

This document, published in January 2005, supplements Becta's report to the DCMS, *ICT, amenability and the BBC digital curriculum service in Wales*, published in the autumn of 2004.

It should be read in conjunction with that report.

Annex

National Curriculum for Wales: amenability findings for subjects and key stages in the BBC's Year 1 commissioning plans

3a) Citizenship at Key Stage 2

The learning requirements for citizenship at this key stage are set out within the personal and social education (PSE) framework. This lists the attitudes and values, skills and knowledge and understanding that should be developed at Key Stages 1 to 4, and identifies 10 aspects of a person in society that can be developed within the school context:

- social
- community
- physical
- sexual
- emotional
- spiritual
- moral
- vocational
- learning
- environmental.

Of these, the two aspects most relevant to citizenship are the community and environmental aspects.

The attitudes, values and skills listed in the framework form a 'holistic' or 'integrated' group. Good pedagogy demands that these should be taught and learned in an integrated fashion and, for the reasons already given (see section **4.3.4** in *ICT*, amenability and the BBC digital curriculum service in Wales), these skills are not included in the list of learning outcomes against which the 50% would be measured.

Measuring 50%

There are four knowledge and understanding learning outcomes within the community and environmental sections of the framework. The BBC may develop resources for up to two of these four.

Amenability statement

There are no outcomes in citizenship at Key Stage 2 judged to be **not** amenable.

Context

For the purpose of fulfilling the DCMS remit, Becta has considered the question of ICT amenability of learning outcomes on a case-by-case basis, in order to judge which learning outcomes are and which are not amenable in this context. Those judged to be not amenable lie outside the scope of the proposed BBC digital curriculum service.

Becta maintains that any judgements reached on the ICT amenability of learning outcomes are made for the purposes of this exercise only and are restricted to use in this context. Any judgements made by Becta do not imply that 'amenable' learning outcomes should be taught by ICT, nor do they imply any view on *how much* ICT is appropriate for any key stage in any subject.

Indeed, Becta recognises that a curriculum should not be learned or taught solely via ICT, as ICT resources alone do not provide the range of learning experiences that amount to a broad and balanced curriculum. Even where it may find a subject to be wholly amenable in relation to the learning outcomes considered, Becta does not wish to suggest or imply in any way that a subject could or should be resourced entirely by ICT. For all subjects, an appropriate balance should be struck between the time pupils spend at the screen and the time spent elsewhere.

In addition, while a learning outcome may be judged amenable, it is still the case that any particular learning or teaching resource developed may or may not be effective and appropriate.

3b) Design and technology at Key Stage 3

The learning requirements for design and technology at Key Stage 3 can be considered in two broad groups. These are the skills components of:

- designing skills (4.1-8)
- making skills (5.1–7)

and knowledge and understanding of:

- systems and control (1.1–7)
- structures (2.1–5)
- materials and components (3.1–4).

The requirements have been examined for amenability. Together, the requirements in the first group describe a set of inter-related 'holistic' skills of the type described in section **4.3.4** in *ICT, amenability and the BBC digital curriculum service in Wales*. Since pupils develop these skills in the context of each other – for example, redesigning to take account of problems with making – to require the BBC digital curriculum service to deal with some of them, but not others, would be to require it to produce pedagogically unsound resources.

Measuring 50%

The BBC may select up to 50% of the outcomes in the three 'knowledge and understanding' sections: sections 1, 2 and 3.

Amenability statement

Based on both the inspection of individual outcomes and an assessment of the role of ICT in the holistic development of skills in Key Stage 3 design and technology, Becta judges that there are no outcomes that are **not** amenable to ICT in the programme of study for Wales in design and technology at Key Stage 3.

In this case, as elsewhere, Becta's judgement on the amenability of learning outcomes is restricted to the purposes of this exercise and should not be interpreted as a requirement or recommendation that they should be taught or supported by ICT-based resources.

