

Standards Unit

Linking theory to practice: observation

Teacher and trainer key skills
handbook

Key skills application

This supplement to Linking theory to practice: observation, identifies opportunities to integrate the three main key skills of:

- Communication (Comm);
- Application of Number (AoN);
- Information and Communications Technology (ICT);

into the observation activities at Levels 2 and 3.

The supplement is in three parts, each representing one of the three main key skills.

The observation activities are designed for learners on Level 3 programmes in health and social care/early years. However, it is recognised that, at least at the start of their programme of learning, some learners will still need to develop some of their key skills at Level 2. It is important that learners have the

opportunity to develop key skills in a vocationally-relevant context, at a pace that suits them and according to their individual learning style. It is recommended that each learner's individual learning plan starts from initial assessment of their level in each of the three main key skills and identifies the skills to be developed during the programme, to take forward their learning appropriately. It is expected that each learner will achieve at least one of the three main key skills at Level 3 and the others at Level 2.

Teachers and trainers may find it helpful, while using these resources, to refer to *The Key Skills Qualifications, Standards and Guidance* published by QCA in 2004. Copies are available from QCA publications, PO Box 99, Sudbury, Suffolk, CO10 2SN (Tel: 01787-884444, Fax: 01787-312950). Price £10, Ref: QCA/04/1272.

Mapping of the key skill of communication

The mapping below consists of two sections. Section 1 goes through each of the constituent parts that form the overall communication standard as they relate to the observation activities. Section 2 suggests a way in which an integrated project on observation could enable Level 3 learners to produce evidence of the acquisition of all aspects of the required skill by means of the course work that they will be doing for the observation component of their childcare programme.

THE STANDARDS

Key skills communication at Levels 2 and 3 are part of the same continuum, with Level 3 demanding acquisition of the same skills, but with greater complexity and in greater depth than at Level 2. At both levels, communication is assessed in terms of:

- (i) discussion;
- (ii) making a presentation;
- (iii) reading and summarising (Level 2) or synthesising (Level 3);
- (iv) writing documents.

The observation activities are a complete package. So, identified below are opportunities, at various points within the whole package, for developing or

reinforcing any of the above aspects of communication. In order to be able to integrate key skills effortlessly into your teaching, you will need to have a clear understanding of how each of these aspects breaks down.

You will find it useful to refer to the following document in planning your integrated key skills work, *The Key Skills Qualifications Standards and Guidance Levels 1–4 2004*, published by QCA.

It will be impossible for learners working individually to be able to meet the criteria for 'taking part in a group discussion'.

Identifying the key skill of communication in the observation activities

SECTION 1

DISCUSSION

(C2.1a; C3.1a)

The favoured teaching approach for Sessions 1–5 is active discussion, with some discussion also occurring in Sessions 6–9. Below are some examples of where

discussion takes place, but there are several other occasions in all these sessions, and any could be used to gather key skills evidence.

Session 1 Working in groups to develop observational skills and feeding back on findings in a plenary.

Session 2 Group work on identifying what to record.

Session 3 Discussion on advantages and disadvantages of the various observation methods.

Session 4 Collaborative work on identifying significant developments observed.

Session 5 Discussion on conclusions drawn and recommendations to be proposed.

Session 6 Group work on defining plagiarism.

Session 9 Learners contribute their own experiences of time sampling observations to the group discussion.

You will need, in advance of asking your learners to take part in a group discussion, to remind them of the features of good discussions and what skills have to be developed in order to meet the overall standard.

At Level 2:

- Make clear and relevant contributions in a way that suits your purpose and situation.
- Respond appropriately to others.
- Help to move the discussion forward.

At Level 3:

- Make clear and relevant contributions in a way that suits your purpose and situation.
- Respond sensitively to others and develop points and ideas.
- Encourage others to contribute.

Advance preparation for effective discussion could usefully comprise:

- suggestions for keeping discussion focused;
- explaining ways to open and close discussions, to take turns, but also to intervene;
- practising what kinds of language to use for various types of discussion;
- learning how to take context into account;
- emphasising the importance of developing good listening skills and assessing body language;
- practising how to summarise and move the discussion on.

