



National Unit Specification: general information

UNIT Supporting Information Communication Technology (ICT)
in an Educational Setting (SCQF level 6)

CODE F7HX 12

SUMMARY

This Unit is designed to introduce candidates to ICT in an educational setting. Candidates will gain knowledge and understanding of the scope of ICT, the benefits to children and young people of using ICT and the role of the adult in supporting ICT in an educational setting. Whilst working under supervision, the candidate will demonstrate the ability to support and evaluate the use of ICT in supporting learning and teaching. To achieve this Unit, candidates need either a suitable work placement or employment in an educational setting.

OUTCOMES

- 1 Explain ICT in education.
- 2 Evaluate the provision of ICT experiences for children and young people.
- 3 Working under supervision in an educational setting, support ICT provision.

RECOMMENDED ENTRY

While entry is at the discretion of the centre, candidates would normally be expected to have attained one of the following, or equivalent:

- ◆ *Information and Communication Technology* (SCQF level 5)

CREDIT VALUE

1 credit at SCQF level 6 (6 SCQF credit points at SCQF level 6*).

**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.*

Administrative Information

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National Unit Specification: general information (cont)

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CORE SKILLS

There is no automatic certification of Core Skills in this Unit. The Unit provides opportunities for candidates to develop aspects of the following Core Skills:

- ◆ *Communication* (SCQF level 5)
- ◆ *Information and Communication Technology* (SCQF level 5)
- ◆ *Working with Others* (SCQF level 5)

These opportunities are highlighted in the Support Notes of this Unit Specification.

National Unit Specification: statement of standards

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Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit Specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

OUTCOME 1

Describe ICT in an educational setting.

Performance Criteria

- (a) Define what is meant by ICT.
- (b) Describe a range of ICT provision in an educational setting.

OUTCOME 2

Evaluate the provision of ICT experiences for children and young people.

Performance Criteria

- (a) Describe the role of the adult in supporting the learning and development of children and young people through the provision of ICT.
- (b) Explain the selection, layout and presentation of resources that would support ICT within an educational setting.
- (c) Explain the benefits of ICT in relation to the learning and development of the children or young people.

OUTCOME 3

While working under supervision in an educational setting, support ICT Provision.

Performance Criteria

- (a) Support the implementation of ICT provision.
- (b) Evaluate ICT provision in terms of the learning and development of children or young people.

National Unit Specification: statement of standards (cont)

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EVIDENCE REQUIREMENTS FOR THIS UNIT

Written and/or recorded oral evidence is required to demonstrate that the candidate has achieved all Outcomes and Performance Criteria.

Specific advice

Outcomes 1 and 2

The evidence for these Outcomes will be gathered through a single question paper lasting no more than 40 minutes with both extended and restricted response questions as illustrated in the National Assessment Bank item for this Unit. It should be taken under controlled supervised conditions. This single question paper should be taken upon the completion of the Outcomes. Achievement can be decided by the use of a cut-off score.

Outcome 3

The evidence for this Outcome will be through two records of personal involvement describing the candidate's support of a variety of ICT provision in the work place as exemplified by the relevant Instrument of Assessment within the NAB material for this Unit. These records of personal involvement should be word processed and could include:

- ◆ A display of work produced by the children or young people.
- ◆ Evidence of the candidate's ability to produce a spreadsheet.
- ◆ Audio/visual evidence of the provision (**NB: video evidence must not include images of children or young people**).
- ◆ A description of the role of the adult.
- ◆ An explanation of the possible benefits to the learning and development of children or young people.
- ◆ Evidence of the implementation of the planned activities including where possible audio/visual evidence. ***(NB: video evidence must not include images of children or young people)**.
- ◆ An evaluation of the experience in relation to the planning and potential benefits to the learning and development of children or young people.

National Unit Specification: support notes

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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 focus of this Unit is not to develop the ICT skills of candidates, although this may be an added extra, but to promote candidate awareness of the scope of ICT provision and its use within an educational setting. It should also allow candidates to develop the confidence to support ICT provision effectively.