Context

For the purpose of fulfilling the DCMS remit, Becta has considered the question of ICT amenability of learning outcomes on a case-by-case basis, in order to judge which learning outcomes are and which are not amenable in this context. Those judged to be not amenable lie outside the scope of the proposed BBC digital curriculum service.

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In addition, while a learning outcome may be judged amenable, it is still the case that any particular learning or teaching resource developed may or may not be effective and appropriate.

3c) English at Key Stage 2

The learning outcomes for English at Key Stage 2 are organised into three attainment targets: oracy, reading and writing. The outcomes (excluding range) have been examined for amenability.

In oracy, much of the skills section (2) might be considered non-amenable if taken in isolation and out of context. While it would be difficult to argue that all the outcomes under these headings could be taught via ICT, it is clear that ICT might be used to support and extend the learning. Furthermore, many of these requirements address key aspects of the subject, and describe 'holistic' or 'integrated' skills that are part of effective learning in the subject (for example, listening and responding). Given these considerations, it is appropriate to judge these learning outcomes as amenable to ICT.

It should be noted that it is vital that all pupils experience English as a 'live' interactive language used by many different individuals and groups in real time and in real contexts. Pupils also need to have real experience of handling printed texts of all kinds as well as to read them on screen, and must be able to write on paper as well as on computer. The tangible and interactive aspects of working in English are particularly pertinent to the teaching and learning in Key Stage 2, although by no means exclusively so. However, there are many contexts in which the programmes of study at all key stages are amenable to ICT, and might be enhanced through the use of ICT.

Measuring 50%

The programme of study at Key Stage 2 contains a large number of outcomes and, as such, provides a reasonable basis for measuring the 50% in terms of amenable learning outcomes.

Amenability statement

The following outcomes in English at Key Stage 2 are judged to be **not** amenable: Writing: 2.7 (all bullet points).

In this case, as elsewhere, Becta's judgement on the amenability of learning outcomes is restricted to the purposes of this exercise and should not be interpreted as a requirement or recommendation that they should be taught or supported by ICT-based resources.

Context

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3d) Geography at Key Stage 3

Geography at Key Stage 3 is organised into three sections:

- Geographical enquiry and skills
- Places
- Themes.

The first of these, Geographical enquiry and skills, describes a set of 'holistic', or 'integrated', skills. Good pedagogy demands that these should be taught and learned in an integrated fashion, and for the reasons already given (see **4.3.4** in *ICT, amenability and the BBC digital curriculum service in Wales*), these skills are not included in the list of learning outcomes against which the 50% would be measured.

The remaining outcomes (from Places and Themes) have been examined for amenability. We note that while 1.5, 'undertake fieldwork, selecting and using appropriate techniques and instruments to measure and record accurately', might be considered non-amenable at first sight, ICT-mediated resources might reasonably be developed to prepare and support fieldwork, and consolidate and extend it after the fieldwork has been undertaken. Therefore Becta judges 1.5 to be amenable.

Measuring 50%

The BBC may select up to 50% of those outcomes deemed amenable by Becta. These 'countable' learning outcomes do not include the 'Geographical enquiry and skills' section, as mentioned above. As stated in section **4.5** of the report, the BBC is free to treat these skills in their resources, but they will not be counted towards the 50%, as this would constitute double counting of the underlying requirements.

Amenability statement

There are no outcomes judged to be **not** amenable in the programme of study for Wales in geography at Key Stage 3.

In this case, as elsewhere, Becta's judgement on the amenability of learning outcomes should not be interpreted as a requirement or recommendation that they should be taught or supported by ICT-based resources.

Context

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Becta maintains that any judgements reached on the ICT amenability of learning outcomes are made for the purposes of this exercise only and are restricted to use in this context. Any judgements made by Becta do not imply that 'amenable' learning outcomes should be taught by ICT, nor do they imply any view on *how much* ICT is appropriate for any key stage in any subject.