And (for Level 3):

- learning how to treat contributions made by others with respect and consideration;
- chairing discussions: encouraging others to contribute by asking follow-up questions or supporting points made.

To meet the overall standard, the following skills need to be demonstrated:

MAKING A PRESENTATION

(C2.1b; C3.1b)

The taught sessions offer plenty of opportunities for learners to feed back the results of their group discussions. It should be possible to give all learners the chance, at some point, either in these or other sessions, to be the spokesperson for their group.

There is also an opportunity – to be expanded in the suggestion for an integrated project below – for each learner

to make a presentation to the group on what they discovered in their workplace observation.

Again you will need to alert your learners to the features of good presentations in advance of plenary feedbacks and encourage an open, evaluative approach by the group to each other's performance

At Level 2 (at least a 4-minute duration):

- Speak clearly in a way that suits your subject, purpose and situation.
- Keep to the subject and structure your talk to help listeners follow what you are saying.
- Use appropriate ways to support your main points.

At Level 3 (at least an 8-minute duration):

- Speak clearly and adapt your style of presentation to suit your purpose, subject, audience and situation.
- Structure what you say to progress logically through each stage of your presentation.
- Use an image or other material to support or enhance what you are saying.

Advance preparation could most usefully concentrate on:

- the kinds of language used for talks/presentations;
- learning how to adapt what you say, and how you say it, to your audience;
- practising speaking aloud clearly and simply;
- body language that denotes confidence and purpose;
- structuring the points to be made;
- using visuals/handouts to back up what you say.

And (for Level 3):

- Knowing how to start and finish effectively.
- Knowing about pace and relating to different audiences.

(C2.2; C3.2)

The observation materials contain plenty of reading activities and demand that learners understand fully what they are reading in order to carry out subsequent set tasks effectively. There are several opportunities for developing the skill of summarising and,

in the observation assignment in particular, for synthesising and drawing conclusions from potentially conflicting standpoints. Here are some opportunities for reading in these sessions:

Session 2: Learners are asked to read, and carry out work on, the *Foundation Stage Profile Handbook*.

Session 3: Learners are expected to read and to use in their group and individual assignments *Birth to Three Matters* and the *National Curriculum – Key Stage One*.

Session 4: Learners will have to read about the work of the theorists and pioneers in their text books/in the learner handbook.

Session 7: Learners will have to read and be familiar with the *Curriculum Guidance for the Foundation Stage*.

To develop reading skills to the required standard, learners must be able to do the following:

At Level 2 (two documents, each of at least 500 words in length):

- Select and read relevant documents.
- Identify accurately the main points, ideas and lines of reasoning.
- Summarise the information to suit particular purposes.

At Level 3 (two documents, each of a least 1000 words in length):

- Select and read relevant documents.
- Identify accurately, and compare, the main points, ideas and lines of reasoning.
- Present their own interpretations of the subject in a way that is coherent and brings together information from different documents to suit their purpose.

An observation document produced to professional childcare standards will demand a breadth and complexity of reading that will only be adequately covered by reading at the Level 3 standard. There will, however, be the possibility, through reinforcing and practising Level 2 competencies, to help Level 2 learners to make progress towards Level 3, if only on some, rather than all, fronts.

Advance preparation for developing effective reading skills could concentrate on:

- effective selection of the right reading materials, that is, understanding the different kinds of available reading matter – textbooks, reference books, journals – and where to locate them;
- teaching learners how to scan, skim and read for detail;
- explaining how to judge the purpose of a text by close attention to its language and tone;
- developing the skills of summarising and writing a précis;
- demonstrating how to identify the lines of argument in a written text.

And (for Level 3):

- Showing how to gain access to a range of source and reference materials, for example, libraries or the internet.
- Developing skills of 'reading between the lines' when necessary.
- Developing skills of assessing and sorting facts, opinions and ideas and presenting the selection to make a reasoned case.