Outcome 1

Candidates should be given a broad definition of ICT that includes a variety of audio visual and every day technologies. ICT is often defined narrowly only including desk-top computers and their peripherals. Appropriate ICT resources for children and young people in educational settings have the characteristics of communicating information, supporting learning and teaching, and promoting interactivity. Some examples are:

Communicating Information

- ◆ Cameras: still and video
- ◆ Digital recording equipment
- ◆ Internet
- ◆ Mobile phone
- ◆ Landline telephone
- ◆ E-mail
- ◆ Software packages

Promoting Interactivity

- ◆ Musical keyboard
- ◆ Activity centres
- ◆ Digital interactive TV
- ◆ Social networks
- ◆ Karaoke machines
- ◆ Cash registers
- ◆ Interactive whiteboards
- ◆ Programmable toys
- ◆ Computer keyboards
- ◆ Timers
- ◆ New and emerging technologies as they become available

Through investigation, candidates will be expected to add to these lists.

National Unit Specification: support notes (cont)

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Candidates could also investigate ICT in the wider community such as:

- ◆ Bar codes
- ◆ Microwave ovens
- ◆ ATM machine
- ◆ Chip & pin technology

Outcome 2

PC (a)

Adult interactions with children are important in promoting high quality ICT provision in an educational setting. Adults should work alongside children and young people to help them solve problems, develop new ideas and learn new things about themselves and their world. Candidates should be aware that, as with other electrical equipment, ICT equipment can malfunction and care should be taken to prevent breakdown by checking cables and keeping equipment dry. Other issues to consider are:

- ◆ ICT equipment should be stored away from excessive heat and dust
- ◆ Equipment should be kept clean, using a soft cloth
- ◆ When using a computer keep the mouse clean by cleaning regularly and using a mouse mat
- ◆ Children, young people and adults should make sure their hands are clean and dry prior to using ICT equipment
- ◆ CD-Roms, DVDs and other software should be stored in proper disc boxes and replaced after use
- ◆ Magnets should not be placed near ICT equipment, particularly computers
- ◆ Food and drink must never be placed or consumed near ICT equipment
- ◆ Safety regulations and manufacturers' instructions should be observed at all times
- ◆ Don't panic!

As part of the wider role, candidates should consider their level of interaction with children and young people when using ICT. Points to consider may be:

- ◆ Finely tuning the experience to meet the needs of individuals
- ◆ Giving positive feedback to children and young people
- ◆ Asking and answering questions
- ◆ Encouraging turn taking
- ◆ Helping children and young people to be aware of the needs and choices of others
- ◆ Encouraging children and young people to explore and experiment with the provision
- ◆ Celebrating success
- ◆ Valuing the choices and interests of the children and young people
- ◆ Valuing the learning of children and young people with and through ICT

Children and young people see adults using ICT in everyday life, such as word-processing notices for parents, searching the internet in response to a question, recording a favourite story or poem etc. ICT does not necessarily need to be a planned experience but used spontaneously in response to the interests and needs of the child or young person.

National Unit Specification: support notes (cont)

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PC (b)

Candidates should demonstrate their understanding of the following issues in relation to the teacher's planning for ICT provision:

- ◆ Room layout:
 - the positioning of power points, appropriate furniture, floor space and telephone lines for internet access
- ◆ Available resources:
 - ICT resources which give children and young people the opportunity to work cooperatively as well as independently
 - Seating and availability of space
 - Opportunities for observing and recording the learning of children and young people when using ICT
 - Links with curriculum and the setting's guidelines
 - Health and safety: appropriate risk assessment carried out
 - Access for all: with diversity of cultures and consideration of gender issues related to ICT reflected in the provision

PC (c)

Candidates should be aware that ICT within an educational setting can:

- ◆ raise the self esteem of children and young people by enabling them to experience a sense of achievement, maintain self confidence and encourage self help skills in the use of ICT
- ◆ enhance the present learning of children and young people, with the use of sensitive feedback and dynamic presentation
- ◆ support and extend the development of children and young people
- ◆ assist children and young people to generalise concepts and skills
- ◆ engage children and young people in self directed learning
- ◆ promote inclusion

Children and young people can use any resource to promote their leaning and development in two ways:

- 1 They can learn about the resource.
- 2 They can use this knowledge to learn with it.