Indeed, Becta recognises that a curriculum should not be learned or taught solely via ICT, as ICT resources alone do not provide the range of learning experiences that amount to a broad and balanced curriculum. Even where it may find a subject to be wholly amenable in relation to the learning outcomes considered, Becta does not wish to suggest or imply in any way that a subject could or should be resourced entirely by ICT. For all subjects, an appropriate balance should be struck between the time pupils spend at the screen and the time spent elsewhere.

In addition, while a learning outcome may be judged amenable, it is still the case that any particular learning or teaching resource developed may or may not be effective and appropriate.

3e) History at Key Stage 1

The learning outcomes for history at Key Stage 1 are set out in five sections:

- Chronological awareness
- Historical knowledge and understanding
- Interpretations of history
- Historical enquiry
- Organisation and communication.

Together, the outcomes under these headings describe a set of inter-related holistic knowledge and skills of the type described in section **4.3.4** of *ICT*, amenability and the *BBC digital curriculum service in Wales*. Since pupils develop these in the context of each other – for example, chronological awareness in the context of historical enquiry – to require the BBC digital curriculum to deal with some of them but not others would be to require it to produce pedagogically unsound resources.

Measuring 50%

The five learning outcomes of the programme of study for history at Key Stage 1 form a set of holistic skills and knowledge of the type described in section **4.3.4** of the report. These holistic skills are developed in an integrated fashion throughout the key stage.

Amenability statement

Based on both the inspection of individual outcomes and an assessment of the role of ICT in the holistic development of skills in Key Stage 1 history, Becta finds that there are no outcomes judged to be **not** amenable in the programme of study for Wales in history at Key Stage 1.

In this case, as elsewhere, Becta's judgement on the amenability of learning outcomes is restricted to the purposes of this exercise and should not be interpreted as a requirement or recommendation that they should be taught or supported by ICT-based resources.

Context

For the purpose of fulfilling the DCMS remit, Becta has considered the question of ICT amenability of learning outcomes on a case-by-case basis, in order to judge which learning outcomes are and which are not amenable in this context. Those judged to be not amenable lie outside the scope of the proposed BBC digital curriculum service.

Becta maintains that any judgements reached on the ICT amenability of learning outcomes are made for the purposes of this exercise only and are restricted to use in this context. Any judgements made by Becta do not imply that 'amenable' learning outcomes should be taught by ICT, nor do they imply any view on *how much* ICT is appropriate for any key stage in any subject.

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In addition, while a learning outcome may be judged amenable, it is still the case that any particular learning or teaching resource developed may or may not be effective and appropriate.

3f) Physical Education at Key Stage 2

The effective use of ICT in the subject can help learners make the most of their entitlement to PE rather than take away from learners' opportunities to actually practise and develop knowledge and skills through a range of activities. This is an important principle in the context of determining the amenability of learning outcomes within the PE curriculum to being taught by ICT.

The programme of study outlines the main areas for activity:

- Games
- Gymnastic activities
- Dance
- Swimming
- Athletic activities
- Outdoor and adventurous activities.

Also included is a set of outcomes – health-related exercise – that are applicable to all the above activities. These outcomes are broadly holistic as they are not intended to be developed in isolation from the activities undertaken during the key stage, but integrated through the various activities.

Some of the statements within the programme of study do not lend themselves individually to being taught via ICT (for instance, 'to develop confidence in the water'). However, there is a variety of ways in which ICT can, for example, support the overarching outcome of becoming a safe, competent swimmer, such as through demonstrating techniques, supplementing verbal feedback and developing children's observational and evaluative assessment.

Measuring 50%

Becta will consult with ACCAC in assessing the BBC's coverage proposals for Key Stage 2 PE, since much of the information required to establish the 50% measures is contained in custom and practice and national expectation.

Amenability statement

Based on both the inspection of the individual outcomes and an assessment of the role of ICT in the holistic development of skills in Key Stage 2 PE, Becta judges that there are no outcomes that are **not** amenable in the programme of study.