WRITING DOCUMENTS

(C2.3; C3.3)

The primary purpose of all the observation materials is to enable learners to develop the skills to observe accurately and to produce a comprehensive written account of their observation. The numerous

opportunities for developing a range of writing skills as learners work through the learner handbook and observation booklets should result ultimately in well-produced written work.

Here are some examples of where a range of writing skills can be developed:

Session 1: Learners are asked to practise the skills of writing objective descriptions of what they see. The written language of an observation will need to be precise and objective. This will give you, as a teacher and trainer, an early diagnosis of each individual's written competence in this context and an opportunity to focus on individual support as well as on difficulties common to the group. There is also an opportunity to develop a different set of writing skills – that of note taking – in Activity 3c (recording speech) in Booklet 1.

Session 2: This offers opportunities for note-taking, for summarising skills (from information in text and reference books) and for presentational language (group discussion on a flip chart).

Session 5: The task of assessing the three examples of evaluations in the learner handbook, Part 5 could focus on the use of language as much as on the content and ordering of activities. The best piece of work (example 3) could usefully be contrasted with the satisfactory one (example 1). Learners could then try to emulate the style of the better piece of work in what they produce themselves.

To develop writing skills to the required standard, learners need to be able to do the following:

At Level 2:

- Present information in a format that suits your purpose.
- Use a structure and style of writing to suit your purpose.
- Spell, punctuate and use grammar accurately.
- Make your meaning clear.

At Level 3:

- Select and use a format and style of writing that is appropriate to your purpose and the complexity of the subject matter.
- Organise material coherently to suit the length, complexity and purpose of your document.
- Spell, punctuate and use grammar correctly.
- Make your meaning clear.

Advance preparation for acquiring good writing skills could therefore concentrate on:

- how to organise writing into logical sequences, for example, paragraphing, headings, sub-headings;
- how to use the appropriate style for a particular piece of written information;
- how to check writing carefully.

And (for Level 3):

- How to adjust particular styles of writing to the intended audience.
- Understanding and using the specialist vocabulary for this vocational area.
- Learning how to synthesise information from different sources.
- Learning not to plagiarise but to reference and attribute material to its origins.
- Developing complex as opposed to simple sentence structures and vocabulary.

SECTION 2

The observation materials also lend themselves to carrying out an integrated project which could be adjusted to meet all the criteria for the Level 3 communication standard.

Evidence could be gathered as follows – although this is simply an indicative suggestion and you will certainly have further ideas on how this approach could be developed.

WRITING DOCUMENTS

(C3.3)

The central core of the evidence will be the written observation. This will need to be 1000 words long. It will also need to be clearly identified as a piece of specialist reporting, as opposed to an essay or discursive account.

The second document required should contrast with this. It is not, of course, necessary that it comes from this same part of the course at all, but it could do. Thus a

possible contrasting document could be a comparison of the varying approaches of different theorists and a discursive account of the social, contextual and historical reasons for these variations, with a clear argument as to why the writer prefers the approach of one against the other(s). Again this piece of writing would need to be 1000 words long. It could be set as a piece of homework as a follow up to the work on theorists in Part 4.

READING AND SYNTHESISING INFORMATION

(C3.2)

The discursive document on theorists suggested above should be based on reference books/journals which are all likely to be longer than 1000 words. Learners should show evidence of independent reading and research on this topic and not

simply rely on their textbooks. They should gather evidence of their note-taking, summarising and synthesising in preparation for their written piece. They must remember to use at least two documents about the same subject.

MAKING A PRESENTATION

(C3.1b)

The same material used to produce the written document can be used as the basis

for a presentation, with whatever focus the learner chooses.

DISCUSSING

(C3,1a)

Following the presentation, the presenter can set up, lead and contribute to a discussion on the topic in question. This

should give plenty of opportunity for the criteria for this standard to be demonstrated and assessed.

This integrated approach, while effective in itself, would have the attraction, and distinct educational advantage, of enabling learners to view key skills as a means to an end – enhancing their ability to achieve their primary learning goal – rather than as a marginalised extra. It is certainly worth trying!

