Guidance on the key skills units: Communication, Application of Number and Information Technology levels 1-3 and level 4

Addendum: September 2001

This addendum should be read in conjunction with *Guidance on the key skills units* (QCA/99/481 for Levels 1-3 and QCA/01/707 for level 4)

Background

Guidance on the key skills units: Communication, Application of Number and Information Technology¹ was produced jointly by ACCAC, CCEA and QCA to support the introduction of the revised specifications for key skills² from September 2000. The intention of the regulatory authorities was to help assessors to reach a common understanding of the specifications in terms of: the skills; standard of performance; and the form and amount of evidence required.

As with any new initiative, experience in the first year of implementation has highlighted a number of areas where adjustments to this guidance would be helpful. This addendum seeks to respond to the questions most frequently asked of the regulatory authorities, awarding bodies and the key skills support programme during the first year of the introduction of the revised key skills specifications. It aims to:

- reduce the amount of evidence currently being produced (at present, more evidence is being produced than is required);
- remove any unnecessary prescription that may be hindering integration of key skills into other programmes;
- encourage flexibility in meeting the evidence requirements;
- clarify further the interpretation of terms used in the specifications.

This should enable the key skills of Communication, Application of Number and Information Technology to be applied more naturally and more purposefully to normal activities within a wider range of contexts.

Introduction

Guidance on the key skills units is essential reading, as are the specifications themselves, for all those responsible for the teaching and assessment of key skills. Centres should have a copy of these documents, which should be accessible to all staff. Additional information has been published more recently in the form of key skills test guidance, identifying those aspects that might be assessed externally. This guidance is available on the QCA website³.

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¹ Available from QCA publications for levels 1-3 and, separately, for levels 4 and 5.

² Key skills units: levels 1-3; and Levels 4 and 5.

³ www.qca.org.uk

General

Relationship between adult literacy and numeracy and the related key skills

Adult literacy and adult numeracy skills can be defined as 'the ability to read, write and speak in English and to use mathematics at a level necessary to function at work and in society in general'. Having the key skills takes the student further: the student will have the basic skills, but can independently select and apply those skills and then progress to improve on them.

The key skills tests at levels 1 and 2 in communication and application of number also act as the tests for adult literacy and adult numeracy. This means that candidates can achieve a literacy or numeracy qualification by passing an external test. Candidates who gain the adult literacy and numeracy certificates based on passing these tests can then progress to achieving the full key skills qualifications if they wish. In order to meet the requirements of the internal assessment component of the key skills, candidates would need to develop a suitable portfolio of evidence.

Coherence of key skills evidence

Part B of each key skills specification lists a number of evidence components (usually three). Each of these has associated assessment criteria set out as a list of bullet points. The bullet points represent a continuous process through which the candidate must go when producing evidence. So for each component there must be evidence that all of these bullet points have been met within the same activity and not 'ticked off' individually.

When identifying a suitable activity for generating key skills evidence, its relevance to the candidate is important. If the activity has no real purpose or genuine relevance to candidates then they will not recognise the importance of the key skills.

Assignments and tasks

Assignment briefs or tasks should be included with each piece of portfolio evidence. These should provide information about the task set, its purpose and expected outcome and, where required, its intended audience. Where support has been given (eg in the form of reading lists supplied) this should also be indicated. Space might be included for candidates to add information of their own, such as details about documents they have located for themselves and records of searches carried out.

Assessment

There should be evidence that assessment has taken place against the relevant key skills criteria. Where a candidate's work has been initially assessed against specific NVQ, AVCE, GCSE, GNVQ, AS or A level specifications, it should also be assessed separately for key skills and appropriate feedback provided to the candidate. There should be evidence of this assessment and feedback. Evidence that is used to meet both the requirement of the main qualification (eg NVQ, AVCE, GCSE, GNVQ, AS or A level) and the key skill need not necessarily exist in two copies. It must however be clearly cross-referenced in the key skills portfolio so that a moderator or verifier knows where to find the evidence.

Assessment of work against the key skills criteria should be carried out by someone with appropriate specialist expertise to understand the full implication of the specifications. For example, whilst appropriate subject expertise would be needed to judge the relevance and accuracy of the information presented in a written document or oral presentation, the person observing the presentation (or short talk or discussion) might not be responsible for assessing it against the criteria for Communication. In the same way, the technical terms used in the Information Technology specifications and the ways in which the benefits of software facilities might be maximised may only be fully appreciated by a specialist.

Use of images

IT and Communication require the use of images in presenting information. Whatever form the image takes, its effectiveness will be determined by whether it is fit for purpose and has been used to aid understanding of the written or spoken text.

