles a personal information folder, which could contain photographs, sketches of computer components and other technological equipment. Together with identification of the names of, and notes on, the use of the equipment. Photographs of people at work using appropriate equipment could also be included. In addition, a log could be compiled by the candidate in relation to tasks undertaken and equipment used.

National Cluster: details (cont)

CLUSTER Computing (Access 2)

APPROACHES TO LEARNING AND TEACHING

All three units can be taught as free-standing units, or completely integrated. The units *Using a Computer* and *Using Computer Aided Learning* are designed to be readily integrated.

Health and safety regulations and hygiene requirements should be introduced. These could include correct care and storage requirements. The dangers of incorrect use of equipment should be highlighted, including circumstances where incorrect use can lead to accidents. Health and safety regulations and safe working practices should form an integral part of the programme of study. Special attention should be paid to working with electrical and electronic equipment in a safe manner. Candidates should be aware of switching off and closing down procedures.

The candidate should be encouraged to gain practical experience in using a range of equipment in selected areas of work. Co-operation with other departments, for example the Business Studies Department and Home Economics Department, would be beneficial.

Further links may be made with units in Mathematics, English and Communication, Art and Design, Music and with leisure-related units.

While candidates should experience working with a range of equipment, it is envisaged that the age and the ability of the candidate group is taken into account.

The teacher/lecturer should fully explain and demonstrate the use of each piece of equipment, prior to use by the candidate. Terminology and procedures should also be introduced in the context of the practical exercises.

Visits could be arranged to different trade or retail outlets.

The programme of study allows 40 hours of additional flexible time. Appropriate activities which could be undertaken might include:

- diagnostic assessment
- consolidation of learning
- additional practice with equipment and software, leading to greater independence
- opportunities for learning with support
- visits to work environments
- target setting and review, moving on to further target setting.

Where appropriate, arrangements should be made to ensure that there will be no artificial barriers to learning and assessment. The nature of the candidate's special needs should be taken into account when planning learning experiences and selecting assessment instruments.

National Cluster: details (cont)

CLUSTER Computing (Access 2)

PRACTICAL ACTIVITIES SUGGESTED

Using Computer Aided Learning (Acc 2)

Programs from number, language, art, music, crafts, technical, adventure, problem solving could be incorporated. Two programs from a leisure context will be included and this should prove motivating for candidates.

Using Technological Equipment (Acc 2)

The candidate is required to use four items of equipment from the home while undertaking this unit. This will link into Home Economics, or with a life skills programme where, for example, washing machines, microwave ovens, will feature.

The candidate is also required to use equipment in the office/workplace or for personal use. Examples include spell checkers, Braille machines, communication devices, photocopier.

Using a Computer (Acc 2)

Maths, English and other subject areas have programs which could be incorporated into this unit. The candidate is required to use a word processor. For this a link could be made with letters that require to be produced for work experience, or leisure. Other activities which may be included are the production of a CV and recording achievement, for example, using Progress File.

Visits and other out-of-centre learning

The units could be effectively linked to visits and other out-of-centre learning to emphasise the use of computers in society. Examples of contexts include: police, travel agents, an office, for individuals with communication difficulties, air traffic control, stock control in a supermarket, an office which employs individuals with communication difficulties.

Log or diary

A log or diary should be maintained to record experiences and assist with the personal interview. This could contain diagrams, photographs, and notes to act as a memory aid.

Other publications give further advice on:

- support materials
- appropriate learning and teaching approaches
- core skills
- assessment.

National Cluster: details (cont)

CLUSTER Computing (Access 2)

SPECIAL NEEDS

This specification is intended to ensure that there are no artificial barriers to learning or assessment. Special 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 Special Assessment and Certification Arrangements for Candidates with Special Needs/Candidates whose First Language is not English* (SQA, 1998).

SUBJECT GUIDES

A Subject Guide to accompany the Arrangements documents has been produced by the Higher Still Development Unit (HSDU) in partnership with the Scottish Consultative Council on the Curriculum (SCCC) and Scottish Further Education Unit (SFEU). The Guide provides further advice and information about:

- support materials for each cluster
- learning and teaching approaches in addition to the information provided in the Arrangements document
- assessment
- ensuring appropriate access for candidates with special educational needs

The Subject Guide is intended to support the information contained in the Arrangements document. The SQA Arrangements documents contain the standards against which candidates are assessed.