Mapping of the key skill of application of number (AON)

The observation pack provides a coherent framework of activity, which covers a substantial and significant part of the level 3 curriculum for learners in the health and social care/early years sector.

While the topic and approach provide opportunities for learners to develop their communication skills, so that, with planning, the entire key skills standard for communication could be integrated into the activity, this is unlikely to be possible for application of number (AoN).

Nevertheless, with adaptation and good management of learning (for example, directing learners' choice of observation method) learners could develop their skills in AoN at Levels 2 and 3 and there could even be some opportunities for assessment of particular numeric skills.

While the following activities are designed with Level 3 learners in mind, it is recognised that many learners will still need to develop their AoN skills at Level 2, at least towards the beginning of their programme of learning.

THE STANDARDS

Key skills AoN at Levels 2 and 3 is a continuum. Level 3 demanding acquisition and application of the same skills but with a greater complexity and depth than at Level 2. The standards recommend that the learner and teacher and trainer agree, in advance of any activity, whether the complexity is sufficient to warrant accreditation at Level 3.

At both levels the AoN standard is measured in terms of:

(i) obtaining information from relevant sources (collect);

(ii) using the information to carry out calculations (process);

(iii) interpreting the results of calculations and presenting findings.

A critical difference between Levels 2 and 3 is that at Level 2 candidates must be familiar with the 'collect > process > interpret' cycle, whereas at Level 3 they must completely understand it. In terms of Part B (the assessment of competence), at Level 2, only one activity needs to incorporate all three phases of the cycle, whereas, at Level 3, all activities must incorporate all three phases.

At both levels, the completed portfolio of evidence for assessment must include calculations concerned with all of:

- (a) amounts or sizes;
- (b) scales or proportion;
- (c) handling statistics;
- (d) using formulae.

For Level 3, multistage calculations are required and at Level 2 calculations must involve at least two steps. For Level 3 one data set of at least 50 items must be used. At both levels learners must show their working and appropriate degrees of accuracy. Learners must use a variety of presentation methods both in the data they use and in their final reporting, for example, graphs, charts and diagrams. At Level 3 a more coherent written plan of the activity, including method and purpose, is essential.

You will find it useful to refer to the following document in planning your integrated key skills work: *The Key Skills Qualifications Standards and Guidance Levels 1–4 2004*, published by QCA.

IDENTIFYING THE KEY SKILL OF AON IN THE OBSERVATION ACTIVITIES

Learners wishing to use the observation activities to build portfolios of key skills AoN evidence at Levels 2 or 3 should discuss their planned observation method and subject with their teacher and trainer in advance. The key skills standards should be referenced during this discussion. For Level 3 assessment of AoN the activity must be planned entirely by the learner, but it is suggested that the teacher and trainer check the proposed method before the activity begins. Consideration must be given at this stage to how evidence will be captured, bearing in mind that workings must be shown (for example, written work, or oral presentation) with supporting flip charts or PowerPoint presentation, captured on video.

It is unlikely that any candidate could cover all calculation types, (a) – (d), of the AoN standard within the observation activities. The easiest calculation type to cover, depending on the observation subject and method selected, is (c), handling statistics. It might also be possible to incorporate (b), scales or proportions, or (d), using formulae.

Physical development (for example, gross motor skills, growth, language development or social development) is more likely to lend itself to quantitative measurement than cultural, intellectual or emotional developments.

Observation methods involving time or event samples will lend themselves to an assessment of AoN more readily than other methods. Booklet 7c, Time and event sampling, gives clear guidance on design of observation method for different purposes, including:

for time samples:

- the duration of observation period;
- the frequency of time samples;
- the duration of time samples;
- the choice of when in the week to carry out the observation and when to repeat the process;
- the design of recording sheet;

for event samples:

- the need to clearly define the behaviour to be observed;
- the need to record the total duration of the behaviour;
- the need to consider whether to record/score the degree of the behaviour, assessing it as mild or serious;
- the concept of identifying antecedents to the behaviour and consequences of the behaviour (ABC model).