At levels 1, 2 and 3 of Communication, one of the two pieces of writing required should 'include at least one image'. Candidates may choose to use one or more images in either of their written documents. In some cases, fitness for purpose and audience may constrain this choice.

Communication requires candidates to use images in their talks or presentations, as well as in their written documents, and to interpret images used in texts they read.

Examples of the forms these images might take are provided in Parts A and C of the Communication specifications and in the *Guidance*: models, plans, sketches, diagrams, pictures, graphs and charts. A table of text or numbers would not count as an image. These suggestions are not exhaustive.

Legibility and consistency of presentation

With the general increase in the use of IT to produce written documents, the use of different conventions (eg for layout and punctuation) is becoming widespread. The use of features such as open punctuation, blocked paragraphs, abbreviations without full stops (in both word-processed and handwritten documents) is acceptable, as long as these conventions are applied correctly and consistently throughout the candidate's work. However, candidates should be aware that they might be unnecessarily disadvantaging themselves by including an excessively long document in their final portfolio.

Although legibility is one of the criteria that has to be met in producing written documents, this does not mean that these have to be handwritten. Legibility may refer equally to word-processed documents where appropriate typeface, font size and spacing are as important as correctly formed and clearly presented handwriting. The degree of accuracy of the final document, either word-processed or handwritten, will equally reflect the ability of the candidate to proofread and redraft, whether dictionaries or electronic checking facilities are used.

Where work is produced electronically, authentication by a supervisor or assessor is required. Authentication should include the assessor or supervisor's signature and the date on each document produced.

Candidates with particular assessment requirements

The key skills specifications suggest that where 'producing certain types of evidence creates difficulties, through disability or for another reason', the candidate might 'be able to use other ways' of demonstrating achievement.

The Communication unit assesses the ability to communicate effectively with others and to understand information presented both orally and in writing. In order to demonstrate these skills, candidates who have hearing, sight or speech impairments or who have specific learning difficulties might need special arrangements (eg the use of a communicator or scribe, electronic aids or special equipment) to produce their portfolio evidence.

Although each case should be referred to the centre's awarding body, the provision made should reflect:

- the candidate's normal way of working;
- the support to which the candidate is entitled and which is routinely available.

Decisions will clearly be based on statements of candidates' specific needs and the recommendations of appropriate specialists. If, with this provision, the candidate is able to produce evidence that satisfies the assessment criteria and meets the standard required, there should be no barriers to achievement.

The Joint Council for General Qualifications publishes guidance for candidates with particular requirements entitled: *GCE, VCE, GCSE & GNVQ – regulations and guidance relating to candidates with particular requirements.*

Communication

Complex subjects

Candidates have to deal with complex subjects for all the evidence components for Communication at level 3. The glossary to the specifications defines this term as 'presenting a number of ideas, some of which may be abstract, very detailed or ... deal with sensitive issues'. The *Guidance* adds that such subjects might 'deal with lines of enquiry dependent on clear reasoning'

As well as having a number of strands, the subject matter must be challenging to the individual candidate in terms of the ideas it presents.

Selecting material

In the case of reading skills at Communication level 1, candidates are expected to read two different types or formats of document to find information on straightforward subjects. At level 2, they should read two extended documents relating to the same straightforward subject but, by level 3, the subject should be challenging and complex, offering a number of strands of thought or different approaches.

At level 1 candidates may be given advice on what to read but at levels 2 and 3 candidates must, independently, select material from the documents in order to meet the purpose of their task. The documents themselves might be included on a reading list or be identified by the candidate, depending on the context of the research. At levels 2 and 3 it would be inappropriate to give candidates detailed chapter or page references. Evidence that appropriate material has been selected from the documents will be implicit in the subsequent summary or synthesis but the assignment brief or task could include details of the level of guidance provided and allow space for the candidate to record details of the documents used.

Selecting a form

When writing documents, candidates at levels 1 and 2 may be given guidance on an appropriate form for their writing. At level 3 the candidate should have responsibility for selecting and using a form and style that is fit for purpose. Within the brief or task, 'form and style' means the structure and format of the document. For example, where candidates have been told to write an essay, their responsibility is to select and use a structure and format that is appropriate for the particular essay. This will include aspects such as use of

⁴ See Guidance on the key skills units: Communication, Application of Number and Information Technology levels 1-3, QCA, 2000, page 23.

headings, paragraphs, overall length, summary and so on. Similar aspects apply to other briefs or tasks that might require a formal report, business letter, or article for one of a range of publications⁵. Whatever form the candidate decides to use, it should: be appropriate to the purpose, subject and audience; provide sufficient scope for all the assessment criteria to be met; and demonstrate that the relevant conventions have been followed.