National Unit Specification: general information

UNIT	Using Computer Aided Learning (Access 2)
NUMBER	D529 08
CLUSTER	Computing (Access 2)

SUMMARY

This unit is designed to demonstrate the use of computer aided learning by developing the candidate's appreciation of the use of software within education and leisure.

OUTCOMES

- 1 Identify key aspects of personal learning targets relating to computer aided learning.
- 2 Explain the difference between the educational use and leisure use of software.
- 3 Use educational programs.
- 4 Use programs for leisure.
- 5 Describe the experience of using computer aided learning to meet personal learning targets.

RECOMMENDED ENTRY

Entry is at the discretion of the centre.

CREDIT VALUE

1 credit at Access 2.

Administrative Information

Superclass:	CD
Publication date:	August 1999
Source:	Scottish Qualifications Authority
Version:	02

© Scottish Qualifications Authority 1999

This publication may be reproduced in whole or in part for educational purposes provided that no profit is derived from reproduction and that, if reproduced in part, the source is acknowledged.

Additional copies of this specification can be purchased from the Scottish Qualifications Authority. The cost for each unit specification is £2.50 (minimum order £5).

National Unit Specification: general information (cont)

UNIT Using Computer Aided Learning (Access 2)

CORE SKILLS

This unit gives automatic certification of the following:

Complete core skills for the unit	Problem Solving	Acc 2
Additional core skills components for the unit	None	

National Unit Specification: statement of standards

UNIT Using Computer Aided Learning (Access 2)

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 the Scottish Qualifications Authority.

OUTCOME 1

Identify key aspects of personal learning targets relating to computer aided learning.

Performance criteria

- (a) Realistic learning targets for a learning programme are identified.
- (b) The skills required to achieve the learning targets are identified correctly.
- (c) The knowledge and understanding required to achieve the learning targets are identified correctly.

Evidence requirements

Written and/or oral evidence identifying key aspects of personal learning targets as detailed in the performance criteria. Two learning targets must be identified and the associated knowledge and skills identified.

OUTCOME 2

Explain the difference between the educational use and leisure use of software.

Performance criteria

- (a) Programs used for education are identified correctly.
- (b) The purpose of identified programs used for education is explained accurately.
- (c) Programs used for leisure are identified correctly.
- (d) The purpose of identified programs used for leisure is explained accurately.

Note on range for the outcome

Education programs: used to support mathematics, language and other educational areas.

Leisure programs: used for entertainment at home, in the centre, games machines within a leisure complex.

Evidence requirements

Written and/or oral evidence

- PC (a) Two programs used for education are identified correctly.
- PC (b) The purpose of the two identified programs is explained accurately.
- PC (c) Two programs used for leisure are identified correctly.
- PC (d) The purpose of the identified programs used for leisure is explained accurately.

National Unit Specification: statement of standards (cont)

UNIT Using Computer Aided Learning (Access 2)

OUTCOME 3

Use educational programs.

Performance criteria

- (a) Operations of programs are undertaken correctly.
- (b) Printing is undertaken correctly.

Evidence Requirements

Performance evidence should be generated from the completion of four practical tasks using four programs.

- PC (a) Operations of each program are undertaken correctly on one occasion.
PC (b) Printing is undertaken correctly for two programs.

One program should be used from each of the following: number, language.
Any two programs should be used from the following: art, music, crafts, technical, adventure, problem solving.

OUTCOME 4

Use programs for leisure.

Performance criteria

- (a) Programs are selected from a provided range, giving reasons for selection.
- (b) Operations of programs are correct, to the point of completion of the program.
- (c) Programs are evaluated against reasons for selection.

Evidence requirements

PCs (a) and (b) Performance evidence should be generated demonstrating selection and completion of two programs, each being used twice.