Booklet 7a, Checklists, supports the design of numeric observation approaches, with advice on:

- the choice of an area of development that lends itself to a checklist approach;
- the considerations of frequency of occurrence;
- the pros and cons of yes/no recording versus rating scales;
- the norm referencing (comparison of observed behaviour with developmental norms).

Booklet 7b, Graphs and charts, helps learners develop the skills needed to plan, produce and analyse tracking charts, bar charts, pie charts and line graphs. It introduces the concept of centiles in relation to child development and from this, flow other opportunities to develop AoN skills and numeracy terminology to do with range, average, mean, median and mode.

Here are two examples of the kind of plan that could provide evidence for AoN assessment:

EXAMPLE 1

The time child A spends on a variety of apparatus in a play area is recorded, to assess the stage of gross motor physical development of the child. This is compared with tables and graphs of development norms for a child of that age. The exercise is repeated by different learners or by the same learner, for every child in the group. The average time spent by the group on each piece of apparatus can then be calculated and compared with the behaviour of child A and national norms. The learner would need to represent the findings in an appropriate variety of ways,

for example, tables of timed observations, pie or bar charts of time spent on each apparatus by child A and by the group. This should include a commentary on the accuracy/limitations of the method and the validity of interpretations. The findings could be used to recommend improvements to the play area, for example, different proportions of the various kinds of apparatus, locations and juxtapositions of apparatus and improvements in individual pieces of apparatus. This would ensure relevance and a practical outcome.

Coverage of the AoN Key Skills standards:

N2.1 or N3.1 (according to the complexity of activity planned and the size of data sets to be used):

- N2.1.1/N3.1.1 Obtain information to meet purpose (and at Level 3 plan how to obtain it) – national reports, direct observations, written results from other learners.
- N2.1.2/N3.1.2 Obtain relevant information – direct observations, web searches regarding norms, tables of timed observations from others.
- N2.1.3/N3.1.3 Choose appropriate methods to process and collate the information (and, at Level 3, justify your methods).

N2.2 or N3.2 (according to number of stages and complexity of calculations involved):

- N2.2.1/N3.2.1 Carry out calculations below, showing the methods and their levels of accuracy. Using actual timed observations ('from – to' should be recorded as the time of start and finish on an apparatus, calculate the total time – in minutes – spent on each apparatus by each child). Work out the proportion of the total time on each apparatus for child A and for the group (expressed as a decimal, fraction or percentage). Finally, plot these findings against each other and/or against known norms, for example, on the same axes or as comparable bar or pie charts.
- N2.2.2/N3.2.2 Sense check methods and correct errors.

N2.3 or N3.3 (according to whether methods can be justified):

- N2.3.1/N3.3.1 Select ways to present findings (and at Level 3 justify choice) – summary of findings clearly and accurately presented with written conclusions on the observation of individual and group compared with published norms.
- N2.3.2 and 3/N3.3.2 Use more than one way to present findings (and at Level 3 the methods must be effective).
- N2.3.4/N3.3.3 Describe results and how/whether they meet purpose.

For Level 2 assessment, any two phases of the “collect > process > interpret” cycle must be covered by the activity. For Level 3 all three phases must be covered by the activity.

EXAMPLE 2

The learner undertakes a comparative study of, say, five variables in developmental behaviour among a group of, say, 10 children. This would generate the requisite data set of 50 items for Level 3 AoN. Depending on how these were measured (for example, on a 1–5 scale of competence, or simply yes/no according to whether or not the child

demonstrated the skill during the period of observation) more or less complex calculations would be generated. This would enable learners to seek assessment at Levels 3 or 2 as appropriate. The findings could be compared with those of one or more theorists, which would broaden the base of information required for the activity.

The AoN competencies for assessment would be similar to those outlined in Example 1 above: a quantitative method of recording the observations should be selected, which lends itself to calculations and interpretation.