Extended document

For Communication at levels 2 and 3 candidates are required to read and write extended documents. The glossary to the specifications suggests that a length of 'more than three pages' would be the norm. Equivalent guidance on length might be a word count of 1,000 words.

However, in making a judgement of whether a document is sufficiently 'extended', the over-riding consideration must be its fitness for purpose. The scope of the content, the amount of factual information or number of different thoughts and ideas included (and the way in which these are expressed and developed) would also influence this decision. The tutor or supervisor responsible for the original task would be best placed to make such a judgement.

Accuracy in written communication

Part A of the specifications prescribes the range of a candidate's skills required at each level. In terms of written communication, this includes the ability to punctuate, spell and apply the rules of grammar with accuracy, at increasing levels of sophistication.

The guidance relating to each document allows for a tolerance level of 'one or two spelling mistakes' as long as these are not repeated in the second document at level 1 and, in addition, 'providing meaning is still clear' at levels 2 and 3. This means that untypical, one-off slips might be overlooked. The same error occurring more than once in a single document counts as a single error. At any level, where a candidate is using punctuation, sentence structures or vocabulary beyond the demands of the specifications at that level, errors in their use should not be penalised⁶.

Fitness for purpose is an important factor. Several minor errors in a document written for one's own personal use or for limited internal circulation can be considered acceptable whereas a document intended for public consumption, where accuracy might be seen to reflect on the writer or organisation from which it comes, would require greater accuracy. As only two written documents are required, such a degree of accuracy should be achievable by candidates carrying out a careful proofing and redrafting process.

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⁵ See *Guidance on the key skills units: Communication, Application of Number and Information Technology levels 1-3*, QCA, 2000, page 23.

⁶ As above, pages 15, 19 and 23.

Discussions, talks and presentations

For Communication at level 2, a group discussion would be the norm since a one-to-one discussion would be unlikely to give the candidate the opportunity to meet the assessment criteria. A group discussion may provide opportunities for responding to a greater range of views and sensibilities, and for candidates to be able to take the lead in moving discussions on. It is these higher level skills which are required at level 2.

The requirements for level 3 build on those for level 2, therefore the length of the presentation should be at least that of the short talk at level 2 (5-6 minutes)⁷. To demonstrate all of the skills required by the assessment criteria, it is likely that the presentation would take longer than this. Adapting the presentation successfully to the needs of the audience, the subject, situation and purpose would always be the most important considerations in determining length. As a general guide, a minimum length of 10 minutes would be expected but assessors should continue to place most emphasis on fitness for purpose.

Application of Number

Calculations

Application of Number requires evidence of a candidate's ability to perform a number of different types of calculations (amounts and sizes; scales and proportion; handling statistics; using formulae). From each of these categories, only a minimum of one example has to be presented as evidence in the portfolio. 'Amounts and sizes' is a single category. 'Scales and proportion' is another single category.

Checking

In Application of Number, checks for accuracy and sense are always needed as the final stage in the calculation process. The level of accuracy required is specified at each level. Producing evidence of what is often a mental process is not necessary on every occasion. Where there is a series of calculations of the same type, evidence of checking at least the first few of each type should be recorded for assessment purposes. For the remainder, accurate results should confirm that effective checking has taken place. Candidates should be aware of the importance of checking both their results and their methods (at levels 2 and 3) and be familiar with different methods of carrying out checks.

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⁷ See Guidance on the key skills units: Communication, Application of Number and Information Technology levels 1-3, QCA, 2000, page 22.

Data sets

The specifications for Application of Number at level 3 state that candidates must be able to work with a large data set. The specifications suggest that a set of some 50 items of data would be appropriate at this level. However, where opportunities arise within the candidate's normal work to manipulate slightly smaller sets of data for a worthwhile purpose, these should not be rejected in favour of less relevant activities.

A large data set should be interpreted as one that is sufficiently complex to be challenging to interpret and sufficiently large to enable candidates to carry out statistical calculations appropriate to level 3. Where two sets of data are used for such a comparison, one large data set must have been obtained by the candidate whilst the other set may have been given.

There are many sources of secondary data such as: reference books and journals; organisations which collate their own statistical information; the Internet; and newspapers.