PC (c) Evidence consisting of an evaluation in the form of an account or report which may be written, word processed, oral, conveyed by the candidate's normal mode of communication.

OUTCOME 5

Describe the experience of using computer aided learning to meet personal learning targets.

Performance criteria

- (a) The extent to which personal learning targets are met is described accurately.
- (b) The learning gained is stated accurately in terms of its relationship to future education, training and leisure time activities.

Evidence requirements

Evidence should be generated by a written and/or oral response to one question for each performance criterion. Additional questions may be asked to prompt the generation of evidence.

National Unit Specification: support notes

UNIT Using Computer Aided Learning (Access 2)

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 CONTENT AND CONTEXT FOR THIS UNIT

Links may be made to the unit *Using a Computer (Access 2)*, Outcome 3. The Personal and Social Education (PSE) unit *Social Awareness and Development - Participating in Leisure Time Activities (Access 2)* could also be linked to this unit. As well as this, it may be possible to link with the following subjects: Mathematics, English and Communication, Music, Crafts, Art and Design, Technical.

The development of core skills Communication, Numeracy, Problem Solving and Working with Others can be included in this unit, as well as the core skill Using Information Technology.

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

This unit should be presented in an activity-based environment, using a programme of practical exercises relating to the candidate's main interests. The outcomes should not be delivered in isolation, but should be integrated within the candidate's learning programme.

It would be beneficial to the candidate if opportunities were made available, depending on the activity, for the candidates to work individually, in pairs or in small groups. Throughout the unit there is likely to be a high degree of teacher or lecturer input, encouraging candidates to practise and become confident in the use of hardware and programs.

All materials should be appropriate to the needs and abilities of the candidates. Where necessary, candidates should be allowed to use an alternative method of inputting data to that of the standard keyboard. The positioning of equipment should be appropriate to the candidate to enable him or her to operate it effectively.

Outcomes 1 and 5

Target setting and reviewing are used routinely as part of good learning and teaching. The teacher/lecturer should work with the candidate to decide on two realistic targets early in the delivery of a unit and then review progress, throughout the undertaking of the unit.

Outcome 2

Candidates will be introduced to a variety of software. Some software will be designed to assist with education, other software will be designed for use within leisure time. Through discussion and use, candidates should become aware of the difference, for example, education programs may be used to support mathematics, language and other educational areas, whereas leisure programs may be used for entertainment at home, in the education centre, games machines within a leisure complex.

National Unit Specification: support notes (cont)

UNIT Using Computer Aided Learning (Access 2)

Outcome 3

The candidate will use a variety of software designed for educational purposes. This can usefully be linked to another unit in this cluster *Using a Computer*, Outcome 2 as well as linking with other subject areas.

Outcome 4

The candidate will use a variety of software designed for leisure. Leisure time may be at set times within the centre, but may also include other times. Candidates should keep a log or diary. Programs should be selected at a level appropriate to the candidate.

Further information on learning and teaching approaches can be found in the cluster details.

GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

Outcome 1

Personal interview following discussion, to set two learning targets which should be recorded in a personal log or diary.

Outcome 2

Personal interview following discussion, to identify two examples of software used for education purposes and two for leisure purposes.

Outcome 3

Candidate must complete four practical tasks using four programs. The teacher or lecturer will observe these tasks and ensure that all the performance criteria are met. This should be recorded in a diary or log.

Outcome 4

Candidate must select and complete two programs, each being used twice, giving reasons for the selection. The teacher or lecturer will collect evidence that programs have been used. Evidence may be recorded as:

- countersigned records
- photographs
- record of scores
- computer printouts
- any other similar methods.

The candidate should evaluate the programme against his or her reasons for selection. The evaluation in the form of an account or report should refer to the candidate's personal log or diary.

Outcome 5

Personal interview drawing on evidence from:

- initial target setting
- personal log or diary
- review sheet.

The interview should contain one question for each performance criteria. Additional questions may be asked to prompt the generation of evidence.

National Unit Specification: support notes (cont)

UNIT Using Computer Aided Learning (Access 2)

SPECIAL NEEDS

This unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special 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 Special Assessment and Certification Arrangements for Candidates with Special Needs/Candidates whose First Language is not English* (SQA, 1998).