In this case, as elsewhere, Becta's judgement on the amenability of learning outcomes is restricted to the purposes of this exercise and should not be interpreted as a requirement or recommendation that they should be taught or supported by ICT-based resources.

Context

For the purpose of fulfilling the DCMS remit, Becta has considered the question of ICT amenability of learning outcomes on a case-by-case basis, in order to judge which learning outcomes are and which are not amenable in this context. Those judged to be not amenable lie outside the scope of the proposed BBC digital curriculum service.

Becta maintains that any judgements reached on the ICT amenability of learning outcomes are made for the purposes of this exercise only and are restricted to use in this context. Any judgements made by Becta do not imply that 'amenable' learning outcomes should be taught by ICT, nor do they imply any view on *how much* ICT is appropriate for any key stage in any subject.

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3g) Science at Key Stage 1

The 'scientific enquiry' section of the programme of study for science at Key Stage 1 lists a group of related 'holistic' or 'integrated' skills of scientific investigation. These lists are judged to be of the type described in section **4.3.4** in *ICT, amenability and the BBC digital curriculum service in Wales*, for which good pedagogy requires that they should be taught and learned in an integrated way. These then are considered to be amenable for the purposes of this exercise but, as detailed in section **4.5** of the report, will not be included when determining the question of 50% coverage.

The remaining requirements have been examined for amenability. For many of these, appropriate learning and teaching requires first-hand physical exploration and experience of the real world as described in section **4.3.3** of the report. An example of this is:

Pupils should be taught to... sort materials into groups, separating them on the basis of simple properties that can be seen or felt, including texture, shininess, transparency, and on whether they are attracted by a magnet.

Science Key Stage 1, Materials and their properties 1.2

It would not be fitting or appropriate to introduce the teaching and learning of this type of aspect of science through the medium of ICT. However, it is feasible that an ICT-based resource might be used to consolidate and apply understanding of the previously learned concepts.

The BBC has made it clear to Becta that in developing resources for Key Stage 1 science it intends to focus on developing skills of problem solving, using and applying knowledge and understanding, and investigation rather than on the teaching of concepts. It is in this sense, then, that the amenability of the learning outcomes has been determined as shown below.

Measuring 50%

The BBC may select up to 50% of those outcomes judged to be amenable by Becta. For the purposes of determining 50%, the 'scientific enquiry' section is not included in the equation, as this would constitute double counting.

Amenability statement

There are no outcomes judged to be **not** amenable in science at Key Stage 1.

In this case, as elsewhere, Becta's judgement on the amenability of learning outcomes is restricted to the purposes of this exercise and should not be interpreted as a requirement or recommendation that they should be taught or supported by ICT-based resources.

Context

For the purpose of fulfilling the DCMS remit, Becta has considered the question of ICT amenability of learning outcomes on a case-by-case basis, in order to judge which learning outcomes are and which are not amenable in this context. Those judged to be not amenable lie outside the scope of the proposed BBC digital curriculum service.

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In addition, while a learning outcome may be judged amenable, it is still the case that any particular learning or teaching resource developed may or may not be effective and appropriate.

4a) Field studies for pupils with severe learning difficulties (SLD) or profound and multiple learning difficulties (PMLD) at Key Stages 3 and 4

Field studies is not a specified curriculum area in the National Curriculum in Wales. However, learners with SLD/PMLD working within local and other environments on 'field study' skills will be developing skills relevant to the programmes of study of many National Curriculum subjects. The integrated programme essential to these learners will use a range of relevant and meaningful contexts to develop life skills.

The priority for learners with SLD or PMLD is largely the development of skills – in particular communication, personal/social skills and problem solving. In Wales, opportunities to develop these common requirements are flagged in all subject orders. In particular, the development of personal and social skills is described in ACCAC's PSE framework.