Candidates should consider the use of ICT to promote both of these aims. For example, by learning about ICT the child or young person develops an understanding of the uses of ICT through observation and talking about it. Children and young people may develop skills in various aspects of technology. They may learn to:

- ◆ programme a Roamer
- ◆ use a digital camera
- ◆ switch on a CD player

National Unit Specification: support notes (cont)

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Learning through ICT involves children and young people using the technologies as tools for learning. They can then use this information to support and promote other learning. They may, for example:

- ◆ Use a digital camera to record interesting events
- ◆ Listen to stories recorded in a home language
- ◆ Make a video recording
- ◆ Make an audio recording

Candidates should be aware that learning with and through ICT should extend across all areas of provision and not be restricted to areas that relate particularly to technology. They should involve children and young people in a variety of situations.

Outcome 3

Under supervision, candidates should demonstrate how they support a range of ICT experiences in an educational setting. These should be across a range of ICT provision that promotes both the communication of information and interactivity. They should demonstrate how they support experiences that are planned, spontaneous, self selected and adult led.

When implementing and evaluating experiences, candidates should take account of the planning model used within their setting. They should make reference to national curriculum guidelines and the setting's curriculum guidelines within the context of local authority policy and procedures.

Candidates should be aware of:

- ◆ different types of planning models
- ◆ curriculum frameworks used and the links to ICT
- ◆ what the learning intentions are for the children or young people
- ◆ the role of the adult
- ◆ reporting observations of the engagement or involvement of children and young people during the experiences

National Unit Specification: support notes (cont)

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GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

When delivering this Unit, teachers/lecturers should:

- ◆ recognise and take into account the expertise and experience of group members
- ◆ encourage group members to recognise and value their own contribution
- ◆ encourage members to reflect on their own practice and the practice of others

This can be done using some of the following methods:

- ◆ Workshops to explore and experiment with ICT provision
- ◆ Small group exercises with or without feedback to the main group
- ◆ Case studies
- ◆ Individual research including the use of appropriate websites, eg. Learning and Teaching Scotland (www.ltscotland.org.uk)
- ◆ Video/DVD/audio material
- ◆ Visiting speakers involved in the promotion of ICT
- ◆ Examination of the setting's ICT policy and national ICT policy

An interactive approach should be taken to learning and teaching to enable candidates to understand the scope of ICT, the benefits to the child or young person and to gain confidence. Candidates should have the opportunity to explore a wide range of suitable ICT resources for children and young people in workshop situations. The focus should be away from desk top computers and on the wider range of ICT discussed previously. This may have resourcing implications for centres.

Candidates will need input on how to observe children and young people during ICT experiences. They should practice this skill during placement or by making use of commercially-produced video/DVD material.

To complete this Outcome, placements could be offered to candidates who are not already in employment, in the local authority or private sectors. Centres should ensure that candidates have enough time in placement to ensure that all relevant Performance Criteria are met.

OPPORTUNITIES FOR CORE SKILL DEVELOPMENT

Throughout this Unit there are opportunities to develop the following Core Skills during learning activities and through the production of evidence for formative and summative assessments:

- ◆ *Communication* (SCQF level 5)
- ◆ *Information and Communication Technology* (SCQF level 5)
- ◆ *Working with Others* (SCQF level 5)

National Unit Specification: support notes (cont)

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GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

The assessment for this Unit is laid out clearly in the Evidence Requirements section of the Statement of Standards of this specification. The standard to be applied is exemplified in the National Assessment Bank item for this Unit. If a centre wishes to design its own assessments for this Unit, they should be of a comparable standard.

A holistic approach should be taken with assessment across Outcomes of this Unit and, where appropriate, with other Units of the PDA: Education Support Assistance (SCQF level 6).

Opportunities for the use of e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

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