National Unit Specification: general information

UNIT	Using Technological Equipment (Access 2)
NUMBER	D530 08
CLUSTER	Computing (Access 2)

SUMMARY

This unit is designed to demonstrate knowledge and skills in using technological equipment by developing the candidate's appreciation of its functions within the household, office/workplace and for personal use.

It should be noted that Access 3 technological equipment will also be interpreted to mean systems such as e-mail, fax, etc.

OUTCOMES

- 1 Identify technological equipment in common use.
- 2 Perform basic operations using technological equipment in common use in the household.
- 3 Perform basic operations using technological equipment in common use in the office/workplace and for personal use.

RECOMMENDED ENTRY

Entry is at the discretion of the centre.

CREDIT VALUE

1 credit at Access 2.

Administrative Information

Superclass:	AY
Publication date:	August 1999
Source:	Scottish Qualifications Authority
Version:	02

© Scottish Qualifications Authority 1999

This publication may be reproduced in whole or in part for educational purposes provided that no profit is derived from reproduction and that, if reproduced in part, the source is acknowledged.

Additional copies of this specification can be purchased from the Scottish Qualifications Authority. The cost for each unit specification is £2.50 (minimum order £5).

National Unit Specification: general information (cont)

UNIT Using Technological Equipment (Access 2)

CORE SKILLS

This unit gives automatic certification of the following:

Complete core skills for the unit	None	
Core skills components for the unit	Critical Thinking	Acc 2

National Unit Specification: statement of standards

UNIT Using Technological Equipment (Access 2)

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 the Scottish Qualifications Authority.

OUTCOME 1

Identify technological equipment in common use.

Performance criteria

- (a) Commonly used technological equipment is identified correctly.
- (b) The use of the identified equipment is stated accurately.

Note on range for the outcome

Technological equipment: household equipment, office/workplace equipment, personal equipment.

Evidence requirements

Oral and/or written evidence of correct identification and use of four items of household equipment, two items of office/workplace equipment and two items of personal equipment.

OUTCOME 2

Perform basic operations using technological equipment in common use in the household.

Performance criteria

- (a) Equipment is switched on correctly.
- (b) Equipment is operated correctly.
- (c) Equipment is switched off following manufacturers' directions.
- (d) Health and safety requirements are observed at all times.

Evidence requirements

Performance evidence to meet all performance criteria.

Evidence should be gathered from the use of four items of equipment. Each item of equipment should be used on two occasions.

OUTCOME 3

Perform basic operations using technological equipment in common use in the office/workplace and for personal use.

Performance criteria

- (a) Equipment is switched on correctly.
- (b) Equipment is operated correctly.
- (c) Equipment is switched off following manufacturers' directions.
- (d) Health and safety requirements are observed at all times.

Evidence requirements

Performance evidence to meet all performance criteria.

Evidence should be gathered from the use of two items of office/workplace equipment and two items of personal equipment. Each item of equipment should be used on two occasions.

National Unit Specification: support notes

UNIT Using Technological Equipment (Access 2)

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 CONTENT AND CONTEXT FOR THIS UNIT

This unit is well suited to integration into other programmes of study across the centre. The equipment to be used can be found in departments such as Computing, Business Studies, and Home Economics, and may be incorporated within other units. Personal equipment should be easily accessed and of benefit to the candidate. Some equipment may be in use as part of a Life Skills programme.

This unit also provides opportunities to develop the process of personal target setting within the technology context. The core skills of Communication, Numeracy, Problem Solving and Working with Others, as well as Using Information Technology, can be developed with this unit.

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

This unit should be presented in an activity-based environment, using a programme of practical exercises relating to the candidate's main interests. The outcomes should not be delivered in isolation, but should be integrated within the candidate's learning programme.

It would be beneficial to candidates if opportunities were made available, depending on the activity, for candidates to work individually, in pairs or in small groups. Throughout the unit there is likely to be a high degree of teacher or lecturer input, encouraging candidates to practise and become confident in the use of technological equipment.