Substantial activity

'At least one substantial activity' is required for Application of Number at levels 2 and 3. This is not intended to prescribe the size of the activity but to give candidates the opportunity to show that they can follow through a task requiring the application of number and gain an accurate result by going through a continuous process of:

- identifying a task which requires number skills;
- finding the relevant numerical information needed to carry out the task;
- interpreting the information correctly;
- · making appropriate calculations accurately;
- presenting findings in written and graphical forms.

Opportunities for substantial activities may be limited within both education and training programmes. Although one substantial activity is compulsory, coverage of any outstanding evidence (eg of types of calculation, sources of information or forms of graphical presentation) may be achieved by shorter additional activities. These must still be purposeful activities, which meet all the assessment criteria (ie at level 3: N3.1, N3.2 and N3.3) for each of the evidence components covered.

Complex activities

For Application of Number at level 3, complex activities are ones which can be broken down 'into a series of tasks' and where the techniques needed to carry out the activity are themselves more sophisticated (eg inter-related multi-stage calculations rather than ones requiring two or more separate steps). They might offer different possible approaches which would be evaluated to decide how best to tackle the problem.

The *Guidance* makes it clear that, at this level, there should be agreement between the candidate and tutor or supervisor that the task was in itself sufficiently demanding.

Graphs, charts and diagrams

Application of Number requires candidates to interpret information presented in different graphical forms and to produce these themselves, to present their own findings.

Definitions of graphs, charts and diagrams do not always make the differences between them clear and some forms of graphical representation overlap categories. For the purposes of the key skill, the basic differences between them are:

Graphs	Representations based on points located in a coordinate system using <i>x</i> and <i>y</i> axes.	Single or multiple line graph; scatter graph with or without line of best fit.
Charts	Representations of frequency data.	Pie or bar chart, histogram, pictogram, frequency polygon, frequency chart or diagram.
Diagrams	Any other graphical method of representation where scale is or is not a factor.	Scale drawing, plan or workshop drawing, circuit drawing, 3D representation, flowchart, critical path or network diagram, organisation chart.

Information Technology

Drafts and revisions

For each component of evidence specified in Part B, it must be clear that the candidate has worked efficiently and effectively by following the process described by the assessment criteria. Evidence of this must be in an assessable form.

In Information Technology, where this development process involves revising, correcting, redrafting or reformatting work, evidence might be in the form of: draft or rough work; notes; annotations; highlighting; or alterations. Alternatively the evidence might be a signed statement from the person who has witnessed the process providing sufficient detail (as outlined in the *Guidance*)⁸. Where witness statements are used, there should normally be supporting evidence in the form of notes or plans, or the final work itself, or evidence that the assessor has been able to discuss the detail of the process with the candidate.

Two different purposes

In common with all key skills, candidates should demonstrate their Information Technology skills in relevant contexts through purposeful activities. Demonstrating the IT key skill in itself is not sufficient as a purpose. The assignment brief or task, or the evidence itself, should indicate what the candidate set out to do, the purpose and the outcome expected. For level 3 the audience should also be specified.

Portfolios must contain sufficient evidence to show that candidates have met all of the components for two different purposes. One of these purposes must be met through a substantial activity comprising of all the evidence components and their associated assessment criteria. Each component must also be covered for a second purpose, but it is not necessary for this to be the same purpose across the three components. For each component the two purposes must differ in significant aspects. This means that it is generally unwise to attempt to cover both purposes within the content of a single activity.

There should be an understanding of when the use of IT, rather than another method of research or presentation, would be appropriate. An example of this is in the use of e-mail to evidence 'effective methods of exchanging information' (IT3.2) or to obtain relevant information (IT3.1). This should not be a discrete activity with no clear purpose. A purposeful use of e-mail might be to transfer files and invite comment on a draft presentation in order 'to guide refinements' (IT3.3). Some software allows other forms of exchanging information through shared documents but neither the specifications nor the *Guidance* demand electronic means for both purposes, recognising the limited availability of IT in certain contexts.

⁸ See *Guidance on the key skills units: Communication, Application of Number and Information Technology levels 1-3*, QCA, 2000, pages 43, 47 and 51.

Level 4

Across all the key skills at level 4, the emphasis shifts from the level of technical skills required to the greater degree of responsibility the candidate has for managing substantial and complex activities, from the planning through to the evaluation stage: a process lasting about three months. The context for this could be a project or an area, within a candidate's normal work, that would require the integrated development of a number of key skills, probably at different levels.

Essential requirements at this level are the ability to work independently and to assess progress regularly in terms of the overall strategy for carrying out the project. At level 4, candidates should be able to employ a wider range of methods in, for example, information seeking and presentation, to display a greater level of perception and to be able to express their findings with greater precision.