Recognising development of mathematical skills in children

Teachers and trainers will appreciate that learners observing the development of intellectual skills will need to understand the processes by which children acquire mathematical knowledge and skills. Handouts 7 and 8 of Booklet 5 (pp. 30–31) make explicit reference to children’s development of mathematical and scientific investigation, through play. It is recommended that, during an early session, teachers and trainers lead and facilitate learner discussion, to enable learners to reflect on how children develop these skills and to classify the learning in some way, relating their conclusions to the work of theorists.

ICT may be used at every stage of the observation activities to seek and process information, and to present findings. The assessment of ICT skills within these activities will vary considerably according to the method and subject chosen. The level and nature of ICT competence required will depend on the method and subject chosen.

Mapping of the key skill of information and communication technology (ICT)

THE STANDARDS

Key skills ICT at Levels 2 and 3 is a continuum. Level 3 demands acquisition and application of the same skills, but with a greater complexity and depth than at Level 2.

At both levels, the ICT standard comprises:

(i) selecting information relevant to the task;

(ii) entering, combining and developing information;

(iii) presenting information as a combination of text, number and image.

The criteria are more demanding at Level 3 and, for part B portfolio evidence, require demonstration of coherent follow-through of the three stages described above.

IDENTIFYING THE KEY SKILL OF ICT IN THE OBSERVATION ACTIVITIES

It is possible, but unlikely, that learners would be able to provide all the evidence needed to cover ICT Level 3 Part B. It is more likely that they could cover the whole ICT Level 2 Part B portfolio from this activity.

Learners who are using this activity for their whole ICT portfolio will need the opportunity to communicate by e-mail. Such opportunities could include e-mail exchange between the learner and the teacher or trainer.

Learners wishing to use the observation activities to build portfolios of key skills ICT evidence at Levels 2 or 3 should discuss their

planned observation method and subject with their teacher and trainer in advance. The key skills standards should be consulted during this discussion. Consideration must be given at this stage to how evidence will be captured, bearing in mind that records must be kept of editing and refining information. Learners' work and witness statements are possible sources of evidence. In planning their work, learners should consider whether to combine images and text, numbers and text or images and numbers.

ICT2.1 and ICT3.1 – finding and selecting information

Learners could use the internet to search for and access relevant texts, for example:

- theories of child development;
- government/national strategies for early years;
- developmental norms;
- the impact of particular conditions and diseases on development;
- international comparative studies.

To achieve the full award, learners would have to use multiple search criteria and Level 3 learners should also use different sources.

ICT2.2 and ICT3.2 – entering and developing information and deriving new information

Learners could merge a variety of information into their own observation report, for comparison, in drawing conclusions or to highlight a point. Examples of material that could be used include:

- photographs or video clips of play, which demonstrate development stage;
- videos of interviews with staff, parents or children;
- audio or video recordings of interviews with theorists from media archives;

- scanned newspaper cuttings or journal extracts;
- children's art work, to demonstrate fine motor, cultural or cognitive skills;
- graphs, charts, diagrams, tables of numbers or passages of text derived from their own or others' observation.

Possible sources of information include:

- internet;
- CD-ROM;
- provider or employer intranet;
- own materials, for example, photographs, video footage, paintings by children, diagrams of play area (computer-generated or manuscript).

If numerical information, for example, time or event sampling, has been gathered during the observation (see AoN section above), this could be processed using a spreadsheet software package. However, care must be taken if the learner is also seeking accreditation of AoN, that they also demonstrate their own ability to carry out and to check the calculations.

ICT2.3 and ICT3.3 – present combined information

In preparing observation reports, learners might wordprocess or desktop publish the information processed at ICT2.2 or 2.3. If they make an oral presentation of their findings (see communication section, p. 00), they could support the presentation, by use of PowerPoint. In the case of oral presentations, teachers and trainers would need to consider carefully, in advance, the criteria to be used in assessing whether the use of ICT was effective. Possible methods include, for example, evaluation sheets submitted by the audience, a knowledge test on the presentation by members of the group, recorded discussion by the group after the presentation, witness statement by the teacher and trainer, video of the presentation, the PowerPoint presentation itself.