Candidates should be encouraged to keep a log or diary, to assist in the personal interview.

Further information on learning and teaching approaches can be found in the cluster details.

GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

Outcome 1

In this task the candidate must identify a minimum eight items of equipment and specify the use of each. The assessment could take the form of an interview supported by written questions and/or visual prompts.

National Unit Specification: support notes (cont)

UNIT Using Technological Equipment (Access 2)

Outcome 2

The candidate will have become familiar with the equipment and its use during the learning programme. For the purposes of gathering evidence, the candidate must use four items of equipment on two occasions. The teacher or lecturer will observe these tasks and ensure that all performance criteria are met.

Outcome 3

The candidate must use four items of equipment on two occasions. The teacher or lecturer will observe these tasks and ensure that all performance criteria are met.

Outcomes 1 to 3

Technological equipment may include:

Household equipment - TV, video camera, video player, interactive video, video/computer link, washing machine, food processor, microwave, oven, teletext, computer;

Office/workplace – electronic till, fax, answer machine, scanner, e-mail, internet, computer, photocopier;

Personal use – electronic communication aids, spell checkers, Braille machines, personal stereo, calculator, Minicom, personal switches.

SPECIAL NEEDS

This unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special 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 Special Assessment and Certification Arrangements for Candidates with Special Needs/Candidates whose First Language is not English* (SQA, 1998).

National Unit Specification: general information

UNIT	Using a Computer (Access 2)
NUMBER	D531 08
CLUSTER	Computing (Access 2)

SUMMARY

This unit is designed to develop basic knowledge and skills in the use of the computer.

OUTCOMES

- 1 Identify hardware used in a computer system.
- 2 Perform basic operations using a microcomputer system.
- 3 Use a word processing package.

RECOMMENDED ENTRY

Entry is at the discretion of the centre.

CREDIT VALUE

1 credit at Access 2.

Administrative Information

Superclass:	CA
Publication date:	August 1999
Source:	Scottish Qualifications Authority
Version:	02

© Scottish Qualifications Authority 1999

This publication may be reproduced in whole or in part for educational purposes provided that no profit is derived from reproduction and that, if reproduced in part, the source is acknowledged.

Additional copies of this specification can be purchased from the Scottish Qualifications Authority. The cost for each unit specification is £2.50 (minimum order £5).

National Unit Specification: general information (cont)

UNIT Using a Computer (Access 2)

CORE SKILLS

This unit gives automatic certification of the following:

Complete core skills for the unit	Information Technology	Acc 2
Additional core skills components for the unit	Critical Thinking	Acc 2

National Unit Specification: statement of standards

UNIT Using a Computer (Access 2)

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 the Scottish Qualifications Authority.

OUTCOME 1

Identify hardware used in a computer system.

Performance criteria

- (a) Hardware components are identified correctly.
- (b) Health, safety or hygiene requirements are identified correctly.

Evidence requirements

Oral and/or written evidence.

Hardware components include six items in common use, selected from: keyboard, disc drive, monitor, printer, disc, mouse, joystick, concept keyboard, touch screen, CD ROM.

PC (a) Six items must be identified.

PC (b) Two health, safety or hygiene requirements must be identified.

OUTCOME 2

Perform basic operations using a microcomputer system.

Performance criteria

- (a) Procedures to load programs are followed correctly.
- (b) Operations of programs are correct.
- (c) Exit from programs is completed correctly.
- (d) Save is executed correctly.
- (e) Print is executed correctly.

Note on range for the outcome

Programs: simple programs designed for educational and/or vocational uses.

Evidence requirements

Performance evidence should be generated from the completion of four practical exercises. Each practical exercise should involve the use of a different program, one of which should be a simple database.

PCs (a) to (c) Evidence of performance for four programs.

PCs (d) and (e) Evidence of performance for two programs.

National Unit Specification: statement of standards (cont)

UNIT Using a Computer (Access 2)

OUTCOME 3

Use a word processing package.

Performance criteria

- (a) Input of alphanumeric data is undertaken using upper and lower cases correctly.
- (b) Amendments using specific functions are made accurately.