Learners aged 11–16 with SLD or PMLD will, in many cases, be working on material selected from earlier key stage programmes of study. At 11–16 themes and topics outlined in the Key Stage 3 and 4 programmes of study may also provide interesting and age-appropriate contexts for work and development of skills even where some concepts or content may be difficult to access.

For pupils with the most complex needs, early skills such as attending to stimuli, showing some memory of a stimulus, developing anticipation, making things happen and developing cause and effect may be priorities as outlined in the Insight assessment materials being developed for these pupils in Wales.

These learners require a holistic programme which uses a range of relevant and meaningful contexts to develop life skills.

Subject coverage has lower priority for this group of learners, although links can be drawn to parts of the PSE framework and subject programmes of study, in particular geography, science, PE and ICT, which lend themselves to this approach. Work related to these areas provides opportunities to develop and practise skills safely before work is extended to community or outside settings.

While personal physical experience of the environment is of enormous importance to the learning of pupils with SLD or PMLD, ICT-based resources can supplement and extend the environment, adding to the range of experiences available. For example, a resource inspired by a trek through the rainforest can provide aspects of the visual and auditory features of moving through heavy vegetation, though clearly it does not itself constitute an experience of the rainforest.

Such resources can extend and support learning in all the aspects covered in this proposal, and for that reason there are no non-amenable outcomes.

Measuring 50%

Many pupils with these difficulties are likely to be working below level 1 of the National Curriculum, so learning outcomes drawn from the National Curriculum – while relevant for planning – do not form a suitable basis for measuring 50%. In this area, the BBC proposal has described twenty 'contexts', which between them cover the range of environments (for instance, home environment, school environment or seaside) that can be experienced by pupils locally and further afield. This approach forms an acceptable basis for measuring 50%.

In this case, as elsewhere, Becta's judgement on the amenability of learning outcomes should not be interpreted as a requirement or recommendation that they should be taught or supported by ICT-based resources.

Amenability statement

There are no outcomes judged to be **not** amenable.

Context

For the purpose of fulfilling the DCMS remit, Becta has considered the question of ICT amenability of learning outcomes on a case-by-case basis, in order to judge which learning outcomes are and which are not amenable in this context. Those judged to be not amenable lie outside the scope of the proposed BBC digital curriculum service.

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4b) Financial capability at Key Stage 4

Financial capability forms part of the PSE framework, which situates it in a broad context that includes moral issues, the environment and social issues. Detailed aspects of knowledge, understanding and skills are not specified.

The key outcome relating to financial capability is 'understand a range of economic and industrial issues related to their role as consumers and future providers and their responsibilities in personal finance'.

In general, financial capability covers areas such as financial understanding, financial competence and financial responsibility. Management of personal finance occurs increasingly through ICT (using budgeting software, for instance) and through online channels (such as online banking and tax returns). In addition, sources of information on financial matters are frequently based online. ICT is thus both an important tool and also a context for learning across the range of possible areas of study.

Within the PSE framework there is a range of contexts (see for example 'Attitudes and values') relevant to financial capability. It would be pedagogically inappropriate not to touch upon these as required in studying the various elements of financial capability (for example, personal responsibility is related to financial responsibility), and therefore for financial capability the contexts do not form a suitable basis for the determination of 50% of learning outcomes.

Measuring 50%

Given that there is a single specified outcome for financial capability within the National Curriculum for Wales, Becta will look to ACCAC for detailed advice when assessing the BBC's coverage proposals for financial capability in Wales to check that they meet the 50% limit.

Amenability statement

Based on the inspection of the financial outcomes within the PSE framework, and an assessment of the role of ICT in the development of knowledge and skills in financial capability, Becta finds that there are no outcomes judged to be **not** amenable within the guidance.

In this case, as elsewhere, Becta's judgement on the amenability of learning outcomes should not be interpreted as a requirement or recommendation that they should be taught or supported by ICT-based resources

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