Note on range for the outcome

Specific functions: shift, space, return, delete.

Evidence requirements

Evidence in the form of hard-copy of a paragraph (or equivalent) produced during each of two practical exercises. The exercises should be on a familiar topic.

PCs (a) and (b) Evidence of performance for each practical exercise. Each practical exercise should involve incorporating amendments using the specific functions. The amendments may be suggested by the teacher/lecturer.

National Unit Specification: support notes

UNIT Using a Computer (Access 2)

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 CONTENT AND CONTEXT FOR THIS UNIT

For Outcome 2, programs used can link with the unit *Using Computer Aided Learning*. Links can also be made to Mathematics and English and Communication units, depending on the software used.

For Outcome 3, using a word processor can be linked with English and Communication or Personal and Social Education (PSE) units to assist with writing a letter, for instance.

This unit is designed to provide opportunities to develop basic knowledge and skills in the use of a computer.

In addition to the core skill Using Information Technology, the core skills of Communication, Numeracy, Problem Solving and Working with Others can be developed within this unit.

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

This unit should be presented in an activity-based environment, using a programme of practical exercises relating to the candidate's main interests. The outcomes should not be delivered in isolation, but should be integrated within the candidate's learning programme.

It would be beneficial to the candidate if opportunities were made available, depending on the activity, for candidates to work individually, in pairs or in small groups. Throughout the unit there is likely to be a high degree of teacher or lecturer input, encouraging candidates to practise and become confident in the use of hardware and programs.

All material should be appropriate to the needs and abilities of the candidates. Where necessary, candidates should be allowed to use an alternative method of inputting data to that of the standard keyboard. The positioning of equipment should be appropriate to the candidate to enable him or her to operate it effectively.

Outcome 1

Candidates will learn over a period of time, through familiarity, the correct names for the equipment, as well as health, safety and hygiene routines for working with a computer. The candidates should have a general knowledge of this, including keeping equipment free from dust, simple care and cleaning, no liquids, clean hands, looking after floppy discs, close down computer following manufacturer's instructions.

Outcome 2

A range of programs should be used, depending on the interests of the candidates, one of the programs should include a simple database in order that candidates can extract and present simple data. When possible these programs should supplement work being undertaken in other units or in other departments, eg, in numeracy, language, PSE. This outcome can link with the unit *Using Computer Aided Learning*, Outcomes 2 and 3, when programs for education and for leisure are used.

National Unit Specification: support notes (cont)

UNIT Using a Computer (Access 2)

Outcome 3

For this outcome, the candidate is required to use a word processing package. This should ideally be linked to other subject areas. The work should be on familiar topics, and should be a paragraph or equivalent in length. A letter could be produced to support a language unit, or it could be to a work experience sponsor. The teacher/lecturer should suggest amendments which the candidate should undertake. This could involve spacing, punctuation, spacing amendments or the insertion of additional texts. Many other activities can take place during the unit for example preparing a menu, an invitation, a poster for the wall, an entry recording achievement, possibly in Progress File.

Candidates should be encouraged to keep a log or diary, to assist the personal interview.

Further information on learning and teaching approaches can be found in the National Cluster details.

GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

Outcome 1

Evidence could be generated using several approaches, for example during an interview following discussion with the teacher/lecturer, by picture matching, word matching, by completing simple written sentences attached to pictures. This can be supported by the use of visual aids and written/oral responses to questions. Evidence may be recorded using a checklist.

For PC (b) health, safety or hygiene requirements should include: keeping equipment free from dust, simple care and cleaning, no liquids, clean hands, looking after floppy discs, closing down computer following manufacturer's instructions.

Outcome 2

The candidate must complete four practical exercises using four programs, one program should be a simple database. The teacher or lecturer will observe these practical exercises and ensure that all performance criteria are met.

Outcome 3

The candidate must complete two practical exercises, producing hard-copy, with evidence that amendments have been made to a specified document. Amendments may be suggested by the teacher/lecturer.

SPECIAL NEEDS

This unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special 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 Special Assessment and Certification Arrangements for Candidates with Special Needs/Candidates whose First Language is not English* (SQA, 1998).